



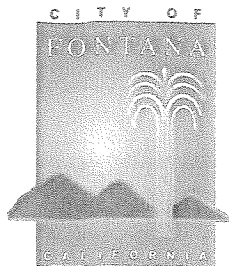
Appendices

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A. NOP and Comments



City of Fontana
Planning Division
8353 Sierra Avenue
Fontana, CA 92335

RBF ONTARIO
SEP 23 2009
RECEIVED

NOTICE OF PREPARATION AND PUBLIC SCOPING MEETING NOTICE

Date: September 15, 2009
Subject: Notice of Intent to Prepare Draft Environmental Impact Report
Project Title: Southwest Industrial Park (SWIP) Specific Plan Update and Annexation
Proponent/ Lead
Agency: City of Fontana, Development Services Organization – Planning Division
Address: City Hall, 8353 Sierra Avenue, Fontana, CA 92335
City Contacts: Dina Lomeli, Planning Technician
Craig L. Bruorton, AICP, Principal Planner
Cecilia Lopez-Henderson, Annexation Program Coordinator
Phone: SWIP Hotline: (909) 422-3408; Annexation Hotline: (909) 422-3405

The City of Fontana (City) has determined that an Environmental Impact Report (EIR) is necessary for the analysis of the proposed Southwest Industrial Park (SWIP) Specific Plan Update and Annexation (the "Project"). The Project proposes a comprehensive amendment to the original Specific Plan previously adopted in 1983 (and subsequently amended through 2008). In addition, the project proposes to annex an additional 472 acres (Almond Avenue Annexation Area as depicted on Exhibit 1). The total expansion will include an additional 1,318 acres from previous and proposed annexations, resulting in a total Project area of 3,110.7 acres. The City is the proponent and lead agency for the Project and will prepare the EIR under the terms and requirements of the California Environmental Quality Act (CEQA) and the implementing Guidelines of the California Environmental Quality Act ("Guidelines").

The purpose of this notice is: (1) to serve as the Notice of Preparation to the Office of Planning and Research (OPR), potential Responsible Agencies, federal agencies involved in funding or approving the Project, and Trustee Agencies responsible for natural resources affected by the Project, pursuant to Section 15082 of the CEQA Guidelines; and (2) to advise and solicit comments and suggestions regarding the preparation of the EIR, environmental issues to be addressed in the EIR, and any related issues, from interested parties other than those noted above, including interested or affected members of the public. The City requests that any potential Responsible or Trustee Agency responding to this notice respond in a manner consistent with CEQA Guidelines Section 15082(b).

In order for the concerns of your agency to be incorporated into the Draft EIR, we are requesting that you provide us with environmental information pertaining to the scope and content relevant to your agency's statutory responsibilities in connection with the proposed Project.

Your response at a minimum should include: a) significant environmental issues and reasonable alternatives and mitigation measures that the responsible or trustee agency will need to have explored in the Draft EIR; and b) whether or not your agency will be a responsible or trustee agency for the Project.

The Project description, location, and a discussion indicating the probable environmental effects of the proposed action are contained in the attached materials. Additional Project information may be obtained at the City Hall address shown above.

In an effort to provide agencies and the public additional time to provide comments, the City of Fontana is providing a 45 day public review period for this Notice of Preparation. **All comments must be received 45 days from receipt of this public notice.** All parties that have submitted their names and mailing addresses will be notified as part of the current Project's CEQA review process. If you wish to be placed on the mailing list or have any questions or need additional information, please contact the person identified above. The City will accept **written** comments from Agencies and interested parties regarding this notice through the close of business on **October 29, 2009** (submit written comments to the City address shown above).

PROJECT SUMMARY

The "Project" to be addressed in the EIR is located on approximately 3,110.7 acres in the southern portion of the City of Fontana. The Project site can be organized into four general areas:

- Northwest Area –** Located north of the I-10 Freeway and west of Cherry Avenue.
- Northeast Area –** Located north of the I-10 Freeway, west of Beech Avenue and north and south of Valley Boulevard.
- Central Area –** Located south of the I-10 Freeway, north of Jurupa Avenue, east of Mulberry Avenue, and west of Citrus Avenue.
- Southwest Area –** Located south of Jurupa Avenue, north of Philadelphia Avenue, east of Etiwanda Avenue, and west of Mulberry Avenue.

The Project proposes the expansion of the existing SWIP Specific Plan to encompass 3,110.7 acres. This expanded Project area would include an additional 1,318 acres of which 472 acres are currently located in unincorporated San Bernardino County and would require annexation into the City. As part of this Specific Plan update a new land use plan would be created, as well as modifications and revisions to allowable uses, design guidelines, and development standards that govern new development within this area.

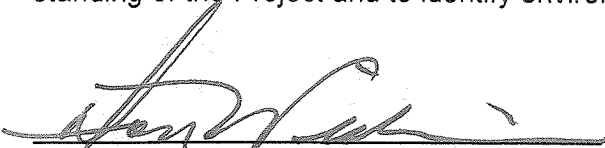
Anticipated approvals for the Project include a General Plan Amendment, Prezone/Zone Change, Specific Plan Amendment, and EIR Certification. Subsequent to these actions, it is anticipated that the San Bernardino Local Agency Formation Commission (LAFCO) will take action regarding annexation of these properties.

PUBLIC SCOPING MEETING

To accommodate the schedules of both public agencies and residents, the City will be conducting two public scoping meetings, which will include a brief overview of the Project and a discussion of the anticipated environmental issues. Information for the date, time, and location for these meetings is provided below:

Meeting Date	Meeting Time	Meeting Location
Monday, October 5, 2009	2:00 pm – 3:00 pm	Fontana City Hall Development Services DAB Conference Room, 1 st Floor 8353 Sierra Avenue Fontana, CA 92335
Monday, October 5, 2009	6:30 pm – 8:00 pm	Kaiser High School Multipurpose Room 11155 Almond Avenue Fontana, CA 92337

Attendance at both of these meetings is not required, as the same information will be presented at both meetings. Any interested parties may attend either meeting to gain a better understanding of the Project and to identify environmental issues of concern.


DON WILLIAMS, AICP
Director of Community Development

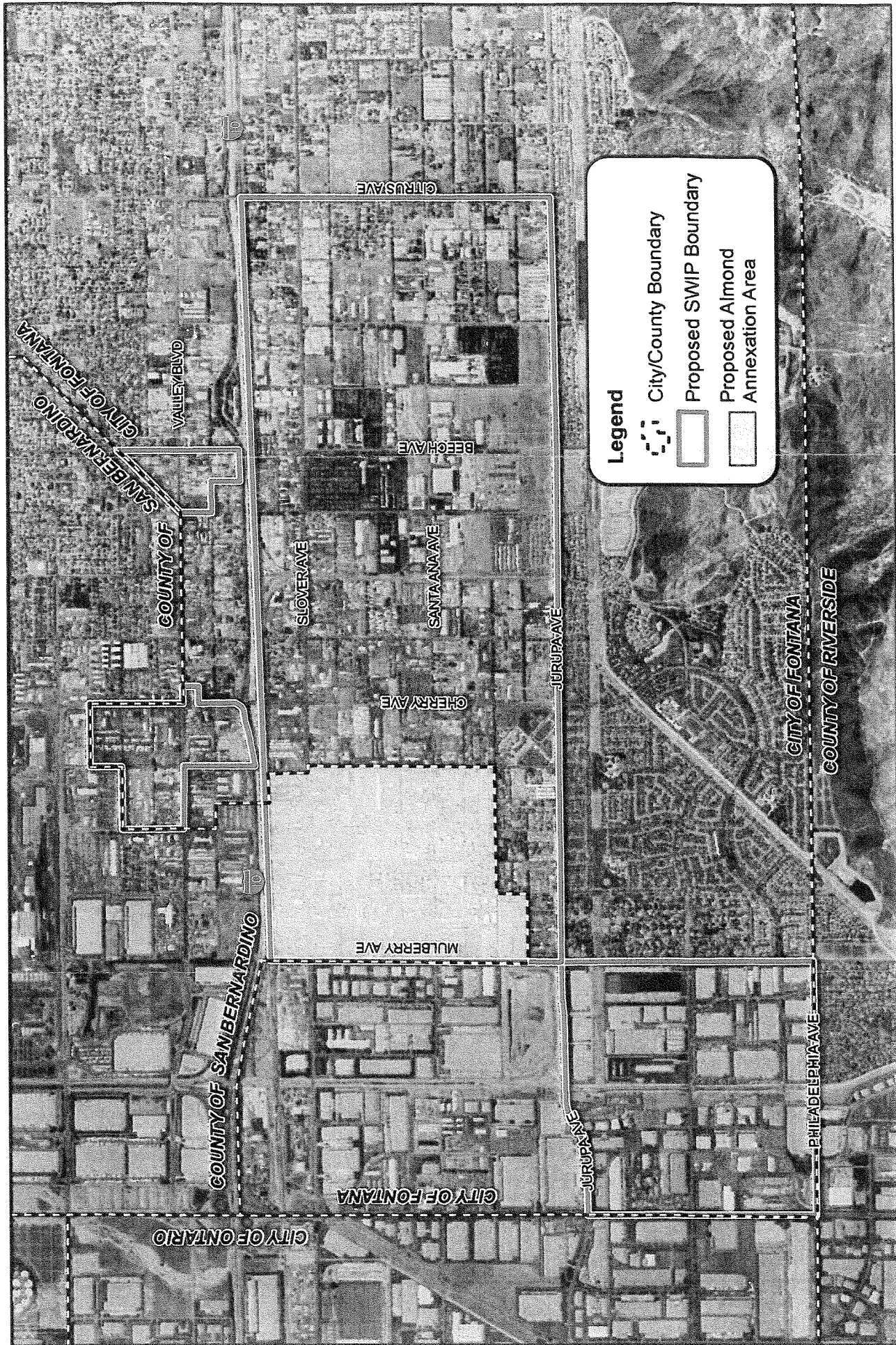


Photo - March 2007

FONTANA SOUTHWEST INDUSTRIAL PARK SPECIFIC PLAN NOP
Proposed Specific Plan Boundary

Exhibit 1

Source: Eagle Aerial, 2007



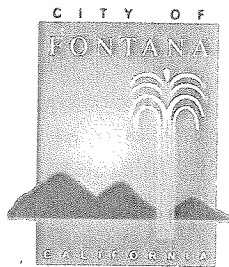
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01/25/09 IN 65-100340

NOTICE OF PREPARATION

SEP 23 2009
RECEIVED

Southwest Industrial Park (SWIP) Specific Plan EIR



LEAD AGENCY:

City of Fontana
8353 Sierra Avenue
Fontana, CA 92335

Contact: Craig L. Bruorton, AICP, Principal Planner
(909) 350-7625

Dina Lomeli, Planning Technician
(909) 350-6578

Cecilia Lopez-Henderson, Annexation Program Coordinator
(909) 350-6743

SEPTEMBER 15, 2009

I. PROJECT LOCATION AND SETTING

The Southwest Industrial Park (SWIP) Specific Plan ("Project") is located within the City of Fontana, San Bernardino County, California (illustrated in the Regional Vicinity Map and Proposed Specific Plan Boundary in Exhibits 1 and 2). The City of Fontana is located in San Bernardino County bordered by the cities of Rancho Cucamonga and Ontario to the west, Rialto to the east, and Riverside County to the south.

The Project site is bordered by Mulberry Avenue and the Fontana Gateway Specific Plan area to the west, Citrus Avenue to the east, Jurupa Avenue to the south, and Interstate 10 to the north with two small portions just north of the freeway. The 3,110.7-acre Project site is generally level, with limited areas of very gentle slopes. The entire Project site has historically been used for farming until the 1940s when the Kaiser Steel Mill established and sparked the development of other industrial uses.

A portion (approximately 472 acres) in the northwest corner of the Project site is currently in unincorporated San Bernardino County and is referred to as the Almond Avenue Annexation Area. The annexation area is bordered by Interstate 10 on the north, Mulberry Avenue on the west, Almond Avenue on the east, and lies approximately 1,400 feet north of Jurupa Avenue. The City is proposing to annex this additional area into the City as well as SWIP as depicted in Exhibit 2.

II. BACKGROUND AND HISTORY

The City of Fontana has a long history of industrial development starting in 1942 with the end of agriculture and the establishment of the Kaiser Steel Mill. Since then, the industrial focus of the City has changed with the closure of Kaiser Steel and a gradual shift towards trucking and distribution-related industries began. The Southwest Industrial Park Specific Plan as approved by the City of Fontana in 1983 (and subsequently amended up until 2008), includes industrial uses within a strategic location between the I-10 and SR-60 freeways and approximately 1.5 miles east of the I-15 Freeway.

The Project consists of the proposed expansion of the existing SWIP Specific Plan to encompass approximately 3,110.7 acres. This expanded Project area would include an additional 1,318 acres of which 472 acres are currently located in unincorporated San Bernardino County and would require annexation into the City. The total expansion of SWIP will include acreage from previous and proposed annexations. The proposed Specific Plan will address issues associated with land use and design standards as well as underutilized parcels, non-conforming parcels, and recently annexed properties within the existing and proposed SWIP boundaries.

III. SWIP SPECIFIC PLAN PROJECT CHARACTERISTICS

Land Use Concept

Currently, the City has developed a land use concept (depicted in Exhibit 3), which identifies the land use districts for the proposed Project. Descriptions of these districts and intended uses include the following:

Speedway Industrial District (SID)

Building on its proximity to the Auto Club Speedway, this district is approximately 126.2 acres in size located directly north of the I-10 Freeway and west of Cherry Avenue. This district would provide opportunities for uses that complement the proximity to the Speedway facility and enhance this area as a gateway to the City through aesthetically pleasing design. This district will allow a mix of uses, including service commercial uses (including hotels), small businesses, research and development, flex tech, and logistics warehousing.

Freeway Industrial/Commercial District (FID)

This district is situated along the I-10 Freeway corridor, a crucial transportation corridor for this part of the City and the region. This district includes approximately 333.7 acres fronting both the north and south side of the freeway. The northern portion of approximately 45 acres is located north and south of Valley Boulevard and west of Beech Avenue, with the remaining 288.7 acres located south of the I-10 Freeway, north of Slover Avenue between Mulberry and Citrus Avenues. The Freeway Industrial/Commercial District is intended to better define Fontana's gateway along the I-10 Corridor and create a positive image of the City with heightened design and development standards, including enhanced landscapes, screening, setback, and fencing regulations. This district will encourage a mixture of commercial and light industrial uses that require high visibility and close proximity to freeways. The district will also encourage activities that combine industrial and commercial uses, such as businesses that require a mixture of warehouse, showroom, and office spaces.

Slover West Industrial District (SWD)

This district includes approximately 289.1 acres located east of Mulberry Avenue, west of Cherry Avenue, north of Santa Ana Avenue and south of Slover Avenue. This district would promote the continued use and expansion of existing industrial developments and logistics based warehousing and manufacturing facilities, along with strategically located service commercial uses.

Slover Central Manufacturing/Industrial District (SCD)

This district includes approximately 423.7 acres located east of Cherry Avenue, west of Beech Avenue, south of Slover Avenue and approximately 1400 feet north of Jurupa Avenue. The intent of this district is to create an industrial area that capitalizes on the existing and proposed infrastructure (existing rail spur, truck routes, and freeway interchanges) that can support manufacturing and industrial uses. This district will allow development of manufacturing and other high intensity industrial uses that can utilize the existing and proposed transportation infrastructure that will support this part of the City. In addition, this district will promote trucking related uses due to close proximity to freeway interchanges and railway facilities.

Slover East Industrial District (SED)

This district includes approximately 361.9 acres located east of Beech Avenue, west of Citrus Avenue, south of Slover Avenue and approximately 1400 feet north of Jurupa Avenue. Bordered by the SWIP Residential Trucking District to the east and Jurupa North Research and Development District to the south, this district is intended to promote the continued use and expansion of existing

industrial developments, logistics based warehousing and manufacturing uses, along with strategically located service commercial. The district will rely on its close proximity to truck routes and existing/proposed freeway interchanges to ensure access to developments proposed within this area of the Project.

Jurupa North Research and Development District (JND)

This district includes approximately 561 acres located north of Jurupa Avenue between Mulberry and Citrus Avenues. This district would encourage small business development by allowing a mixture of development types and uses including light industrial, warehousing, office development, flex tech (type of building designed to be versatile, which may be used in combination with office, research and development, or other types of development), research and development and service commercial uses. By focusing on a mixture of lower intensity uses, this district would act as a buffer between the adjacent Southridge Specific Plan residential development to the south, the existing and planned industrial uses to the north, and Kaiser High School by encouraging uses compatible with residential and school uses in this part of the Project area.

Residential Trucking District (RTD)

This district includes approximately 107.1 acres within four separate areas of the Project. The areas are generally described as follows: RTD-1 comprises approximately 8.3 acres and RTD-2 comprises approximately 30.2 acres and lie on the west side of the Project area; RTD-3 comprises approximately 17.7 acres and RTD-4 comprises approximately 51 acres and lie on the east side of the Project area. This district is intended to preserve four existing residential neighborhoods with trucking uses and provide additional opportunities for trucking uses within this part of the Specific Plan.

Jurupa South Industrial District (JSD)

This district is approximately 535.6 acres in size and includes all of the land located south of Jurupa Avenue, north of Philadelphia Avenue, east of Etiwanda Avenue, and west of Mulberry Avenue. This portion of the Project is considered to be largely built-out. The proposed land use district for this area is intended to maintain and promote the existing manufacturing and warehousing industrial uses and provide opportunities for intensification of these uses where applicable. This district's proximity to existing truck routes and the I-10, I-15, and SR-60 freeway, ensures that regional connectivity will be considered as part of the planning area.

Public Facilities (Kaiser High School) (PF)

In addition to the land use districts previously outlined, the SWIP Specific Plan will also include the existing Kaiser High School facility currently located at the northwest corner of Cherry and Jurupa Avenues. This district is approximately 37.7 acres in size.

SWIP Specific Plan Land Use Summary

Table 1 identifies the acreages of each district within the SWIP Specific Plan as well as the acreage of roadway right-of-way for the Project area as follows:

Table 1 – SWIP Specific Plan Land Use Summary

Land Use District	Acreage
Speedway Industrial	126.2
Freeway/Industrial Commercial	333.7
Slover West Industrial	289.1
Slover Central Manufacturing/Industrial	423.7
Slover East Industrial	361.9
Jurupa North Research and Development	561.0
Residential Trucking	107.1
Jurupa South Industrial	535.6
Public Facilities (Kaiser High School)	37.7
Right-of-Way	334.7
TOTAL	3,110.7

Circulation and Infrastructure

The EIR will address onsite roadways, onsite and offsite sewer, water and storm drain infrastructure facilities as follows:

Circulation

The Project area includes approximately 334.7 acres of existing public right-of-way for roadways located within the Specific Plan area. The circulation system within the Project area is designated in the Fontana General Plan as 8-lane Major Highways, Major Highways (6 lane), Primary Highways (4 lane), and Secondary Highways (4 lane), which are anticipated to be constructed as implementation of the Specific Plan occurs. At this time, some of the onsite roadways are not fully improved. Improvements to these roadways will be identified as a part of the Specific Plan and Environmental Impact Report.

Infrastructure

As part of the Specific Plan preparation, the City will be conducting an analysis of onsite and offsite sewer, water, and storm drain infrastructure that may be needed to support the Project. The Specific Plan will identify the existing facilities and the recommended improvements that will be necessary to support the proposed land uses as depicted on Exhibit 3.

Phasing

Market conditions typically dictate phasing for industrial projects. It is anticipated that this Project will have a buildout horizon of approximately 20 years based on the market conditions and the demand for the land uses being proposed.

Anticipated Approvals

Table 2 identifies the anticipated approvals that will occur as a result of the Project, as follows.

Table 2 - Anticipated Approvals

Project Approvals	Agency
Specific Plan Approvals: - General Plan Amendment - Prezone/Zone Change - Specific Plan Amendment	City of Fontana
Final EIR Certification	
Annexation	LAFCO

IV. POTENTIAL ENVIRONMENTAL EFFECTS OF THE PROJECT

Based upon review of available information, the City of Fontana has determined that the Project may have significant environmental effects and therefore has initiated preparation of a Program EIR. This EIR will address potentially significant Project-related impacts, based upon responses to the NOP, public and agency comments on the NOP, public scoping meeting comments, consultation with potentially affected agencies, results of various technical studies, and research conducted throughout the EIR process. The following discussions of potential environmental effects represent a preliminary summary of potential impacts. These environmental effects may be modified during the course of the EIR preparation.

Aesthetics, Light and Glare: The EIR will characterize the existing aesthetic environment and visual resources, including a discussion of views within the site and views from surrounding areas to the site, particularly from the adjacent uses. Project impacts will be addressed based on changing onsite and offsite aesthetics visible from surrounding roadways and viewpoints, particularly with respect to those districts that border residential areas and areas that front major thoroughfares. The contents of the EIR will incorporate discussion of architectural and design specifications for the Project, as identified in the Specific Plan, including City requirements for proposed landscaping. If necessary, mitigation measures will be recommended to reduce the significance of potential negative impacts.

The EIR will include discussion of impacts due to the introduction of light and glare associated with the development of the proposed Project. This analysis will include a light and glare impact discussion on neighboring sensitive uses from streetlights, vehicle headlights, building lights, etc., including consideration of "dark sky" issues. The analysis within the EIR will include review of and incorporation of existing City policies and guidelines regarding light and glare, and will include recommended mitigation measures to avoid, reduce or offset potential aesthetic and light and glare impacts.

Air Quality: This portion of this section will provide a discussion on the existing conditions and the current status of the California Clean Air Act and relevant air quality planning programs. Existing pollutant data will be obtained from the nearest monitoring station(s). This data will be summarized in a table indicating days exceeding State and Federal Standards for monitored pollutants. The various types of pollutants monitored at the station will also be described and sensitive receptors in the vicinity of the Project site will be identified.

The analysis within the EIR will provide discussion of potential Project impacts upon climate and air quality, addressing temporary construction emissions and long-term emissions from Project operations associated with daily vehicle travel and energy consumption. Short-term air quality impacts will be discussed focusing on dust generation, construction vehicle emissions, and possible odors. In addition, Project consistency will be evaluated based upon local and regional planning programs. Based on the Air Quality Management District (AQMD) and City criteria, the EIR will model construction-related dust and vehicle emissions and long-term operational emissions using Urban Emissions (URBEMIS) and Emission Factors (EMFAC) modeling. A Carbon Monoxide (CO) hotspot analysis will be provided, if warranted. The EIR will also provide estimated projection of annual greenhouse gas emissions resulting from development of the Project site, and will provide a qualitative discussion of the proposed Project's impacts relative to global warming and climate change. The EIR will recommend mitigation measures as appropriate to reduce construction and operational impacts to the extent feasible.

Biological Resources: The EIR will address potential impacts to biological resources, including mature trees, potential for sensitive habitats, and sensitive species. The EIR will include information from the City of Fontana General Plan as well as the technical documentation prepared for this Project. The EIR will recommend mitigation measures to reduce potentially significant impacts on these resources.

Cultural Resources: The EIR will address potential impacts with respect to historical, archaeological and paleontological resources. The EIR will also evaluate the potential for disturbance of human remains. The EIR will recommend mitigation measures to reduce potentially significant impacts on these resources.

Hazards and Hazardous Materials: The EIR will analyze the potential impacts from hazardous materials associated with historic uses of the Project site, such as contaminated soils, underground/above ground storage tanks and asbestos-containing materials, based on the Hazardous materials technical study prepared for the Project. The EIR will also evaluate the potential impacts resulting from development of the proposed Project with respect to the routine transport, use, or storage of hazardous substances, potential release of hazardous materials, and the potential for emissions of hazardous substances within ¼ mile of existing or proposed schools, as well as other sensitive land uses (i.e., Southridge Village and the Residential Trucking District). The EIR will also include evaluation of wildland fire risks, and the proposed Project's impacts on local emergency response plans within SWIP.

Land Use and Relevant Planning: The EIR will include evaluation of the proposed Project with respect to the City of Fontana General Plan and Zoning and Development Code, County of San Bernardino General Plan and Zoning Ordinance and related plans/policies. Due to the proposed General Plan Amendment, Prezone/Zone Change and annexation, the EIR will discuss the Project with respect to applicable regional planning documents. The EIR will include discussion of land use compatibility issues, as well as the Project's effects upon LAFCO policies. If required, mitigation measures will be recommended to minimize potentially significant impacts.

Noise: The EIR will include evaluation of potential noise impacts of the proposed Project, focusing on short-term construction noise (including truck hauling from site grading and construction), long-term changes in noise levels in the Project area due to traffic changes along area roadways, and changes in ambient noise levels associated with increased human activity. This section will specifically address impacts associated with the Project to noise-sensitive land

uses, both within the Project site and along existing offsite roads affected by the Project. The noise analysis will address potential increase in noise levels along the adjacent roadway portions, with particular attention to anticipated cumulative noise impacts. If required, mitigation measures will be recommended to minimize potentially significant impacts.

Population and Housing: The EIR will evaluate the proposed Project's impacts on population growth in the area due to proposed land use districts, as well as the potential for displacement of housing and/or people from the area.

Public Service and Utilities: The EIR will address the Project's potential impacts upon public services and utilities, with respect to the potential for new or modified facilities that may result in physical environmental impacts, particularly with respect to new or modified facilities on and off-site (such as emergency response times/facilities, water storage tanks, detention basins, and offsite utility infrastructure). The EIR will also address potential Project effects upon local services, such as schools, parks, library, and solid waste. This analysis will be based primarily upon feedback obtained from respective agencies as part of the NOP process, and incorporation of proposed infrastructure plans identified in the Specific Plan. If required, mitigation measures will be recommended to minimize potentially significant impacts.

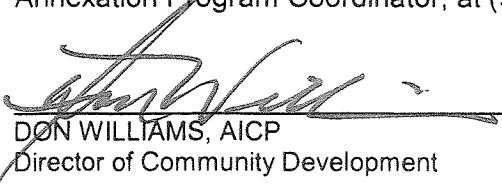
Transportation and Circulation: The EIR will summarize the results of a Traffic Impact Analysis, which will address potential impacts to local roadways, intersections and state highways, as well as Congestion Management Plan requirements. Mitigation measures will be identified, where necessary to mitigate impacts associated with existing and cumulative conditions.

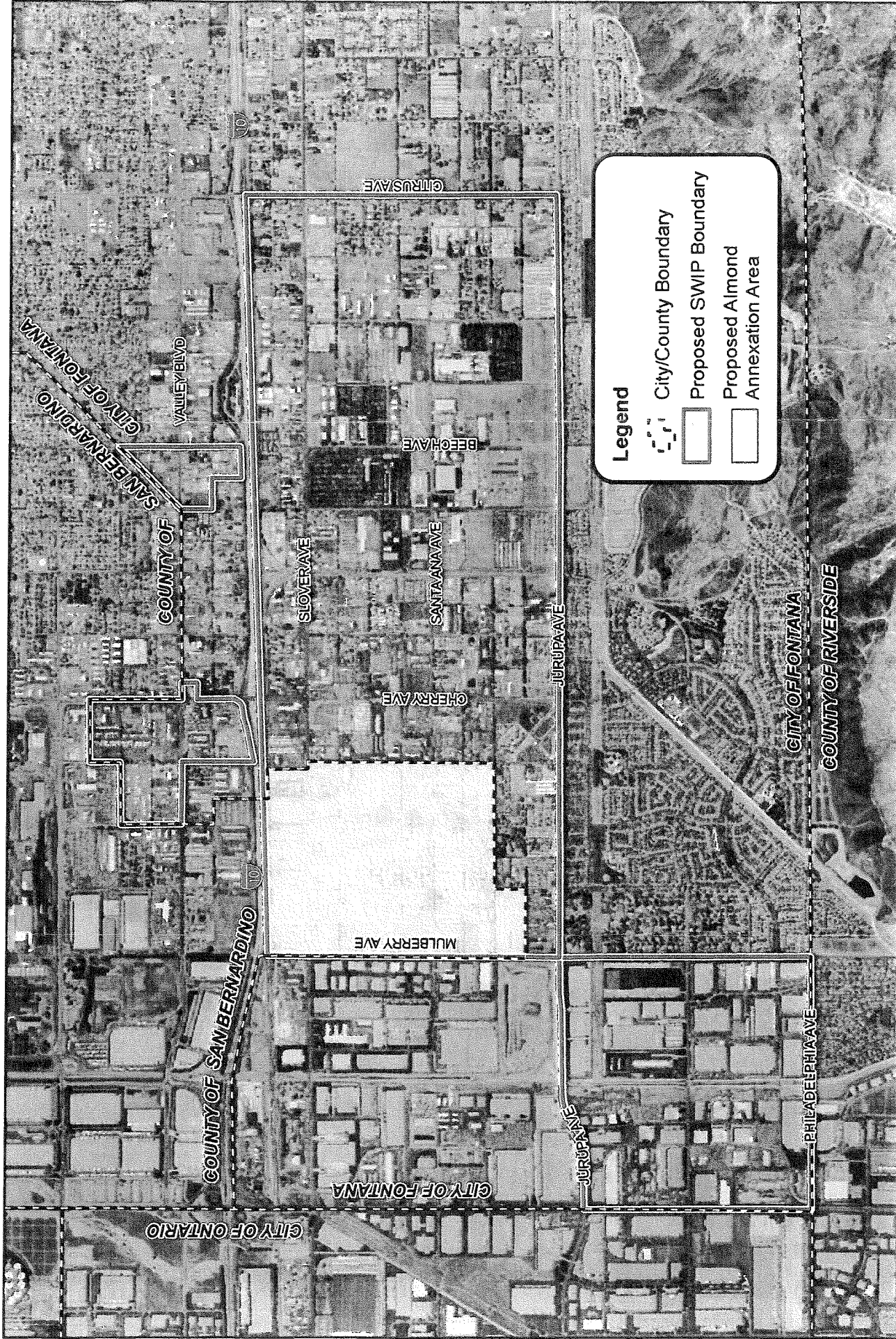
Additional Environmental Topics: The EIR will also address CEQA-mandated sections such as Cumulative Impacts, Growth-Inducing Impacts, Alternatives and other required sections.

V. ENVIRONMENTAL REVIEW PROCESS

Following completion of the 45-day Notice of Preparation public review period, the City of Fontana will incorporate relevant information into the Project EIR, including results of public scoping and technical studies. A Draft EIR will be circulated for public review and comment for the required 45-day public review period. All individuals that have requested notification will be placed on a Notice of Availability list for the Draft EIR, which will be available for review at the Fontana City Hall, 8353 Sierra Avenue, Fontana, CA 92335 and at the Lewis Library and Technology Center, 8437 Sierra Avenue, Fontana, CA, 92335. Following receipt of all written comments on the Draft EIR, the City will prepare Responses to Comments as part of the Final EIR.

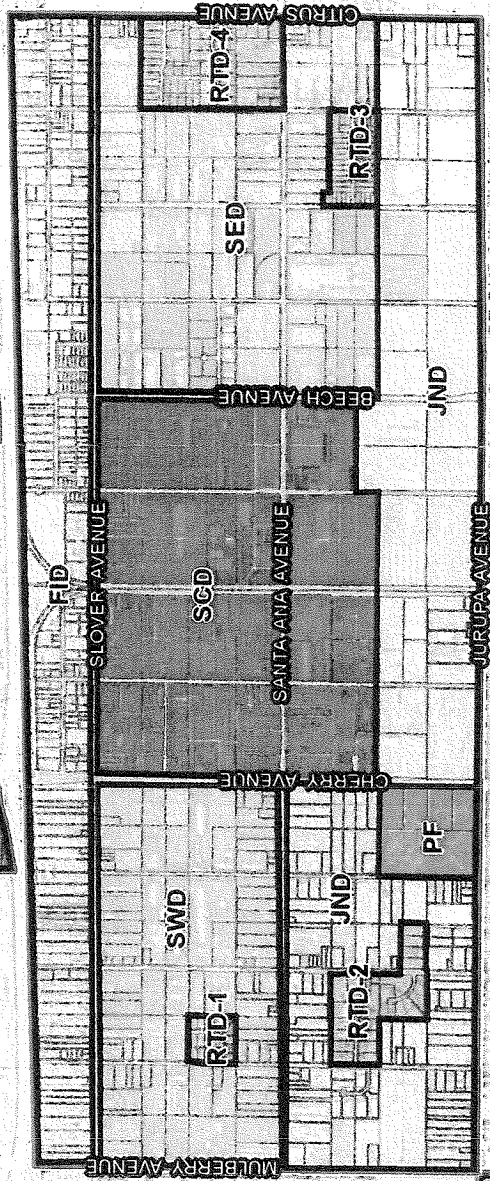
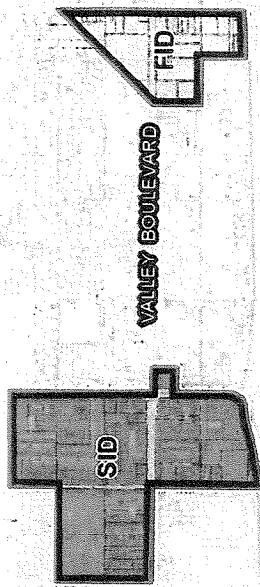
Any written comments regarding this Notice of Preparation can be submitted to the City of Fontana-Planning Division, 8353 Sierra Avenue, Fontana, California, 92335 by **October 29, 2009**. Inquiries concerning the Notice of Preparation may be directed to Dina Lomeli, Planning Technician, at (909) 350-6578 or Craig L. Bruorton, AICP, Principal Planner, at (909) 350-7625. For questions regarding the annexation process, please contact Cecilia Lopez-Henderson, Annexation Program Coordinator, at (909) 350-6743.


DON WILLIAMS, AICP
Director of Community Development



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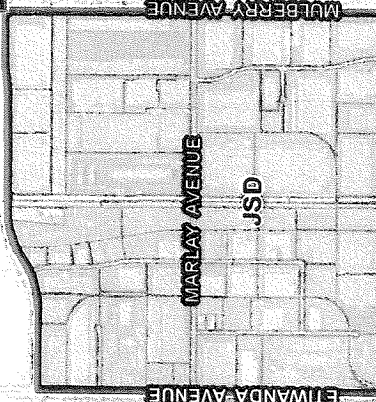
- City/County Boundary
- Proposed SWIP Boundary
- Proposed Almond Annexation Area



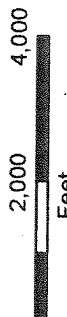
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- Speedway Industrial District (SID) = 126.2 Acres
- Freeway Industrial/Commercial (FID) = 333.7 Acres
- Slover East and West Industrial District (SED) = 361.9 Acres, (SWD) = 289.1 Acres
- Slover Central Manufacturing/Industrial District (SCD) = 423.7 Acres
- Jurupa North Research and Development District (JND) = 561.0 Acres
- Residential Trucking Districts (RTD 1-4)* = 107.1 Acres
- Public Facilities (Kaiser High School) (PF) = 37.7 Acres
- Jurupa South Industrial District (JSD) = 535.6 Acres
- Right of Way (ROW) = 334.7 Acres

* RTD-1 = 8.3 Acres, RTD-2 = 30.2 Acres, RTD-3 = 17.7 Acres, RTD-4 = 51.0 Acres



Source: Eagle Aerial, 2007



RBF
CONSULTING

07/13/09 IN 65-100340

FONTANA SOUTHWEST INDUSTRIAL PARK SPECIFIC PLAN EXPANDED NOP
Proposed Land Use Plan



ARNOLD SCHWARZENEGGER
GOVERNOR

STATE OF CALIFORNIA
GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH
STATE CLEARINGHOUSE AND PLANNING UNIT



CYNTHIA BRYANT
DIRECTOR

Notice of Preparation

September 22, 2009

To: Reviewing Agencies

Re: Southwest Industrial Park (SWIP) Specific Plan EIR
SCH# 2009091089

Attached for your review and comment is the Notice of Preparation (NOP) for the Southwest Industrial Park (SWIP) Specific Plan EIR draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Craig L. Bruorton
City of Fontana
8353 Sierra Avenue
Fontana, CA 92335

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

Scott Morgan
Acting Director

Attachments
cc: Lead Agency

**Document Details Report
State Clearinghouse Data Base**

SCH# 2009091089
Project Title Southwest Industrial Park (SWIP) Specific Plan EIR
Lead Agency Fontana, City of

Type **NOP** Notice of Preparation
Description NOTE: Review per lead October 29, 2009; Reference SCH# 1983091904

The Project proposes to comprehensive amendment to the original Specific Plan previously adopted in 1983 (and subsequently amended through 2008). In addition, the project proposes to annex an additional 472 acres (Almond Avenue Annexation Area). The total expansion will include an additional 1,318 acres from previous and proposed annexations, resulting in a total Project area of 3,110.7 acres. As part of this Specific Plan update a new land use plan would be created, as well as modifications and revisions to allowable uses, design guidelines, and development standards that govern new development within this area.

Lead Agency Contact

Name	Craig L. Bruorton		
Agency	City of Fontana		
Phone	(909) 350-7625	Fax	
email			
Address	8353 Sierra Avenue		
City	Fontana	State CA	Zip 92335

Project Location

County	San Bernardino
City	Fontana
Region	
Cross Streets	Citrus Ave, Jurupa Ave, Mulberry Ave
Lat / Long	
Parcel No.	
Township	
Range	
Section	
Base	

Proximity to:

Highways	I-10, I-15
Airports	
Railways	
Waterways	
Schools	
Land Use	Industrial

Project Issues Aesthetic/Visual; Air Quality; Biological Resources; Archaeologic-Historic; Toxic/Hazardous; Landuse; Noise; Population/Housing Balance; Public Services; Traffic/Circulation

Reviewing Agencies Resources Agency; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; Department of Fish and Game, Region 6; Native American Heritage Commission; California Highway Patrol; Caltrans, District 8; Air Resources Board, Major Industrial Projects; Department of Toxic Substances Control; Regional Water Quality Control Board, Region 8

Date Received	09/22/2009	Start of Review	09/22/2009	End of Review	10/29/2009
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☐ Resources Agency Nadell Gayou	☐ Fish & Game Region 2 Jeff Drongesen	☐ Public Utilities Commission Leo Wong	☒ Caltrans, District 8 Dan Kopulsky	☐ Regional Water Quality Control Board (RWQCB) ☐ RWQCB 1 Cathleen Hudson North Coast Region (1)
☐ Resources Agency Nadell Gayou	☐ Fish & Game Region 3 Robert Floerke	☐ Santa Monica Bay Restoration Guangyu Wang	☐ Caltrans, District 9 Gayle Rosander	☐ RWQCB 2 Environmental Document Coordinator San Francisco Bay Region (2)
☐ Dept. of Boating & Waterways Mike Sotelo	☐ Fish & Game Region 4 Julie Vance	☐ State Lands Commission Marina Brand	☐ Caltrans, District 10 Tom Dumas	☐ RWQCB 3 Central Coast Region (3)
☐ California Coastal Commission Elizabeth A. Fuchs	☐ Fish & Game Region 5 Don Chadwick	☐ Tahoe Regional Planning Agency (TRPA) Cherry Jacques	☐ Caltrans, District 11 Jacob Armstrong	☐ RWQCB 4 Teresa Rodgers Los Angeles Region (4)
☐ Colorado River Board Gerald R. Zimmerman	☒ Fish & Game Region 6 Gabrina Gatchel	<u>Business, Trans & Housing</u>	☐ Caltrans, District 12 Chris Herre	☐ RWQCB 5S Central Valley Region (5)
☐ Dept. of Conservation Rebecca Salazar	☐ Fish & Game Region 6 I/M Gabrina Gatchel	☐ Caltrans - Division of Aeronautics Sandy Hesnard	<u>Cal EPA</u>	☐ RWQCB 5F Central Valley Region (5) Fresno Branch Office
☐ California Energy Commission Dale Edwards	☐ Inyo/Mono, Habitat Conservation Program	☐ Caltrans - Planning Terri Pencovic	☐ Air Resources Board	☐ RWQCB 5R Central Valley Region (5) Redding Branch Office
☐ Cal Fire Allen Robertson	☐ Dept. of Fish & Game M George Isaac Marine Region	☐ California Highway Patrol Scott Loetscher Office of Special Projects	☐ Airport Projects Jim Lerner	☐ RWQCB 6 Lahontan Region (6)
☒ Office of Historic Preservation Wayne Donaldson	<u>Other Departments</u>	☐ Housing & Community Development CEQA Coordinator Housing Policy Division	☐ Transportation Projects Douglas Ito	☐ RWQCB 6V Lahontan Region (6) Victorville Branch Office
☐ Dept. of Parks & Recreation Environmental Stewardship Section	☐ Food & Agriculture Steve Shaffer Dept. of Food and Agriculture	☐ CEQA Coordinator Housing Policy Division	☐ Industrial Projects Mike Tollstrup	☐ RWQCB 7 Colorado River Basin Region (7)
☐ Central Valley Flood Protection Board Jon Yego	☐ Dept. of General Services Public School Construction	<u>Dept. of Transportation</u>	☐ California Integrated Waste Management Board Sue O'Leary	☒ RWQCB 8 Santa Ana Region (8)
☐ S.F. Bay Conservation & Dev't. Comm. Steve McAdam	☐ Dept. of General Services Anna Garbeff Environmental Services Section	☐ Caltrans, District 1 Rex Jackman	☐ State Water Resources Control Board Regional Programs Unit Division of Financial Assistance	☐ RWQCB 9 San Diego Region (9)
☒ Dept. of Water Resources Resources Agency Nadell Gayou	☐ Dept. of Public Health Bridgette Binning Dept. of Health/Drinking Water	☐ Caltrans, District 2 Marcelino Gonzalez	☐ State Water Resources Control Board Student Intern, 401 Water Quality Certification Unit Division of Water Quality	☐ Other _____
☐ Conservancy	<u>Independent Commissions/Boards</u>	☐ Caltrans, District 3 Bruce de Terra	☐ State Water Resources Control Board Steven Herrera Division of Water Rights	
☐ Fish and Game	☐ Delta Protection Commission Linda Flack	☐ Caltrans, District 4 Lisa Carboni	☐ Dept. of Toxic Substances Control CEQA Tracking Center	
☐ Dept. of Fish & Game Scott Flint	☐ Office of Emergency Services Dennis Castillo	☐ Caltrans, District 5 David Murray	☐ Department of Pesticide Regulation CEQA Coordinator	
☐ Environmental Services Division	☐ Governor's Office of Planning & Research State Clearinghouse	☐ Caltrans, District 6 Michael Navarro		
☐ Fish & Game Region 1 Donald Koch	☒ Native American Heritage Comm. Debbie Treadway	☐ Caltrans, District 7 Elmer Alvarez		
☐ Fish & Game Region 1E Laurie Hamsberger				

DEPARTMENT OF PUBLIC WORKS

FLOOD CONTROL • SOLID WASTE MGMT • SURVEYOR • TRANSPORTATION

SOLID WASTE MANAGEMENT DIVISION

222 West Hospitality Lane, Second Floor • San Bernardino, CA 92415-0017 • (909) 386-8701

Administration/Engineering Fax (909) 386-8900



COUNTY OF SAN BERNARDINO
PUBLIC AND SUPPORT
SERVICES GROUP

GRANVILLE M. "BOW" BOWMAN, P.E., P.L.S.
Director of Public Works

PETER H. WULFMAN
Solid Waste Division Manager

September 23, 2009

Craig L. Bruorton, AICP, Principal Planner
City of Fontana, Planning Division
8353 Sierra Avenue
Fontana, CA 92335

RECEIVED
SEP 24 2009
PLANNING DEPT. COPY

**RE: NOTICE OF INTENT TO PREPARE DRAFT ENVIRONMENTAL IMPACT REPORT FOR
THE SOUTHWEST INDUSTRIAL PARK (SWIP) SPECIFIC PLAN UPDATE AND
ANNEXATION**

Dear Mr. Bruorton:

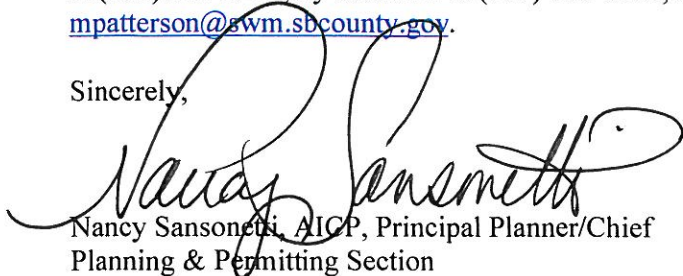
Thank you for the opportunity to comment on the above-referenced project.

The County of San Bernardino Solid Waste Management Division is responsible for the management and oversight of all County landfill and waste transfer operations. As such, we would request that the following issues be addressed in the Environmental Impact Report::

- The creation of a new waste stream with this development and its impact on existing landfill capacity and traffic (information provided should include waste generation pre and post construction, estimated tonnage, existing approved tonnage at receiving landfill(s), potential increase in traffic at the development site [creation of new streets], traffic to the landfill itself, etc.);
- Requirements for handling recycling, construction and demolition debris (information should include existing recycling programs);
- Whether any hazardous waste will be generated, and, if so, types and quantities, including proposed disposal method(s) (information should address pre and post construction; i.e., will any hazardous materials be used during demolition and/or construction and the types/quantities of hazardous waste expected after project completion);
- Availability of commercial waste haulers and expected increases in traffic due to expanded hauler routes to serve the proposed development.

Should you have any questions or comments, please feel free to contact Mary Patterson, Senior Planner, by phone at (909) 382-3237; by facsimile at (909) 386-8964, by mail to the address listed above, or by e-mail to mpatterson@swm.sbcounty.gov.

Sincerely,


Nancy Sansonetti, AICP, Principal Planner/Chief
Planning & Permitting Section

MARK H. UFFER
County Administrative Officer

Board of Supervisors

BRAD MITZELFELT	First District	NEIL DERRY	Third District
PAUL BIANE	Second District	GARY OVITT	Fourth District
JOSIE GONZALES	Fifth District		



Fontana Unified School District

9680 Citrus Avenue · P.O. Box 5090 · Fontana · CA 92334-5090 (909) 357-5000

September 28, 2009

Mr. Craig L. Bruorton
City of Fontana
8353 Sierra Avenue
Fontana, CA 92335

RECEIVED

SEP 29 2009

PLANNING DEPT.

Subject: Southwest Industrial Park (SWIP) Specific Plan EIR

Dear Mr. Bruorton,

The Fontana Unified School District ("District") has received the Notice of Preparation of an EIR for the SWIP Specific Plan update dated September 15, 2009. The District has reviewed the materials and has the following comments.

Generally, the areas of District concern are traffic, noise, and future land use designations – more specifically, the potential creation of attractive nuisances. The District currently operates Kaiser High School (11155 Almond Avenue) within the boundaries of the SWIP specific plan area. Additionally, the new Jurupa Hills High School (10700 Oleander Avenue) which is opening in the Fall of 2010 is located on the east side of Citrus Avenue, directly across the street from the proposed SWIP specific plan boundary. School sites are classified as sensitive receptors, and both of these sites have the potential to be impacted by the specific plan expansion with respect to traffic and student transportation and safety, noise, and nearby zoning and land use issues.

Traffic

Currently, the area under consideration for addition to the SWIP specific plan is zoned primarily M-1, or light industrial, and is sparsely populated, primarily consisting of trucking and warehousing industrial uses with the occasional house. An increase in the number of warehouse, trucking, and other industrial uses has the potential to significantly increase traffic near the schools, and an increase in large truck traffic may pose a safety danger to students walking to and from school.

Specifically, the Almond Annexation area is located directly northwest of Kaiser High School, and contains two areas identified as "Residential Trucking District". Much of the area identified as "residential Trucking District" is already operating as trucking facilities; however, these districts are being established in part to "...provide additional opportunities for trucking uses..." An expansion of trucking uses would increase traffic and specifically large truck traffic in the area. Combined with the other nearby land use designations including the expansion of warehousing facilities, which by their nature would involve an increase in truck traffic in the area, an increase in traffic and large truck traffic is almost a certainty and the potential for traffic and safety problems related to student transportation to and from school increases.

In addition to the general traffic studies conducted, the District requests the EIR address the potential safety risks posed to students walking to and from school by an increase in large truck traffic. Potential mitigation measures could include identified trucking routes that avoid areas of high foot traffic, additional traffic control measures such as pedestrian crosswalks and stop signs, or designated truck hours on specified segments of streets to avoid school arrival and departure hours. This is especially important given that almost all of the land use districts identified have the stated goal of increasing truck traffic and transport throughout.

Noise

The location of the two high schools, one within and one adjacent to, with respect to the proposed SWIP boundary justifies study of the noise impacts created by the expansion of the specific plan area and the land use designations identified in the areas nearest to the schools. A large increase in large truck traffic has the potential to increase noise impacts at stationary receptor sites such as schools. Additionally, many of the specific land uses identified aim to increase truck and warehousing uses, which could potentially create additional noise impacts above and beyond those created by merely expanding the SWIP area.

Land Use

The new Jurupa Hills High School is located on the east side of Citrus Avenue just south of Slover Avenue, and is very near the area identified as "Freeway Industrial/Commercial", which would encourage the development of industrial as well as commercial uses. California Law requires commercial uses that serve alcohol must be located at least 600 feet from the nearest school site.

The District looks forward to reviewing the draft EIR. Should you have any questions or require further information regarding this matter, please contact me at (909) 357-7522, or via email at purema@fUSD.net.

Thank you for your assistance in this matter.

Sincerely,



Melinda A. Pure
Director, Facilities Planning, Design, Construction

BOARD OF EDUCATION
Kathy Binks
Barbara L. Chavez
Gus Hawthorn
Laura Abernathy Mancha
Julie A. Ramos

SUPERINTENDENT
Cali L. Olsen-Binks

Telecommunications Device for the Deaf (909) 357-5018

MORONGO
BAND OF
MISSION
INDIANS



A SOVEREIGN NATION

RECEIVED

SEP 29 2009

PLANNING DEPT.

September 24, 2009

Craig I. Bruorton, AICP, Principal Planner
City of Fontana
8353 Sierra Avenue
Fontana, CA 92335

SUBJECT: Notice of Preparation
Southwest Industrial Park
Specific Plan EIR

Dear Mr. Bruorton:

Thank you for contacting the Morongo Band of Mission Indians regarding the above referenced project(s). The Tribe greatly appreciates the opportunity to review the project and, respectfully, offer the following comments.

The project is outside of the Tribe's current reservation boundaries but within an area that may be considered a traditional use area or one in which the Tribe has cultural ties (e.g. Cahuilla/Serrano territory). Because the project involves the preparation of an Environmental Impact Report for the Southwest Industrial Park the Tribe asks that you impose standard conditions regarding cultural and/or archaeological resources and buried cultural materials as follows:

- If human remains are encountered during mass or finished grading and other construction excavation, work in the immediate vicinity shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5.
- In the event that Native American cultural resources are discovered during project development/construction, all work in the immediate vicinity of the find shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the overall project may continue during this assessment period.

- If significant Native American cultural resources are discovered, for which a Treatment Plan must be prepared, the developer or his archaeologist shall contact the Morongo Band of Mission Indians ("Tribe")¹. If requested by the Tribe, the developer or the project archaeologist shall, in good faith, consult on the discovery and its disposition (e.g. avoidance, preservation, return of artifacts to tribe, etc.).
- If a cultural resource study is conducted for the project, the Morongo Band of Mission Indians respectfully requests a copy of said study.

If I may be of further assistance with regard to this matter, please do not hesitate to contact me at 951-755-5212 or FDANCY@MORONGO_NSN.GOV

very truly yours,

MORONGO BAND OF MISSION INDIANS



Franklin A. Dancy
Director of Planning

¹ The Morongo Band of Mission Indians realizes that there may be additional tribes claiming cultural affiliation to the area; however, Morongo can only speak for itself. The Tribe has no objection if the archaeologist wishes to consult with other tribes and if the city wishes to revise the condition to recognize other tribes.

September 29, 2009

Attn: Craig L. Bruorton, Principal Planner
City of Fontana
8353 Sierra Ave.
Fontana, CA 92335-3528

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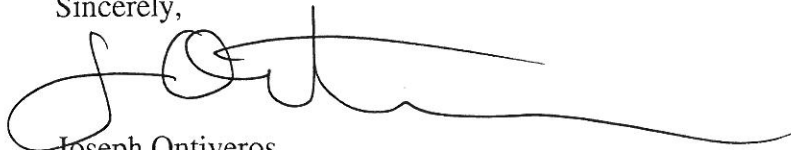
Re: Notice of Preparation for SWIP Specific Plan EIR

The Soboba Band of Luiseño Indians appreciates your observance of Tribal Cultural Resources and their preservation in your project. The information provided to us on said project has been assessed through our Cultural Resource Department, where it was concluded that although it is outside the existing reservation, the project area does fall within the bounds of our Tribal Traditional Use Areas. This project location is in close proximity to known village sites and is a shared use area that was used in ongoing trade between the Luiseno and Cahuilla tribes. Therefore it is regarded as highly sensitive to the people of Soboba.

Soboba Band of Luiseño Indians is requesting the following:

1. To initiate a consultation with the Project Developer and Land owner.
2. The transfer of information to the Soboba Band of Luiseno Indians regarding the progress of this project should be done as soon as new developments occur.
3. Soboba Band of Luiseño Indians continues to act as a consulting tribal entity for this project.
4. Working in and around traditional use areas intensifies the possibility of encountering cultural resources during the construction/excavation phase. For this reason the Soboba Band of Luiseño Indians requests that Native American Monitor(s) from the Soboba Band of Luiseño Indians Cultural Resource Department to be present during any ground disturbing proceedings. Including surveys and archaeological testing.
5. Request that proper procedures be taken and requests of the tribe be honored
(Please see the attachment)

Sincerely,



Joseph Ontiveros
Soboba Cultural Resource Department
P.O. Box 487
San Jacinto, CA 92581
Phone (951) 654-5544 ext. 4137
Cell (951) 663-5279
jontiveros@soboba-nsn.gov

Cultural Items (Artifacts). Ceremonial items and items of cultural patrimony reflect traditional religious beliefs and practices of the Soboba Band. The Developer should agree to return all Native American ceremonial items and items of cultural patrimony that may be found on the project site to the Soboba Band for appropriate treatment. In addition, the Soboba Band requests the return of all other cultural items (artifacts) that are recovered during the course of archaeological investigations. When appropriate and agreed upon in advance, the Developer's archeologist may conduct analyses of certain artifact classes if required by CEQA, Section 106 of NHPA, the mitigation measures or conditions of approval for the Project. This may include but is not limited or restricted to include shell, bone, ceramic, stone or other artifacts.

The Developer should waive any and all claims to ownership of Native American ceremonial and cultural artifacts that may be found on the Project site. Upon completion of authorized and mandatory archeological analysis, the Developer should return said artifacts to the Soboba Band within a reasonable time period agreed to by the Parties and not to exceed (30) days from the initial recovery of the items.

Treatment and Disposition of Remains.

A. The Soboba Band shall be allowed, under California Public Resources Code § 5097.98 (a), to (1) inspect the site of the discovery and (2) make determinations as to how the human remains and grave goods shall be treated and disposed of with appropriate dignity.

B. The Soboba Band, as MLD, shall complete its inspection within twenty-four (24) hours of receiving notification from either the Developer or the NAHC, as required by California Public Resources Code § 5097.98 (a). The Parties agree to discuss in good faith what constitutes "appropriate dignity" as that term is used in the applicable statutes.

C. Reburial of human remains shall be accomplished in compliance with the California Public Resources Code § 5097.98 (a) and (b). The Soboba Band, as the MLD in consultation with the Developer, shall make the final discretionary determination regarding the appropriate disposition and treatment of human remains.

D. All parties are aware that the Soboba Band may wish to rebury the human remains and associated ceremonial and cultural items (artifacts) on or near, the site of their discovery, in an area that shall not be subject to future subsurface disturbances. The Developer should accommodate on-site reburial in a location mutually agreed upon by the Parties.

E. The term "human remains" encompasses more than human bones because the Soboba Band's traditions periodically necessitated the ceremonial burning of human remains. Grave goods are those artifacts associated with any human remains. These items, and other funerary remnants and their ashes are to be treated in the same manner as human bone fragments or bones that remain intact.

Coordination with County Coroner's Office. The Lead Agencies and the Developer should immediately contact both the Coroner and the Soboba Band in the event that any human remains are discovered during implementation of the Project. If the Coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, the Coroner shall ensure that notification is provided to the NAHC within twenty-four (24) hours of the determination, as required by California Health and Safety Code § 7050.5 (c).

Non-Disclosure of Location Reburials. It is understood by all parties that unless otherwise required by law, the site of any reburial of Native American human remains or cultural artifacts shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act. The Coroner, parties, and Lead Agencies, will be asked to withhold public disclosure information related to such reburial, pursuant to the specific exemption set forth in California Government Code § 6254 (r).

Ceremonial items and items of cultural patrimony reflect traditional religious beliefs and practices of the Soboba Band. The Developer agrees to return all Native American ceremonial items and items of cultural patrimony that may be found on the project site to the Soboba Band for appropriate treatment. In addition, the Soboba Band requests the return of all other cultural items (artifacts) that are recovered during the course of archaeological investigations. Where appropriate and agreed upon in advance, Developer's archeologist may conduct analyses of certain artifact classes if required by CEQA, Section 106 of NHPA, the mitigation measures or conditions of approval for the Project. This may include but is not limited or restricted to include shell, bone, ceramic, stone or other artifacts.

OXFORD LAND DEVELOPMENT, LLC
225 South Lake Avenue, Suite 300
Pasadena, CA 91101
(626) 432-5450 – Office
(626) 432-5451 – Fax
oxfordland@gmail.com

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PLANNING DEPT.

September 23, 2009

COPY

Mr. Craig L. Bruorton, AICP
Principal Planner
City of Fontana
8353 Sierra Avenue
Fontana, CA 92335

RE: SWIP Specific Plan Update and Annexation

Dear Craig Bruorton

I will be on vacation until October 8th, but would otherwise attend the October 6, 2009 public scoping meeting.

My comments for consideration by the City will be the same as are being proposed for the SWIP Redevelopment Plan Amendment No. 9 Program EIR, and are enclosed.

I can be reached at the contact information above if there are questions or clarifications necessary.

Highest and best regards



Cecila Jackson
SWIP PAC Member: Business Owner

September 23, 2009

**OCTOBER 6, 2009 NOP AND PUBLIC SCOPING MEETING
SWIP Specific Plan Update and Annexation**

~~~~

My comments and suggestions on the environmental issues are as follows:

1. Establish minimum 3<sup>rd</sup> party certification requirements for *all* new construction, major rehabs, and new residential communities within the Project Area for energy and environmental design. As examples: Leadership in Energy and Environmental Design (LEED), Energy Star, and Americans with Disabilities Act (ADA).
2. Establish agency or manager to provide financial assistance, fee waivers, grants, rebates and incentives to businesses, landowners, homeowners and developers for energy and environmental protection. Potential sources of these incentives would be from federal, state, local governments, permitting processes and utility companies.
3. Significant consideration within the Project Area to reducing cumulative heat island effect resulting from proliferation of concrete structures. Mitigations could include an abundance of street trees to shade sidewalks; urban forests within residential communities; Tree City USA status within residential communities; and landscape greening of concrete tilt-ups adjacent to residential streets;
4. Establish exterior "Dark Sky" compliant lighting guidelines to reduce nighttime glare which interfere with migratory birds and residential quality of life. Considerations to be given to LED lighting which appear to be environmentally superior to fluorescent/mercury lighting?

Respectfully submitted by:

Cecila Jackson

SWIP PAC Member: Business Owner

225 South Lake Avenue, Suite 300

Pasadena, CA 91101

[oxfordland@gmail.com](mailto:oxfordland@gmail.com)

# VASILJ, INC.

General Engineering Contractor  
State Contractors License # 711040

Tel: (626) 480-1442  
Fax: (626) 480-1610

September 30, 2009

City of Fontana  
Planning Division  
8353 Sierra Avenue  
Fontana, CA 92335

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Re: Notice of Preparation

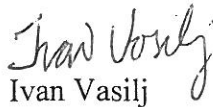
To Whom It May Concern:

I, Ivan Vasilj the property owner of 14512 Aliso Dr. Fontana, Ca, am in agreement with the proposed expansion of the SWIP Specific Plan. I would like the current heavy industrial zoning to remain in effect with regards to my property.

My property is located in the Slover Central Manufacturing/Industrial District (SCD); I am in agreement with the proposed land use concept to promote trucking related businesses and uses. I would also like SCD to promote and encourage the use of construction related businesses, construction materials, equipment sales, storage and repairs.

I feel that the current right of way limits are too severe and the setbacks along property lines are too great. The current standards are too costly for any potential development to take place. During the current economic downturn, I feel that the City of Fontana should lessen the requirements for development and encourage new developments to be constructed within our City limits.

Sincerely,

  
Ivan Vasilj

**From:** Craig Bruorton <cbruorto@fontana.org>  
**Date:** 10/5/2009 8:31 AM  
**Subject:** FW: NOP comments, SWIP update

---

From: slpleasant@aol.com [mailto:slpleasant@aol.com]  
Sent: Saturday, October 03, 2009 1:01 PM  
To: Craig Bruorton  
Cc: Dina Lomeli; amartukovich@lee-associates.com; martukovich@lee-associates.com; wteece@dispatchtrans.com  
Subject: NOP comments, SWIP update

Dear Mr. Bruorton

Per our phone discussion last week, I just received the attached notice of your Notice of Preparation(NOP) community meeting set for this Monday. As I explained on several occasions with you, I have several clients in the area that have trucking businesses which are located within the Almond Annexation area. I also note that the proposed SWD land use and description seems to limit such uses. The SWIP update will cluster trucking uses around Cherry Avenue and restrict or eliminate them in the Almond Annexation area. I believe that trucking uses should be spread out along the Slover and Santa Ana corridors rather than clustered around Cherry Ave, as proposed by your proposed land use plan. This will limit the amount of truck traffic congestion in the Cherry Ave. corridor area and open up more direct access to Mulberry Ave to the 60 Freeway and on Slover Ave, to the Etiwanda interchange on the 10 Freeway. The EIR should address this alternative, "clustering vs spreading" trucking over a greater area.

There should also be a list of interim uses permitted by the SWIP that includes trucking and other uses that are compatible with the base land use. This should also be addressed in the EIR.

I appreciate the opportunity to offer these comments and look forward to reviewing future drafts of the EIR and SWIP update.

Please add my comments to the NOP.

Steve Pleasant

-----Original Message-----

From: Dina Lomeli <dlomeli@fontana.org>  
To:  
Sent: Tue, Sep 29, 2009 5:44 pm  
Subject: SWIP Specific Plan Update & annexation  
Dear Stakeholder,

The City of Fontana would like to inform you of the upcoming Southwest Industrial Park Specific Plan (SWIP) Update and Annexation, Notice of Intent to Prepare Draft Environmental Impact Report. We have sent out notices to the property owners inside the SWIP boundaries and 660 foot radius outside the SWIP boundaries. You are receiving this informational e-mail because you are in the SWIP Distribution List. Please see the attached documents for additional information about the environmental process.

Sincerely,

Dina Lomeli  
City of Fontana, Planning Division  
Planning Technician  
(909) 350-6578

# Southwest Industrial Park Specific Plan

**Prepared for:**

CITY OF FONTANA

8353 Sierra Avenue, Fontana, California 92335

Mayor: Aquanetta Warren

Mayor Pro-Tem: John Roberts

City Council: Michael Tahan, Matthew Slowik and Lydia S. Wibert

Planning Commission: Carole Lee, Larry Meyer, Peter Garcia, Robert Baker and Phil Cothran

City Manager: Kenneth R. Hunt

Deputy City Manager: Debbie Brazill

Director of Community Development: Don Williams, AICP

SWIP Team: Craig Bruorton, Principal Planner, Shannon Casey, Senior Planner, Cecilia Lopez-Henderson, Annexation Program Coordinator, Shawnika Johnson, Assistant Planner and Dina Lomeli, Planning Technician

**Adopted by Fontana City Council – March XX, 2012**

# **Southwest Industrial Park Specific Plan**

**Prepared by:**

RBF Consulting  
14725 Alton Parkway, Irvine, California 92618  
City of Fontana  
SWIP Team  
8353 Sierra Avenue, Fontana, California 92335

**Adopted by Fontana City Council – March XX, 2012**

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PUBLIC REVIEW DRAFT

## Chapter 1.0 – Introduction



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### **1.1 Project Location**

The SWIP Specific Plan is located on the southwestern edge of the City of Fontana, California (See Exhibit 1-1 – Regional Vicinity Map and Exhibit 1-2 – Local Vicinity Map). Fontana was incorporated on June 25, 1952 and became Southern California's leading producer of steel and related products. The steel industry dominated the City's economy until the late 1970's, when Kaiser Steel began to cut back on production and labor. In 1984, the Kaiser Steel facility closed, and the plate steel and rolling mill plants were both acquired by California Steel Company, which continues to produce steel products.

In addition to steel production, several industrial facilities, as well as warehousing and distribution facilities, are located in Fontana because of its strategic location along the I-15, I-210, I-10, and I-60 Freeways. As a result, this area is also home to several railroad and trucking facilities.



Exhibit 1-1 – Regional Vicinity Map

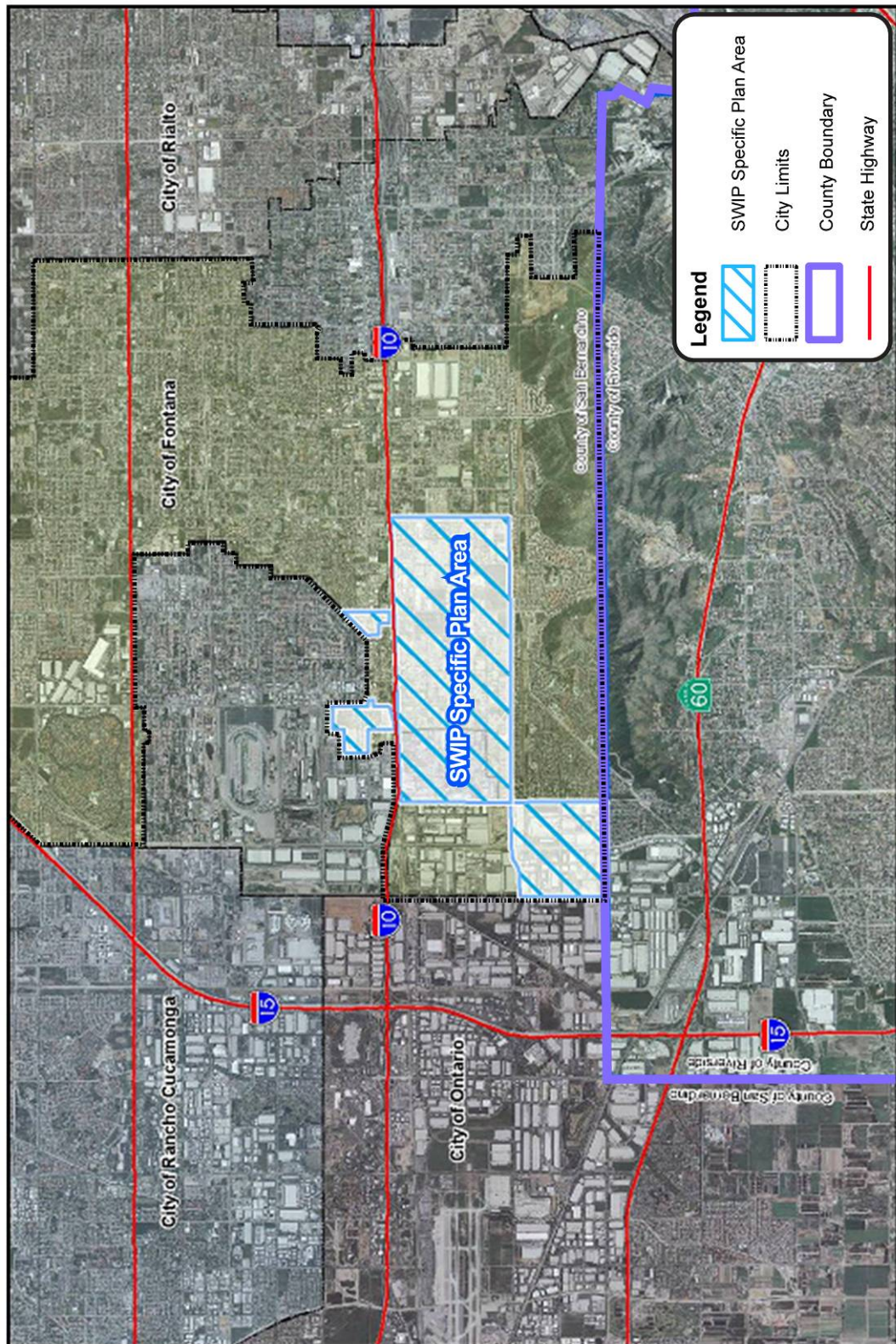


Exhibit 1-2 – Local Vicinity Map

## **1.2 Annexation**

In 2005, the City of Fontana proposed the annexation of approximately 2,920.9 acres (4.6+/- square miles) of unincorporated land within its sphere of influence. This annexation action concluded in 2007 and included 32 separately identified unincorporated “islands.” Of these, seven were located within the proposed boundaries of the SWIP Specific Plan.

As part of the 2005 Annexation process, the City prepared a Plan for Services for the proposed Annexation of Unincorporated Island Areas. The Plan for Services demonstrated that the population and service assumptions incorporated into the 2003 General Plan were consistent with the population projections and projections of service needs and capacities calculated for the annexation area in the 2005 Service Plan.

A portion (approximately 472 acres) in the northwest corner of the project site is currently in unincorporated San Bernardino County and is referred to as the Almond Avenue Annexation Area. The annexation area is bordered by interstate 10 on the north, Mulberry Avenue on the west, Almond Avenue on the east, and lies approximately 1,400 feet north of Jurupa Avenue. The City is proposing to annex this additional area into the City. The City is proposing to annex this additional area into the City as well as the SWIP Specific Plan.

### 1.3 Land Use Concept

The SWIP Specific Plan ("Specific Plan") includes nine land use districts with approximately 3,110 acres of industrial, manufacturing, office, commercial, research and development, and flex-tech development. Some existing residential areas will be preserved. Exhibit 1-3 – Land Use Map depicts the boundaries for each land use district within the Specific Plan project area and Table 1-1 – Build-Out provides build-out statistics for each of them.

Table 1-1 – Build-Out

| <i>SWIP Land Use District</i>          | <i>Acres</i> | <i>Commercial (SF)<sup>1</sup></i> | <i>Office (SF)</i> | <i>Industrial (SF)<sup>2</sup></i> | <i>Residential (DU)</i> | <i>Existing Development to Remain (SF)</i> | <i>Total (SF)/DU</i> |     |
|----------------------------------------|--------------|------------------------------------|--------------------|------------------------------------|-------------------------|--------------------------------------------|----------------------|-----|
| Freeway Industrial/Commercial          | 333.7        | 2,185,057                          | 546,264            | 2,731,321                          |                         | 478,645                                    | 5,462,642            |     |
| Speedway Industrial                    | 126.2        | 762,191                            |                    | 1,778,446                          |                         | 31,508                                     | 2,540,637            |     |
| Slover West Industrial                 | 289.1        |                                    |                    | 5,025,953                          |                         | 88,068                                     | 5,025,953            |     |
| Slover Central Manufacturing           | 423.7        |                                    |                    | 3,710,006                          |                         | 960,325                                    | 3,701,006            |     |
| Slover East Industrial                 | 463.15       | 503,074                            |                    | 2,012,298                          |                         | 1,025,461                                  | 2,515,372            |     |
| Jurupa North Research and Development  | 515.1        | 2,033,109                          | 1,219,865          | 4,879,460                          |                         | 392,934                                    | 8,132,434            |     |
| Jurupa South Industrial                | 535.6        |                                    |                    | 2,249,874                          |                         | 7,241,326                                  | 2,249,874            |     |
| Residential Trucking                   | 51.7         |                                    |                    |                                    | 180*                    |                                            |                      | 180 |
| Public Facilities (Kaiser High School) | 37.7         |                                    |                    |                                    |                         |                                            | N/A                  |     |
| <b>Right of Way</b>                    | 334.7        |                                    |                    |                                    |                         |                                            | N/A                  |     |

**Assumptions:**

1. The Commercial Category includes service commercial and retail commercial land uses
2. The Industrial Category includes industrial and manufacturing uses, including but not limited to warehousing, flex-tech developments.

\* Existing residential units to remain within the Specific Plan area.



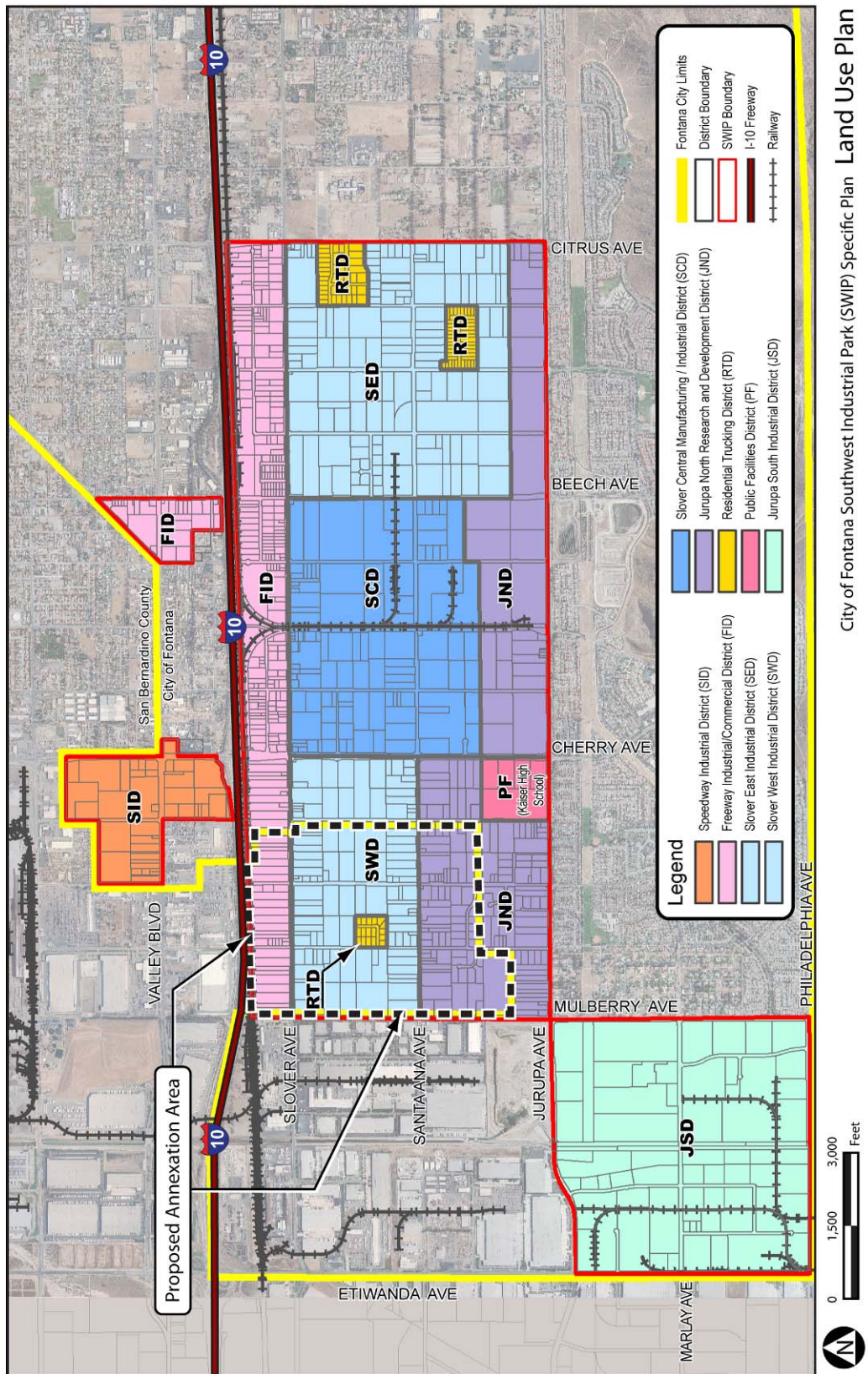


Exhibit 1-3 – Land Use Map

## Chapter 2.0 – Policy Framework





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## 2.1 Policy Framework

A primary objective of the SWIP Specific Plan is to establish a policy and regulatory document that is a result of community participation and input. Several methods of outreach were used to inform citizens of Fontana, as well as citizens of San Bernardino County. These methods are listed below:

- Community Mail Brochures with contact information about the project were mailed to city and county residents.
- The project was discussed at Public Meetings.
- Information was made available on the City of Fontana Website.
- A Toll-Free Hotline was set up at City Hall.
- A SWIP Annexation/Open House was conducted.

## 2.2 Planning Factors

As part of the development of the Specific Plan, an extensive opportunities and constraints analysis was conducted. This analysis identified the opportunities, constraints, issues, concerns, and positive/negative attributes that influence and contribute to the successful implementation of the SWIP Specific Plan. The following planning factors highlight and summarize the facts and findings in the analysis:

- **Industrial Development History** - Fontana has had a longstanding history of Industrial Development. The Kaiser Steel Mill opened in 1942, and after closure in 1984, a shift in industrial services towards trucking and logistics-based distribution began within the area.
- **Gateway Opportunities** - The Specific Plan area abuts the I-10 Freeway for about 3.2 miles, which will provide an opportunity to serve as a gateway to the City and establish the image of the City.
- **Locational Factors** - The Specific Plan area is located in close proximity to some of the most heavily traveled freeways in the State of California. SR-60, I-10 and I-15 all provide major thoroughfares for truckers and motorists. In addition, Slover Avenue, located in the northern portion of the Specific Plan area, is a heavily traveled frontage road that provides access to the area.
- **Emerging Development Trends** - Market research indicates that demand for Industrial and logistics-based warehousing and distribution services will continue to increase in the Inland Empire through 2030. The Fontana industrial market is considered to have a healthy vacancy rate and healthy lease rates when compared to surrounding cities.

- **Existing Development Standards** - The existing industrial development standards need to be updated so the Specific Plan area can be competitive with surrounding market areas.
- **Existing Parcel Sizes and Development Availability** - The recent and proposed annexations within the Specific Plan area will result in an increase in the amount of parcels available for development. This in turn will provide opportunities for larger district areas within the overall Specific Plan area.
- **Infrastructure Upgrades** - Many roadways require improvements such as additional lanes, street signs/lights, additional traffic signals and medians to conform to the General Plan Circulation Element. Interchange improvements are being proposed at the I-10/Cherry Avenue, I-10/Beech Avenue, and I-10/Citrus Avenue interchanges. These infrastructure upgrades will improve access and mobility throughout the project site, as well as surrounding areas.
- **Underutilized Land** - A large percentage of acreage in the Specific Plan area is ready for more intensive development.
- **Non-Conforming Land Use and Sensitive Receptors** - Many of the uses within the Specific Plan Area were developed under San Bernardino County regulations and do not conform with current Fontana City regulations. As a result, several residential areas, and several sensitive uses will need to be accommodated through the use of additional development standards and buffers.

### 2.3 Guiding Principles

This Specific Plan contains Guiding Principles that are general statements of direction to guide decision-makers when evaluating development proposals and design concepts and determining if they support the overall intent of the Specific Plan.

- **Guiding Principle 1.0**  
Increase and maintain an increased daytime employment population.
- **Guiding Principle 2.0**  
Coordinate land uses and transportation with infrastructure planning.
- **Guiding Principle 3.0**  
Embrace flexible and diverse industrial land uses that foster economic development opportunities for the City of Fontana and surrounding areas.
- **Guiding Principle 4.0**  
Retain and expand existing businesses and business opportunities.

- **Guiding Principle 5.o**  
Improve pedestrian accessibility, vehicular access, and parking to establish safety throughout the Specific Plan Area.
- **Guiding Principle 6.o**  
Enhance the streetscape as well as the parking and loading areas throughout the Specific Plan area.
- **Guiding Principle 7.o**  
Tailor land use regulations and design guidelines to custom-fit the Specific Plan area.
- **Guiding Principle 8.o**  
Improve visual and functional linkages between I-10, Slover Avenue, and the City of Fontana.
- **Guiding Principle 9.o**  
Identify and prioritize development area and property assemblage opportunities to serve as economic development catalysts.
- **Guiding Principle 10.o**  
Coordinate and focus change in the Specific Plan area to enhance the sense of place and promote aesthetic improvements.
- **Guiding Principle 11.o**  
Incorporate planning policy that encourages viable development in the future, while paying tribute to Fontana's past.

## **2.4 Policy Objectives**

Objectives provide more explicit policy statements that implement the Specific Plan's Guiding Principles and provide consistency with policies contained in the Fontana General Plan.

Specific Plan Land Use (LU) Objectives include:

- **Objective LU-1**  
Establish incentives to encourage private development and investment in this sector of the City by creating a gateway along the I-10 corridor.
- **Objective LU-2**  
Contribute positively to the City-wide employment and economic base through implementation of a viable southern employment center within the City of Fontana.

- **Objective LU-3**  
Create land use districts that encourage high quality development responsive to market demands and Fontana development objectives.
- **Objective LU-4**  
Incorporate modulated building volumes, mass, height, and articulated facades to create spaces suitable for industrial development throughout the SWIP Specific Plan Area.
- **Objective LU-5**  
Create a gateway district which will incorporate wayfinding mechanisms and will create transportation and aesthetic linkages between the I-10 and the City of Fontana.
- **Objective LU-6**  
Develop incentives to encourage the reuse of underutilized land.
- **Objective LU-7**  
Provide specific requirements that enhance public amenities for new development and rehabilitation.
- **Objective LU-8**  
Allow a mix of industrial uses to capitalize on the market potential within the City of Fontana and surrounding region.

## **2.5 Circulation, Parking and Infrastructure (CIR) Objectives**

- **Objective CIR-1**  
Create a street system capable of handling large transportation flows from trucks.
- **Objective CIR-2**  
Provide work opportunities near existing housing to reduce traffic congestion along major freeways and local roads.
- **Objective CIR-3**  
Ensure potential transportation impacts on the Specific Plan are identified and mitigated to the greatest extent feasible.
- **Objective CIR-4**  
Ensure vehicular traffic Level of Service (LOS) meets or exceeds adopted City wide Standards.



- **Objective CIR-5**

Ensure infrastructure capacity within the Specific Plan Area meets future demands.

## **2.6 Environmental (ENV) Objectives**

- **Objective ENV-1**

Ensure potential environmental effects of the Specific Plan are mitigated to a less than significant level where feasible.

- **Objective ENV-2**

Establish methods and strategies for the conservation of resources, including water use and drought tolerant landscaping.

## **2.7 Landscape (LS) Objectives**

- **Objective LS-1**

Incorporate landscaped parkways, parking lots, and pedestrian walkways separated from the street to enhance safety and enjoyment of residents and employees.

- **Objective LS-2**

Incorporate a system of on- and off-street bicycle pathways with access from the residences to employment areas.

## **2.8 Design (D) Objectives**

- **Objective D-1**

Enhance the area through a streetscape improvement and gateway plan with an implementation program that reinforces the identity of each district and includes a hierarchy of entry monumentation and landscaping.

- **Objective D-2**

Prepare design guidelines as a tool to facilitate exemplary and innovative design; promote development that is compatible with the surrounding environment; serve as a resource of ideas for project applicants; and perform as an objective reference for City review of project applications.

## **2.9 Implementation and Administration (IMP) Objectives**

- **Objective IMP-1**

Establish a tier-review process for discretionary development application review to streamline the approval process.

- **Objective IMP-2**

Prepare an Environmental Impact Report as the primary tiering clearance document to streamline additional project level environmental reviews.

- ***Objective IMP-3***

Integrate design guidelines within the design review process to streamline discretionary review.

## Chapter 3.0 – Transportation and Circulation



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### **3.1 Circulation Master Plan**

The Circulation Master Plan for the SWIP Specific Plan focuses on connectivity to the I-10, I-15, and SR-60 Freeways, as well as connectivity along primary major roadways and truck routes. The Circulation Plan, illustrated in Exhibit 3-1, provides necessary roadway improvements to accommodate traffic generated by the anticipated Land Use Plan. As a component of this project, a comprehensive traffic analysis was prepared, which identified existing conditions, forecasted future conditions, and provided recommended roadway segment and intersection improvements to address project-related significant impacts associated with the build-out of the anticipated land use plan. This analysis is provided in the technical appendices of the SWIP Specific Plan EIR.

The traffic analysis prepared for the SWIP Specific Plan determined that the anticipated build-out of the SWIP Specific Plan will impact local roadways.

### **3.2 Initial Roadway Segment Improvements**

To prevent the identified local impacts, the following initial improvements are recommended to keep roadway segments functioning as 2030 build-out is approached. Recommended improvements are noted below.

#### **Improvement No. 1 – Mulberry Avenue**

Construct Mulberry Avenue connection from Slover Avenue to Valley Boulevard over I-10 freeway in order to provide additional north-south capacity, reducing forecast traffic on Etiwanda Avenue and Cherry Avenue. This improvement is consistent with City of Fontana General Plan Circulation Master Plan.

#### **Improvement No. 2 – Beech Avenue**

Construct Beech Avenue from Slover Avenue to Valley Boulevard including an interchange with I-10 in order to provide additional north-south capacity and freeway access, reducing forecast traffic on Cherry Avenue and Citrus Avenue. This improvement is consistent with City of Fontana Circulation General Plan Circulation Master Plan.

#### **Improvement No. 3 – Jurupa Avenue between Etiwanda Avenue and Mulberry Avenue**

Widen the study roadway segment from a 4-lane divided roadway segment to a 6-lane divided roadway segment. This improvement is consistent with the City of Fontana General Plan Circulation Master Plan.

#### **Improvement No. 4 – Mulberry Avenue between Slover Avenue and Santa Ana Avenue**

Widen the study roadway segment from a 2-lane undivided roadway segment to a 4-lane undivided roadway segment. This improvement is consistent with the City of Fontana Circulation Master Plan.



# Southwest Industrial Park Specific Plan

## Transportation and Circulation

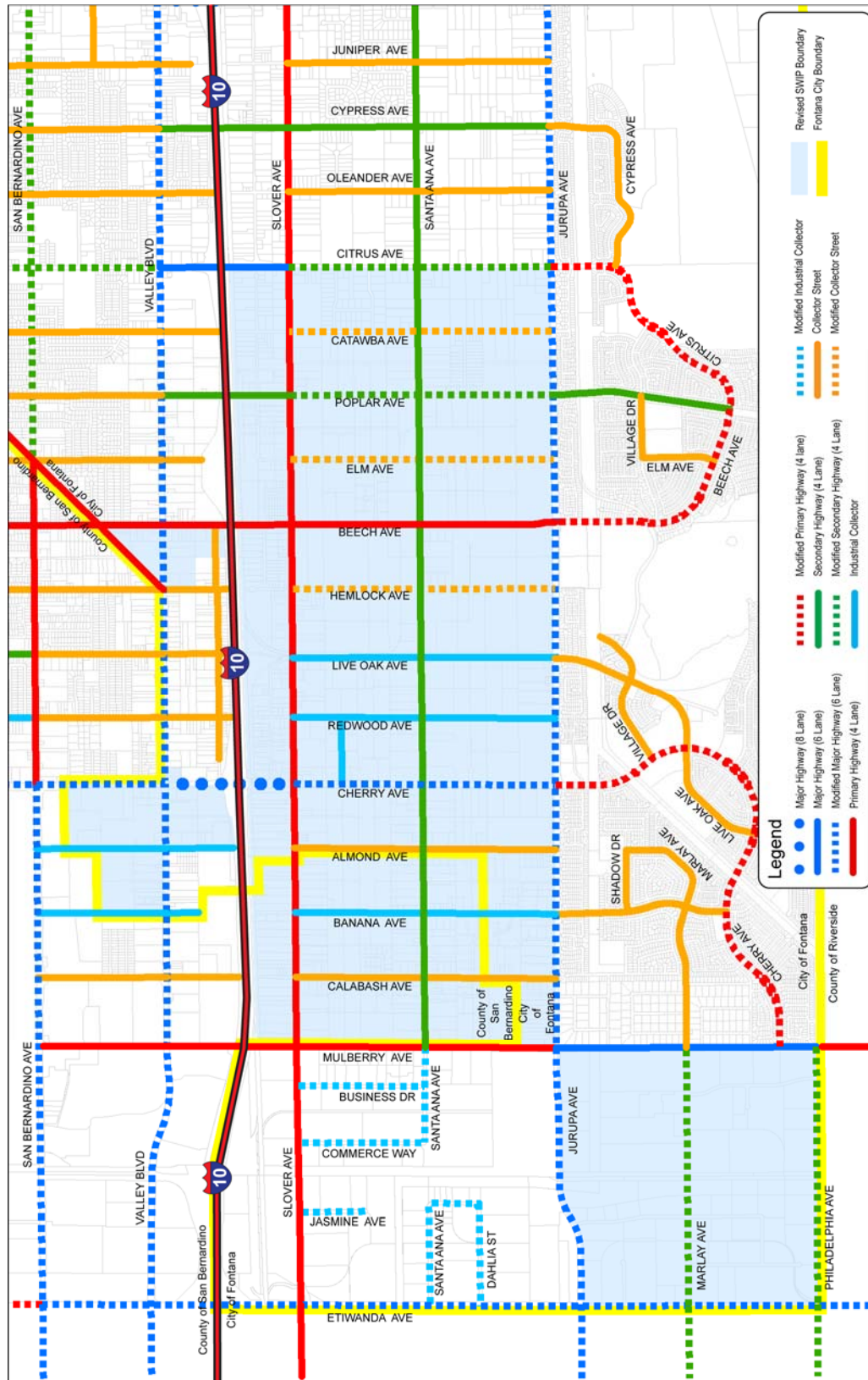


Exhibit 3-1 – Circulation Master Plan

**Improvement No. 5 – Slover Avenue east of Mulberry Avenue**

Widen the study roadway segment from a 4-lane divided roadway segment to a 6-lane divided roadway segment. Requires General Plan Circulation Master Plan update.

**Improvement No. 6 – Jurupa Avenue between Mulberry Avenue and Calbash Avenue**

Widen the study roadway segment from a 4-lane divided roadway to a 6-lane divided roadway. This improvement is consistent with the City of Fontana General Plan Circulation Master Plan.

**Improvement No. 7 – Slover Avenue between Redwood Avenue and Live Oak Avenue**

Widen the study roadway segment from a 4-lane divided roadway segment to a 6-lane divided roadway segment. Requires General Plan Circulation Master Plan update.

**Improvement No. 8 – Beech Avenue between Slover Avenue and Santa Ana Avenue**

Widen the study roadway segment from a 2-lane divided roadway to a 4-lane divided roadway. Requires General Plan Circulation Master Plan update.

**Improvement No. 9 – Citrus Avenue between Slover Avenue and Santa Ana Avenue**

Widen the study roadway segment from a 2-lane undivided roadway segment to a 4-lane undivided roadway segment. Requires General Plan Circulation Master Plan update.

**Improvement No. 10 – Citrus Avenue between Santa Ana Avenue and Jurupa Avenue**

Widen the study roadway segment from a 2-lane undivided roadway segment to a 4-lane undivided roadway segment. Requires General Plan Circulation Master Plan update.

**Improvement No. 11 – Slover Avenue between Oleander Avenue and Cypress Avenue**

Widen the study roadway segment from a 4-lane divided roadway segment to a 6-lane divided roadway segment. Requires General Plan Circulation Master Plan update.

### **3.3 Additional Roadway Segment Improvements**

The ultimate 2030 build-out of the SWIP Specific Plan will be addressed in the SWIP Environmental Impact Report (EIR). These improvements are needed because anticipated 2030 build-out will generate more impacts to the local circulation system, even with the previously identified improvements in place.

### **3.4 Intersection Improvements**

A total of 45 intersections have been chosen as study intersections within the SWIP Specific Plan area. The traffic congestion generated by the 2030 buildout of the SWIP Specific Plan have been addressed in the SWIP Environmental Impact Report (EIR).

### **3.5 Truck Routes**

Many of the roads within and around the SWIP Specific Plan area are designated as truck routes. The SWIP Specific Plan proposes multiple truck routes, in accordance with the Fontana General Plan Circulation Element. Truck routes within the SWIP Specific Plan area are depicted in Exhibit 3-2 – Truck Routes, along the following roadways:

#### **East to West**

- Valley Boulevard
- I-10
- Slover Avenue
- Santa Ana Avenue
- Jurupa Avenue
- Marlay Avenue

#### **North to South**

- Etiwanda Avenue
- Mulberry Avenue
- Cherry Avenue
- Beech Avenue
- Citrus Avenue

### **3.6 Pedestrian and Bicycle Circulation**

Pedestrian and bicycle circulation routes are anticipated within the SWIP Specific Plan, consistent with the Trails Plan and Bicycle Plan shown in the General Plan Circulation Element. It is anticipated that the provision of pedestrian and bicycle trails will foster multi-modal transportation opportunities and connections in a project area heavily centered on the automobile and truck. Pedestrian routes include a Southern California Edison Utility easement just south of Jurupa Avenue and a pedestrian trail that connects through the Jurupa South Industrial Sub-District, between Etiwanda and Mulberry Avenue. Class I Bike Paths are proposed just south of Jurupa Avenue, within the existing SCE Utility easement, and along the San Sevaine Creek Channel, which runs in a north to south direction through the JSD Sub-District between Etiwanda and Mulberry Avenue. Class II Bike Lanes are proposed along San Bernardino Avenue, Santa Ana Avenue, and Poplar Avenue within the SWIP Specific Plan area. Proposed pedestrian and bicycle routes can be seen in Exhibit 3-3 – Pedestrian and Bicycle Circulation Plan.



Exhibit 3-2 – Truck Routes



# Southwest Industrial Park Specific Plan

## Transportation and Circulation

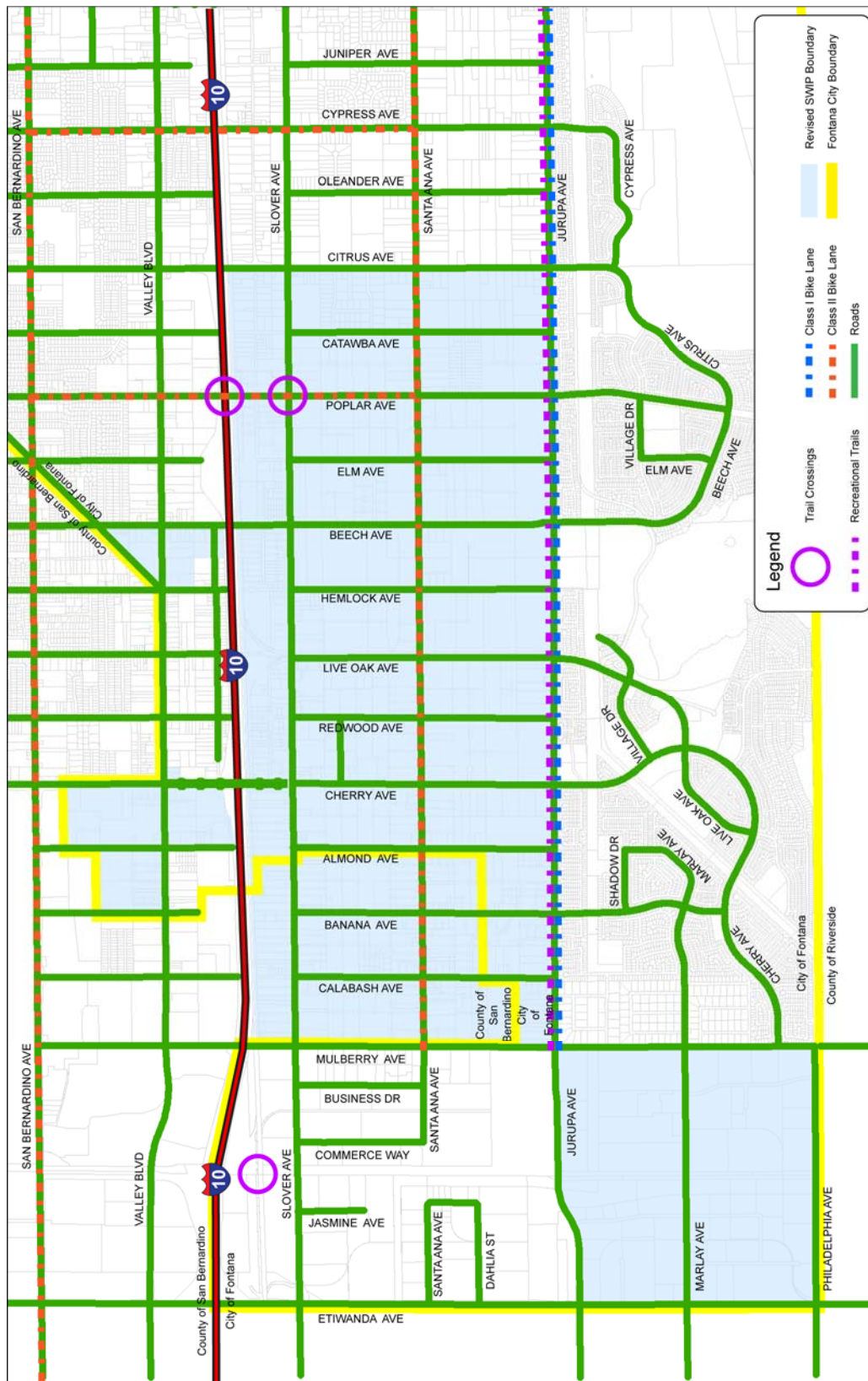


Exhibit 3-3 – Pedestrian and Bicycle Circulation Plan

## Chapter 4.0 – Infrastructure Improvements



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#### **4.1 Water Services and Recycled Water**

##### **A. Domestic and Recycled Water**

###### **1. Background**

The SWIP Specific Plan area is within the service area of the Fontana Water Company (FWC), a private water purveyor which provides water service to the City of Fontana. Based on the 2005 Water System Master Plan, FWC will rely on up to 75 percent of its total water supply from local groundwater sources drawing from the Chino Basin. Therefore, FWC plans to develop new water supply sources based on this percentage, which will require construction of new water facilities for, and possibly within, the SWIP Specific Plan area. The Chino Basin is an adjudicated basin which requires imported sources for basin replenishment. The new facilities are expected to be required due to the estimated increase in water demands of the SWIP Specific Plan area to approximately 3.47 Million Gallons per Day (MGD) on average, and 6.93 MGD during a maximum summer day.

###### **2. Existing Conditions**

The existing water system serves the current land uses within the SWIP Specific Plan area with potable (domestic) water, and is owned and operated by the Fontana Water Company (FWC). Water supply is from local groundwater and surface water sources, and imported water from San Bernardino Valley Municipal Water District (SBVMWD) and Inland Empire Utilities Agency (IEUA). In order to accommodate the expected increase in water demands for the SWIP Specific Plan area, FWC will require increased capacity from these sources. The 2005 FWC Water System Master Plan (WSMP) indicates the Company has interest in re-activating groundwater production at sites within, and adjacent to, the SWIP Specific Plan. The existing FWC water distribution system is necessarily divided into service pressure zones to maintain operating pressures within acceptable limits and for water service redundancy and reliability.

The SWIP Specific Plan area is within the FWC Juniper pressure zone and serves the existing land uses. Due to the range of service elevations, the Juniper system is divided into high and low subzones. The SWIP topography generally slopes southwesterly with the highest elevations at Citrus and Slover Avenues. The service boundary is generally defined by Santa Ana Avenue and Live Oak Avenue. Development to the north and east are served by the Juniper-high subzone, while the remainder of the SWIP area to the south and west are served through pressure-reducing stations for the Juniper-low subzone.

The service pressure zone serving the SWIP Specific Plan area operates at supply hydraulic gradient of approximately 1,260 feet above mean sea level. The SWIP Specific Plan area is at approximate service elevations ranging from 850 feet to 1100 feet. For efficient service to the existing land uses, FWC pressure-reduces the Juniper Zone for manageable service pressures south and west of Santa Ana Avenue and Live Oak Avenue.

###### **3. Domestic Water Analysis**

Distribution storage and pumping work in unison with the pipeline conveyance system in order to effectively distribute service flows to all customers within the Juniper Zone. Juniper Zone storage tanks directly "float" the Juniper-high subzone from off-site storage facilities with a

total capacity of 7.1 MG. Optimum distribution storage capacity is typically 50- to 100-percent of daily demand volume, depending on operational needs and desired level of service redundancy. In addition, fire flow volume may also be included in distribution storage tanks. Optimum pumping capacity is typically between 100- and 150- percent of maximum daily flow, plus fire flow if fire flow volume is not included in “floating” storage. According to the WSMP, the ultimate Juniper Zone storage requirement is 4.56 MG. The SWIP water demand estimated for the WSMP should be verified; however, it appears any increase in proposed Specific Plan land use densities over those anticipated in the WSMP can be accommodated in existing storage.

Existing distribution capacity may be sufficient for ultimate SWIP land uses. However, hydraulic analysis using computer simulation should be performed as part of master planning and preliminary design of the initial system upgrades. This will provide FWC engineering staff alternative looping and pipe size configurations, for flexibility and constructability, to meet critical service scenarios. For the purposes of the SWIP Specific Plan Domestic Water Study, it is assumed that fire flow requirements would dictate the sizing of the distribution system.

In order to meet standard accepted velocity and headloss criteria during fire flow conditions, Table 4-1 provides figures to use as a general rule to guide minimum pipe sizes:

| Table 4-1 – Minimum Pipe Sizes                                                                                                                                                                              |                                |                                         |                |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|----------------|
| <i>Land Use Designation</i>                                                                                                                                                                                 | <i>Possible FF Requirement</i> | <i>Planning-Level Minimum Pipe size</i> |                |
|                                                                                                                                                                                                             |                                | <i>Dead end</i>                         | <i>Looping</i> |
| Commercial, Retail                                                                                                                                                                                          | 3,500 gpm                      | 12-inch                                 | 10-inch        |
| Commercial, Office                                                                                                                                                                                          | 5,000 gpm                      | 16-inch                                 | 12-inch        |
| Service Commercial                                                                                                                                                                                          | 3,500 gpm                      | 12-inch                                 | 10-inch        |
| Light Industrial                                                                                                                                                                                            | 5,000 gpm                      | 16-inch                                 | 12-inch        |
| Flex Tech                                                                                                                                                                                                   | 5,000 gpm                      | 16-inch                                 | 12-inch        |
| Warehousing                                                                                                                                                                                                 | 5,000 gpm                      | 16-inch                                 | 12-inch        |
| Manufacturing                                                                                                                                                                                               | 5,000 gpm                      | 16-inch                                 | 12-inch        |
| Residential                                                                                                                                                                                                 | 1,500 gpm                      | 10-inch                                 | 8-inch         |
| Note: Fire Department flow requirements should be validated on a case by case basis, and hydraulic analysis simulation should be performed to verify service capacity and reliability for adequate service. |                                |                                         |                |

Based on the anticipated build-out of the SWIP Specific Plan, it is recommended that the SWIP area domestic water distribution system be upgraded pursuant to all pipe sizes shown in Table 4-1 and Exhibit 4-1 – Water Master Plan.

It should be noted that a significant component of the ultimate domestic water demands may be served from future non- domestic water sources, such as recycled water, which is discussed below.

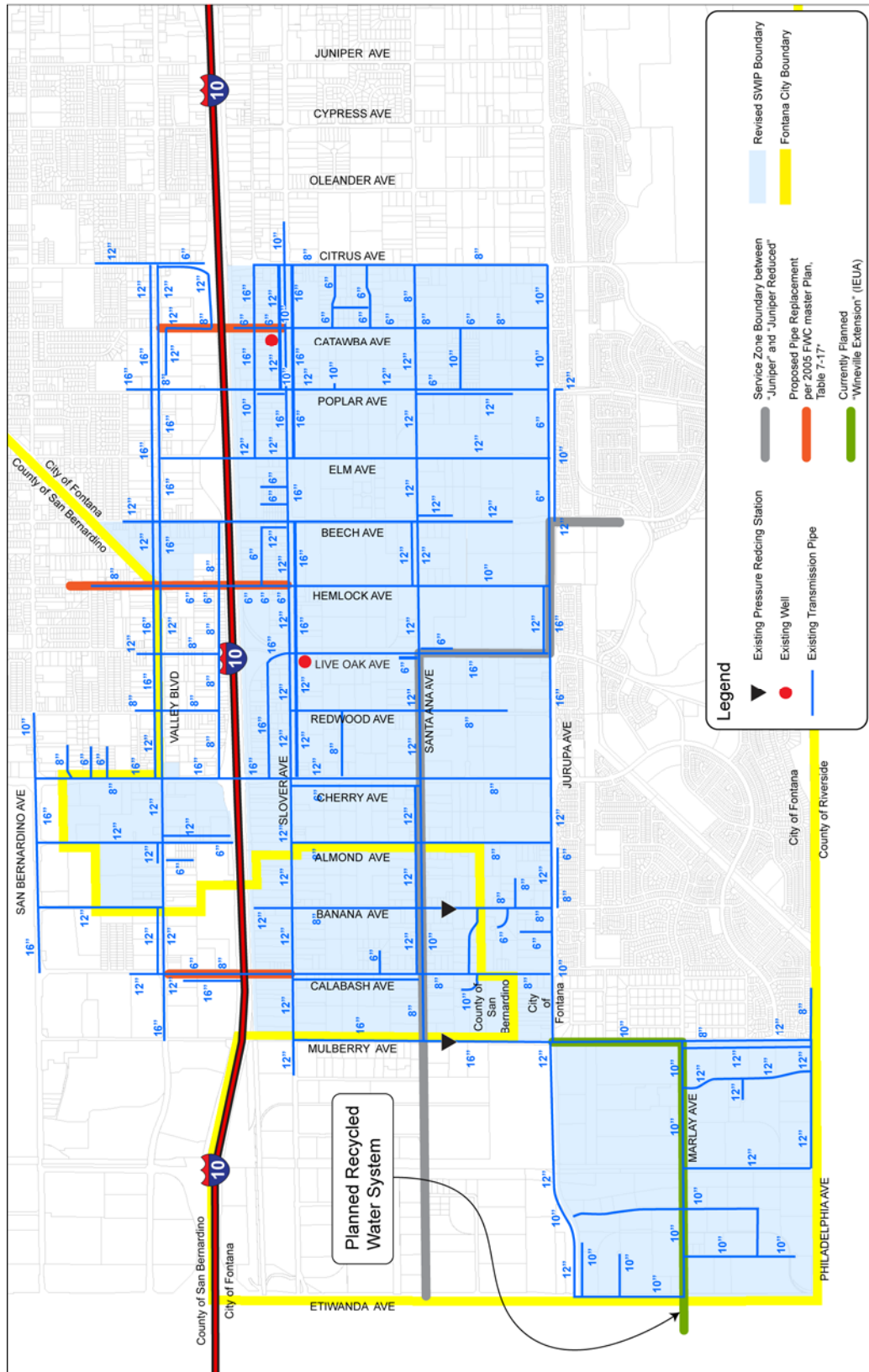


Exhibit 4-1 – Water Master Plan

#### 4. Recycled Water Analysis

Currently, Fontana Water Company (FWC) does not operate a separate recycled water distribution system within the SWIP Specific Plan area. However, IEUA plans to construct the Wineville Extension for delivery of recycled water from their Regional Plant (RP-4) wastewater treatment plant, located in Rancho Cucamonga. This delivery system could allow for direct service within the west SWIP sub-area. Exhibit 4-1 – Water Master Plan shows the currently planned location of the Wineville Extension in Marlay Avenue. It is estimated that this system could serve candidate non-domestic water uses and conserve potable water sources.

With the proposed implementation of recycled (non-domestic) water service to the SWIP Specific Plan, the increase in domestic water demands can be reduced. The Inland Empire Utilities Agency (IEUA) recognizes that the availability of critical imported water sources continue to decline, both in capacity and reliability while the region continues to develop, outpacing water conservation efforts. The Chino Basin Water master has also documented the economic benefits of maximizing the use of recycled water. Each of IEUA's member agencies are expected to take advantage of the opportunities to offset the need for expensive imported water supplies. IEUA plans to achieve this by maximizing recycled water from their regional distribution system for candidate uses within their member agencies' service areas. The SWIP Specific Plan area may provide the City with industrial customers that will implement centralized boiler and chiller systems, material cooling and washdown systems, as well as landscape irrigation. All of these could potentially be candidate uses of recycled water.

#### 4.2 Sewer Services

##### A. Waste Water

The SWIP Specific Plan area is within the sewer service area of the City of Fontana and the Inland Empire Utilities Agency (IEUA). Fontana is a member agency of the IEUA, which provides the City contracting privileges with the Agency for off-site collection, treatment, disposal and reuse. In order to accommodate the expected increase in wastewater from the SWIP Specific Plan, the City will require increased capacities from IEUA treatment and disposal facilities, and City collection facilities. In addition, the two agencies have plans to expand recycled water service from off-site treatment plants to the SWIP area.

##### 1. Existing Conditions

The current wastewater collection system serves only current land uses within city limits and is owned and operated by the City of Fontana. Current land uses within the SWIP Specific Plan area, but not within current city limits, are served by private wastewater systems. Two major collection systems owned and operated by the IEUA serve City flows and are located within the western portion of the Specific Plan area within Jurupa Avenue and Marlay Avenue. These systems collect all flow from the SWIP Specific Plan area and much of the eastern portion of Fontana. A City flow control structure at Jurupa Avenue and Beech Avenue allows the City to optimize the capacities of each system. Exhibit 4-2 Sewer Master Plan, shows existing waste water infrastructure.

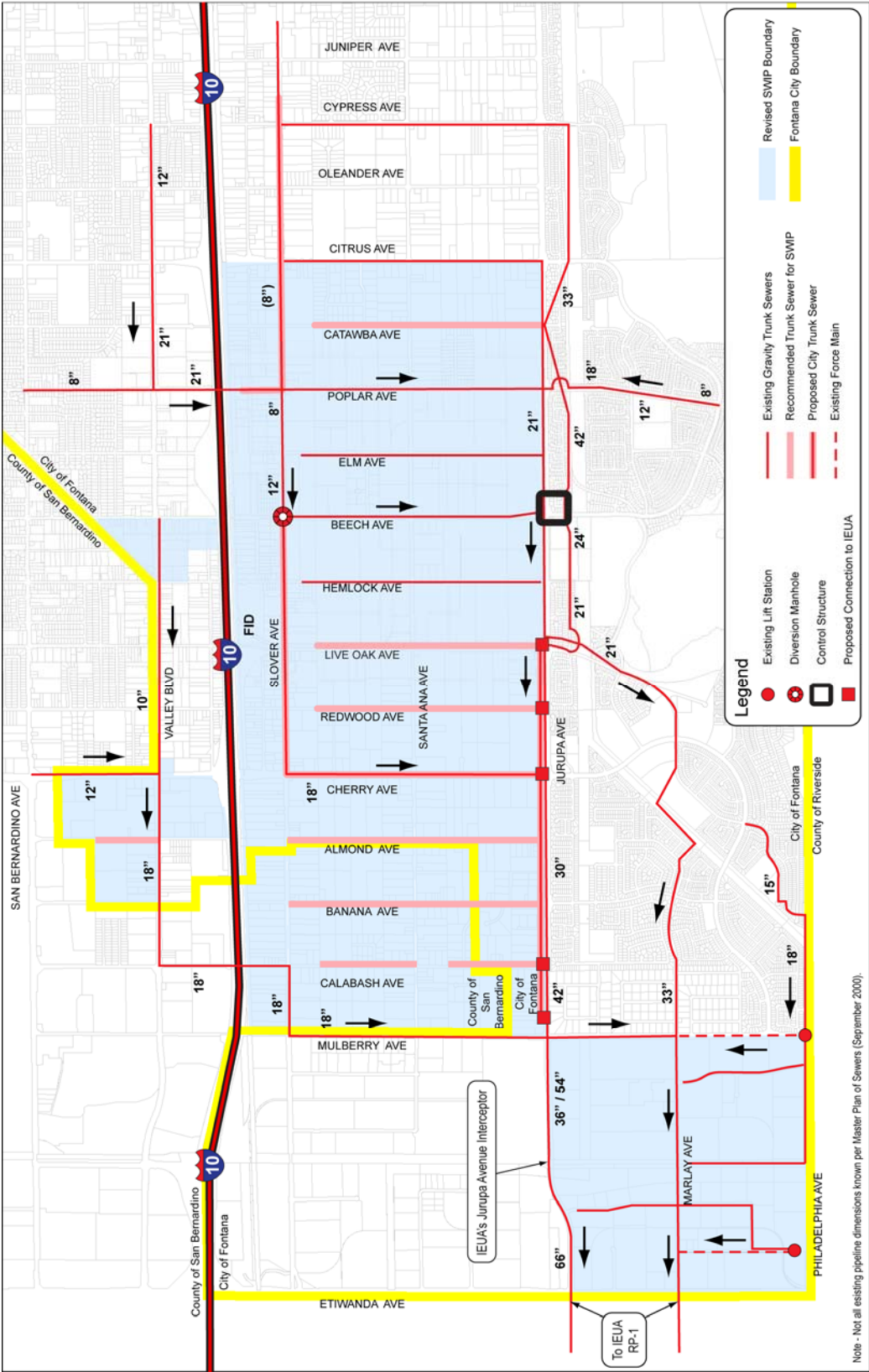


Exhibit 4-2 – Sewer Master Plan

**2. Waste Water System Analysis**

The existing topography within the SWIP Specific Plan area ranges in elevation from 1100 feet (above mean sea level) at the northeast end to 850 feet at the southwest end. The general drainage direction from the northeast to the southwest is at an average slope of approximately one percent. Although this would seem favorable for gravity sewer systems (which have been considered), potential unidentified constraints for areas not currently sewered, as well as those areas that may require sewer upgrades, will likely prove challenging to maintaining gravity flow conditions during future design and construction. During interim operating conditions of the expanded use areas to be annexed into the City, temporary lifting for service flows from individual development projects may be necessary.

Existing sewerage collection capacity may be sufficient for ultimate proposed SWIP land uses for the areas currently within the City limits. However, new sewer systems will be required for all annexed areas. Hydraulic analysis using computer simulation should be performed as part of master planning and preliminary design of the initial system upgrades, in order to provide the City engineering staff alternative collection alignments and pipe size configurations to meet critical service flow scenarios of the annexed areas. Alternative configurations will be essential as the City moves into the design phase for system expansion to serve development and redevelopment projects within the Specific Plan area. For the purposes of the Specific Plan, and to meet standard minimum velocity criteria during dry weather conditions, Table 4-2 provides a guide to determine future pipe sizes:

| <b>Table 4-2 – Future Sewer Pipe Sizes</b> |                                 |                                 |                                            |
|--------------------------------------------|---------------------------------|---------------------------------|--------------------------------------------|
| <i><b>Size</b></i>                         | <i><b>Allowable<br/>d/D</b></i> | <i><b>Minimum<br/>Slope</b></i> | <i><b>Maximum Allowable Flow (gpm)</b></i> |
| 8-inch                                     | 50%                             | 0.0040                          | 172                                        |
| 10-inch                                    | 50%                             | 0.0028                          | 278                                        |
| 12-inch                                    | 50%                             | 0.0022                          | 375                                        |
| 15-inch                                    | 67%                             | 0.0015                          | 886                                        |
| 18-inch                                    | 75%                             | 0.0012                          | 1,489                                      |
| 21-inch                                    | 75%                             | 0.0010                          | 2,051                                      |
| 24-inch                                    | 75%                             | 0.0008                          | 2,619                                      |

Note: Hydraulic analysis using computer simulation should be performed as part of master planning and preliminary design of the initial system upgrades on a case-by-case basis.

**3. Wastewater System Improvements**

The anticipated build-out of the SWIP Specific Plan will result in a need for upsizing wastewater facilities. In order to accommodate the expected increase in wastewater generated by the SWIP Specific Plan, the City will require increased capacities from IEUA treatment and disposal facilities, and City collection facilities. Recycled water service from off-site treatment plants to the SWIP area is also planned in the future. Thus, upsizing of waste water pipes will be necessary to handle increased wastewater volumes. All recommended future waste water system improvements may be seen in Exhibit 4-2 – Sewer Master Plan.

### 4.3 Solid Waste

Solid waste disposal services for the City of Fontana are handled by Burrtec Waste Industries (Burrtec). Burrtec is a private company with a franchise agreement with the City of Fontana. In addition to solid waste disposal, Burrtec also operates the City's curbside recycling program. The Mid-Valley Landfill located in Rialto, adjacent to the City of Fontana, is the primary solid waste depository in the area. The landfill is projected to have approximately 34 years of capacity left. The City of Fontana operates a number of programs to reduce, recycle and properly divert solid waste from the sanitary landfills to meet the State of California's mandate. These programs include, but are not limited to, a permanent Household Hazardous Waste Collection facility; xeriscaping/grass recycling programs; and a Household Material Reuse Center.

### 4.4 Flood Control and Hydrology

#### A. Storm Drain System

##### 1. Background

In 1992 the City of Fontana developed a Master Plan of Drainage for the entire City and the Fontana Sphere of Influence. The study was divided into several areas with additional sub-drainage areas. The Southwest Industrial Park (SWIP) lies in the South Fontana Drainage Area. This drainage area is located southerly of the West Fontana Channel and northerly of the ridge line of the Jurupa Mountains. This area drains to the San Sevaine Channel via the I-10 channel and the Declez Chanel and major storm drains in Randall Avenue, San Bernardino Avenue and Valley Boulevard. Several smaller storm drains also join the San Sevaine Channel directly.

##### 2. Existing Conditions

The Specific Plan area does not currently have a system of organized storm drain facilities. There are reinforced concrete pipe (RCP) storm drains in both Beech and Hemlock Avenue that extend south from Slover Avenue to 1,300 feet north of Jurupa Avenue. Most of the study area drains to the Declez Channel via storm drain facilities. A portion of the study area drains to the San Sevaine Channel via existing storm drain system.

The San Sevaine Channel lies on the west end of the specific plan area. It provides drainage for the San Gabriel Mountains and a substantial part of the city north of I-10. The channel is improved where it traverses the SWIP Specific Plan Area. A small part of the SWIP Specific Plan area is within a FEMA flood zone AE. Zone AE is an area with a 1% (100-yr flood) chance of flooding and the Base Flood Elevations (BFE) have been determined from detailed analyses.

The Declez Channel generally follows the base of the Jurupa Mountains on their northern slope. The channel is fully improved and discharges to the San Sevaine Channel approximately one mile south of the City of Fontana, in Riverside County. Existing storm drain infrastructure identified in portions of Mulberry Avenue, Almond Avenue, Cherry Avenue, Hemlock Avenue, Beech Avenue, Elm Avenue, and Citrus Avenue, is shown in Exhibit 4.3 – Storm Drain Master Plan.



**3. Analysis**

Impervious surfaces contribute to the volume of storm water runoff. To complete the storm water runoff analysis, the SWIP Specific Plan area is divided into 17 sub-areas. Existing percentages of impervious surfaces (such as building surfaces or pavement) were noted and the percent of existing impervious surface within each sub area was identified. Following the establishment of existing impervious surfaces, the anticipated 2030 build-out of the SWIP Specific Plan was analyzed, and concluded that anticipated build-out will substantially increase the amount of impervious surface area, as shown in Table 4-3.

| <b>Table 4-3 – Existing Impervious Surface and 2030 Impervious Surface Comparison</b> |                                           |                                                 |                          |
|---------------------------------------------------------------------------------------|-------------------------------------------|-------------------------------------------------|--------------------------|
| <b><i>Sub-Area</i></b>                                                                | <b><i>Existing Impervious Surface</i></b> | <b><i>2030 Build-out Impervious Surface</i></b> | <b><i>% Increase</i></b> |
| 1A                                                                                    | 0.52                                      | 0.76                                            | 31.45                    |
| 2A                                                                                    | 0.51                                      | 0.80                                            | 36.42                    |
| 3A                                                                                    | 0.50                                      | 0.81                                            | 38.38                    |
| 4A                                                                                    | 0.49                                      | 0.83                                            | 41.20                    |
| 5A                                                                                    | 0.49                                      | 0.83                                            | 41.29                    |
| 6A                                                                                    | 0.48                                      | 0.83                                            | 41.53                    |
| 7A                                                                                    | 0.52                                      | 0.80                                            | 34.52                    |
| 8A                                                                                    | 0.55                                      | 0.87                                            | 36.49                    |
| 9A                                                                                    | 0.56                                      | 0.88                                            | 36.53                    |
| 1B                                                                                    | 0.54                                      | 0.63                                            | 14.29                    |
| 2B                                                                                    | 0.54                                      | 0.63                                            | 14.29                    |
| 3B                                                                                    | 0.54                                      | 0.63                                            | 14.29                    |
| 4B                                                                                    | 0.54                                      | 0.63                                            | 14.29                    |
| 5B                                                                                    | 0.54                                      | 0.63                                            | 14.29                    |
| 6B                                                                                    | 0.54                                      | 0.63                                            | 14.29                    |
| 1C                                                                                    | 0.71                                      | 0.90                                            | 21.11                    |
| 1D                                                                                    | 0.56                                      | 0.87                                            | 35.63                    |

It is not anticipated that existing storm drain facilities in and around the SWIP Specific Plan area will be adequate enough to handle the increased flows that will result from increasing impervious surfaces in the SWIP Specific Plan area through the 2030 build-out. Improvements to the storm drain system are required.

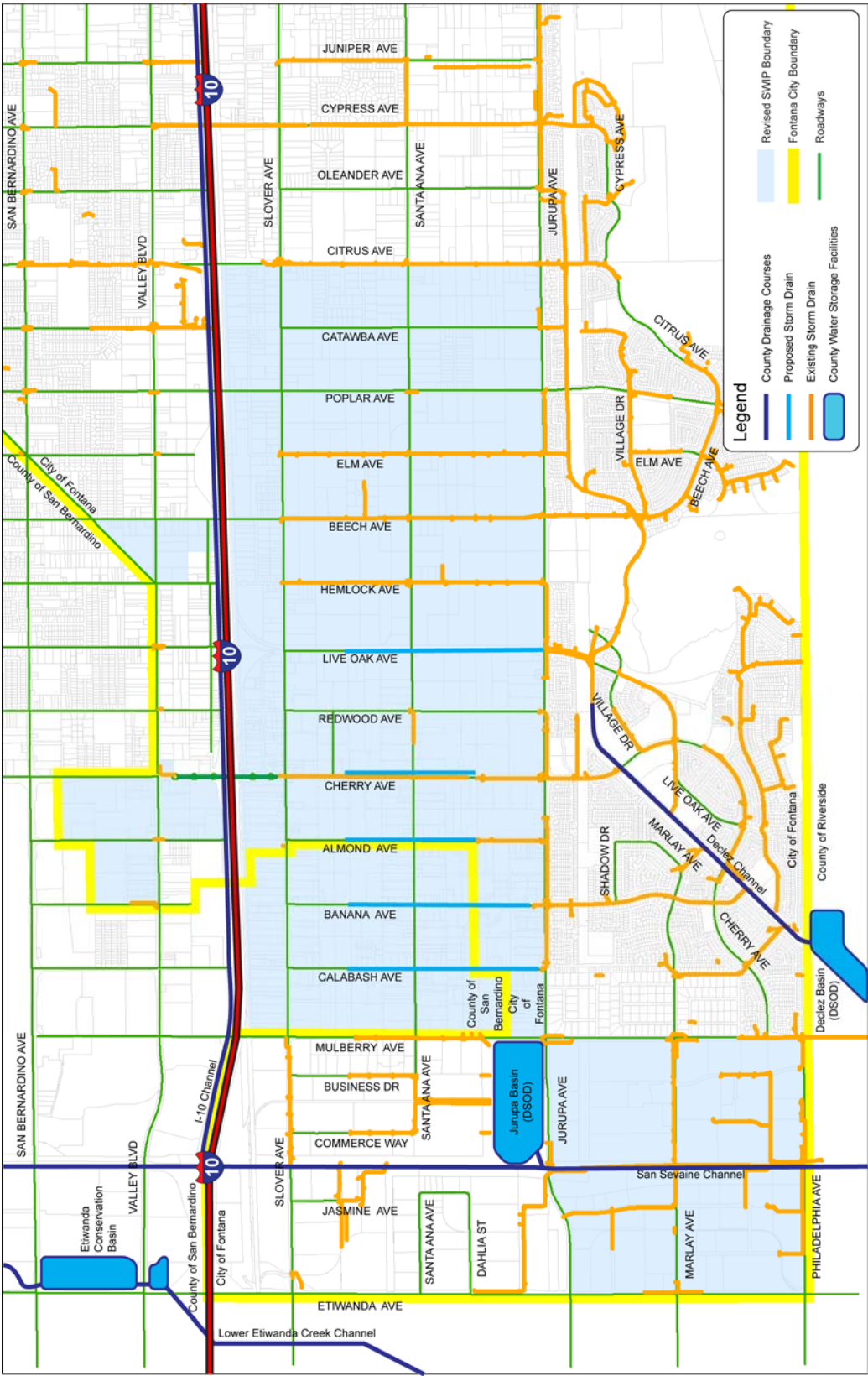


Exhibit 4-3 – Storm Drain Master Plan

**B. Proposed Improvements**

The Fontana Master Plan of Drainage identifies necessary improvements within the Specific Plan area as the City of Fontana approaches build-out thresholds. All necessary upgrades associated with the 2030 build-out of the SWIP Specific Plan are to be done in accordance with the Fontana Master Plan of Drainage, as shown in Exhibit 4-3 – Storm Drain Master Plan. These improvements are as follows:

**Improvement No. 1 – Calabash Avenue**

Construct 51" storm drain facility along Calabash Avenue which drains south to existing storm drain facility along Jurupa Avenue.

**Improvement No. 2 – Banana Avenue**

Construct 42" storm drain facility along Banana Avenue which drains south to existing storm drain facility along Jurupa Avenue.

**Improvement No. 3 – Almond Avenue**

Construct 36" storm drain facility along Almond Avenue which drains south to existing storm drain facility along Jurupa Avenue.

**Improvement No. 4 – Cherry Avenue**

Construct 39" storm drain facility along Cherry Avenue which drains south to existing storm drain facility along and south of Jurupa Avenue.

**Improvement No. 5 – Live Oak Avenue**

Construct 45" storm drain facility which drains south to existing storm drain facility along and south of Jurupa Avenue.

It should be noted that in addition to each of the storm drain improvements listed above, project proponents will be required to submit a Storm Water Pollution Prevention Plan (SWPPP) prior to commencement of project construction. A Notice of Intent (NOI) is required to be filed with the State Water Resources Control Board (WRCB) before construction begins, and a Notice of Termination is required to be filed with the WRCB once construction is complete. This process is required on a site-by-site basis throughout the anticipated build-out of the SWIP Specific Plan.

**4.5 Natural Gas**

Natural gas service for the Project Area is provided by The Gas Company. The Gas Company operates a planning office in Riverside that maintains information on existing lines, forecasts future needs, and analyzes the size and location of future service pipelines. The Gas Company supplies natural gas to nearly all of Southern and Central California. The Gas Company's primary sources include the El Paso Natural Gas Company and the Transwestern Pipeline Company.

#### **4.6 Electric Service, Telephone, Cable Television and Internet**

The proposed land use changes in the Specific Plan will have some impacts on the demands for telephone, cable television, internet and electricity services. Purveyors of these utilities, including AT&T, Verizon, Time Warner Cable, and Southern California Edison, will be responsible for necessary improvements.

#### **4.7 Fire Protection**

Fire protection services for the Southwest Industrial Park will be provided by the Fontana Fire Protection District.

The following Valley Division Stations service the City of Fontana:

- **Valley Division - Station 71**  
16980 Arrow Blvd.
- **Valley Division - Station 72**  
15380 San Bernardino Ave  
P.O. Box 1040
- **Valley Division - Station 73**  
14360 Arrow
- **Valley Division - Station 74**  
11500 Live Oak
- **Valley Division - Station 77**  
17459 Slover
- **Valley Division - Station 78**  
7110 Citrus
- **Valley Division - Station 79**  
5075 Coyote Canyon Rd

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## Chapter 5.0 – Implementation and Administration



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No Exhibits



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## **5.1 Establishment and Adoption**

### **A. Statutory Authority**

The Southwest Industrial Park (SWIP) Specific Plan is established through the authority granted to the City of Fontana by California Government Code, Title 7, Division 1, Chapter 3, Article 8, Sections 65450 through 65457 (Specific Plans).

### **B. Adoption**

This Specific Plan is a regulatory document, adopted by ordinance.

### **C. California Environmental Quality Act**

The SWIP Specific Plan has been prepared in compliance with the requirements of the California Environmental Quality Act (CEQA). Pursuant to State and Local CEQA Guidelines, the City of Fontana prepared an expanded Notice of Preparation. The City has determined that the Specific Plan will result in additional environmental impacts, and therefore, required environmental analysis. As a supplement to this Specific Plan, an Environmental Impact Report (EIR) has been prepared to respond to the anticipated environmental impacts associated with the project. The Southwest Industrial Park Specific Plan EIR is a program-level EIR and includes an Introduction, Project Description, description of existing environmental conditions, assessment of impacts and mitigation measures as directed by the City of Fontana, in accordance with CEQA.

## **5.2 Applicability**

### **A. Relationship to the General Plan**

The current City of Fontana General Plan was last updated in 2003. Chapter 1 (Introduction) provides current land use build-out estimates and Chapter 2 (Policy Framework) provides other development policies that supplement the General Plan Land Use Element. The Specific Plan's regulations are consistent with the directives of the General Plan's goals, policies, and actions.

### **B. Relationship to the Zoning and Development Code**

The provisions contained in this SWIP Specific Plan constitute the primary land use and development standards for the Specific Plan area. These regulations are in addition to the provisions in the City of Fontana Municipal Code.

This Specific Plan provides all development standards and guidelines necessary to approve subsequent project applications, unless otherwise noted. Permit processing procedures (e.g., noticing, hearing, appeals, and expiration procedures) and enforcement procedures are provided in Municipal Code Chapter 30 (Zoning and Development Code) shall apply, unless otherwise noted. Where there is a conflict between the provisions in this Specific Plan and those in the Zoning and Development Code, the Specific Plan provisions shall prevail to the extent allowable under Federal or State law. Where there is no conflict, both shall be applied concurrently.

### **5.3 General Plan Amendments**

Amendments to the appropriate General Plan Elements and other related conforming amendments to the General Plan Land Use Map and General Plan Exhibits shall be performed to ensure that the SWIP Specific Plan and the City General Plan, as amended, are internally consistent.

### **5.4 Zoning Code/Map Amendments**

The existing zoning classifications within the SWIP Specific Plan area, include Community Commercial, Light Industrial, General Industrial and Public Facilities. Upon adoption of the SWIP Specific Plan, these zoning designations shall be revoked and replaced with a Specific Plan Area zoning designation. The following amendments to the Fontana Zoning Code and Zoning Map shall apply:

- **Specific Plan.** The City of Fontana shall adopt the of the SWIP Specific Plan by Ordinance thereby establishing the regulatory policy for the Specific Plan area, inclusive of each zoning sub-district of the Specific Plan. The Specific Plan shall provide land use and development regulations, as well as design guidelines applicable to legal parcels within the Specific Plan area
- **Zone Change.** Change the current zoning classifications for parcels of land within the Specific Plan area from their current zoning classifications to a Southwest Industrial Park Specific Plan zoning classification.
- **Zoning Map Amendment.** The City of Fontana Zoning Map shall be amended to indicate the geographic boundaries of the Specific Plan . The SWIP Specific Plan shall be indicated by a SP classification on the City of Fontana Zoning Map.

### **5.5 Specific Plan EIR and Mitigation Monitoring**

The Specific Plan has been prepared in conjunction with a program-level Environmental Impact Report that identifies potential impacts resulting from proposed development and establishes mitigation measures to reduce the impacts to a less than significant level, where feasible.

As the Lead Agency the City of Fontana will implement a monitoring program for the identified mitigation measures. A Mitigation Monitoring Program will be developed by the City as part of environmental findings and included in the Final Specific Plan approved by the Fontana City Council. The approved Mitigation Monitoring program shall comply with all applicable sections of the Fontana Municipal Code.

The Specific Plan Environmental Impact Report (EIR) will serve as the primary environmental clearance document for the SWIP Specific Plan and all future development undertaken within the Specific Plan area. The EIR is considered the primary environmental clearance document for project implementation within the Specific Plan area, including serving as a Project EIR for purposes of infrastructure improvements. Development applications that require discretionary review will be examined in consultation with the EIR to determine if additional environmental

documentation is required. Developments that do not require additional discretionary review will not be subject to additional environmental documentation. However, the project applicant will be required to submit documentation substantiating said development is allowed and in conformance with the Specific Plan, and the potential environmental effects are within the parameters analyzed within the Specific Plan EIR.

Future development projects proposed within the Specific Plan area may be required to prepare their own environmental documentation pursuant to State law. However, subsequent site-specific projects may use the “tiering” concept, as provided by Section 15385 of the CEQA Guidelines. The tiering concept is a process by which the City of Fontana, as the Lead Agency, can adopt a programmatic EIR focusing on the “big picture,” and can then use streamlined CEQA review for subsequent individual development projects in the SWIP Specific Plan area. The streamlined CEQA review may be utilized for each subsequent individual development application so long as the project is consistent with the analysis and findings provided in the EIR, and the City’s General Plan and Municipal Code. This tiering concept allows the City to address the broad environmental issues detailed in the accompanying EIR during the planning stages of the proposed Specific Plan. Future site-specific development projects are evaluated on a project-by-project basis, and may be excused from repeating the broad environmental analysis examined in this comprehensive, programmatic EIR for the entire proposed SWIP Specific Plan area.

## **5.6 Severability**

In the event that any regulation, condition, program, portion, or policy of this Specific Plan or the application thereof to any person or circumstance is held to be invalid or unconstitutional by any court of competent jurisdiction, the provision(s) shall be deemed a separate, distinct, and independent provision and shall not affect the validity of the remaining provisions of this Specific Plan or applications thereof, which can be implemented without the invalid provision or application.

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## Chapter 6.o – Freeway Industrial/Commercial District



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### **6.1 Purpose**

The Freeway Industrial/Commercial District (FID) is intended to encourage a mixture of commercial and light industrial uses. Service commercial activities, such as restaurants, gas stations, and truck stops, will be allowed around the existing/proposed freeway interchanges at Cherry Avenue, Beech Avenue, and Citrus Avenue. The district will also encourage activities that combine industrial and commercial uses, such as businesses that require a mixture of warehouse, showroom, and office spaces. General features of this District include:

- Landscape/Streetscape Enhancement and edge treatments along the I-10 Corridor to create an appealing gateway for the City
- Promotion of lot consolidation
- Activity nodes around improved freeway interchanges
- Establishment of uses that capitalize on regional market potential as well as local demand, such as trucking uses to capitalize on the various truck routes in the area
- Light industrial and service commercial uses that are auto-oriented and pedestrian-sensitive
- Interesting, appropriately-massed facade development that serves as a gateway into Fontana and enhances the I-10 Corridor

## **6.2 Applicability**

### **A. Projects Subject to Development Regulations**

This Chapter contains the Development Regulations that govern all future private development actions in the FID, including new construction, additions or renovations to existing structures and/or new land uses proposed for existing facilities.

### **B. Right of Continued Use**

This Chapter shall not require any change in any existing building or structure for which a building permit has been previously issued or for approved plans on file in the Community Development Department before the effective date of this Specific Plan. Changes in the property's ownership or tenants of legal existing uses shall likewise require no change in any existing building or structure. Nonconforming standards and provisions shall be governed by Section 6.11 Entitlement Procedures.

### **C. Other Requirements**

This Chapter does not eliminate the need for obtaining any other permits required by the City, or any permit, approval or entitlement required by any other applicable special district or agency, and/or the regulations of any State or Federal agency.

### **D. Types of Development Regulations**

The Development Regulations are of two types – Standards and Guidelines – as follows:

1. Standards address those aspects of development that are essential to achieve the goals of the Specific Plan. They include specifications for allowable land uses and site development (e.g., building height, setbacks, etc.). Conformance with Standards is mandatory. Standards are indicated by use of the words "shall," "must," or "is / is not permitted."
2. Guidelines provide guidance for new development in terms of aesthetics and design details. They are intended to direct building and site design in a way that results in the desired character for the FID. Whereas conformance with the Standards is mandatory, conformance with the Guidelines is preferred and/or recommended. Provisions that fall into this category are indicated by the use of the words "should," "may" or "are encouraged to." In various cases, the Guidelines provide a choice of treatments that will achieve the desired effect. Developers are permitted to propose alternative design details if they are able to show that such details implement the Specific Plan objectives with respect to the desired character of the FID.

### **E. Minimum Requirements**

The provisions in this Chapter shall be minimum requirements. When this Chapter provides for discretionary authority on the part of the Director of Community Development, Planning Commission, or City Council, that discretion may be exercised to impose more stringent requirements if deemed necessary to accomplish the objectives of the FID.

### **F. Overview of Development Regulations**

1. Relationship of Land Use Districts. The Development Regulations in this Chapter are applied to those properties that are within the FID. Exhibit 6-1 – Land Use Plan indicates the location of the FID and its relationship to the other land use districts in the Specific Plan area.
2. Standards, Guidelines, and Procedures. The Development Regulations are divided into the following sections: 6.3 Allowable Land Uses and Permit Requirements; 6.4 Development Standards; 6.5 Landscape Standards; 6.6 Parking and Loading Standards; 6.7 Sign Standards; 6.8 Public Right-of-Way Streetscape; 6.9 Design Guidelines, 6.10 Development Incentives, and 6.11 Entitlement Procedures. Projects must meet all development standards in order to achieve approval in the development review process. Projects are encouraged to adhere to the guidelines contained in 6.9 Design Guidelines.
3. Steps for Using Chapter. Table 6-1 – Process Procedures illustrates the steps for using this Chapter.

| Table 6-1 – Process Procedures                                                                                              |                                                        |                                      |
|-----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|--------------------------------------|
| <i>Instructions</i>                                                                                                         | <i>Information Source</i>                              | <i>Where to Find in this Chapter</i> |
| Locate property and its street frontage                                                                                     | Land Use Plan                                          | Exhibit 6-1                          |
| Identify the allowable uses and refer to the definitions of the uses                                                        | Allowable Land Uses & Permit Requirements              | Table 6-2                            |
|                                                                                                                             | Definitions                                            | Appendix A                           |
| Comply with the requirements for intensity, lot dimensions, height limits, and setbacks                                     | Intensity and Dimensional Standards                    | Table 6-3                            |
| Comply with fence, wall, and screening standards                                                                            | Fence, Wall, and Screening Standards                   | Table 6-4                            |
| Comply with landscaping requirements                                                                                        | Landscape Standards<br>Public Right-of-Way Streetscape | Section 6.5<br>Section 6.8           |
| Comply with parking requirements                                                                                            | Parking and Loading Standards                          | Section 6.6                          |
| Comply with sign requirements                                                                                               | Sign Standards                                         | Section 6.7                          |
| Review the design guidelines for preferred site layout, building orientation and architectural detail, fencing, and parking | Design Guidelines                                      | Section 6.9                          |
| Determine if development is eligible for incentives                                                                         | Development Incentives                                 | Section 6.10                         |
| Submit project application and proceed through project approval process                                                     | Entitlement Procedures                                 | Section 6.11                         |

# Southwest Industrial Park Specific Plan

Freeway Industrial/Commercial District

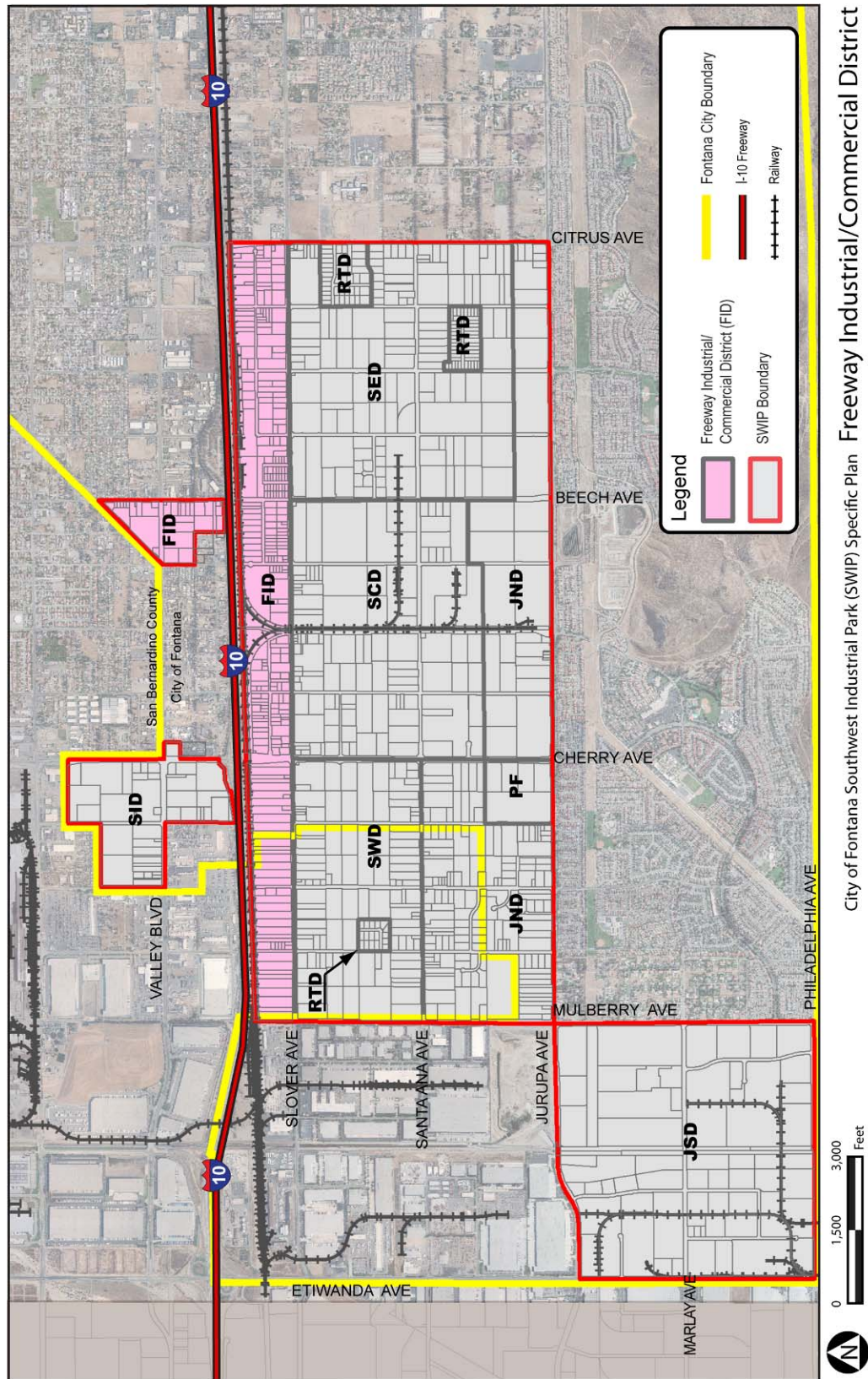


Exhibit 6-1 – Land Use Plan

### **6.3 Allowable Land Uses and Permit Requirements**

This Section identifies allowable land uses and their permit requirements.

#### **A. Allowed Uses**

Table 6-2 – Allowable Land Uses and Permit Requirements identifies the types of land uses allowed in the FID and the use permit required to establish each use.

#### **B. Uses Not Listed**

Uses not listed in Table 6-2 are prohibited land uses, until and unless the Director of Community Development makes a similar use determination in compliance with Subsection 6.11.C Entitlement Procedures – Similar Use Determination.

#### **C. Other Applicable Regulations**

The provisions contained in this SWIP Specific Plan constitute the primary land use and development standards for the Specific Plan area. These regulations are in addition to the provisions in the City of Fontana Municipal Code.

This Specific Plan provides all development standards and guidelines necessary to approve subsequent project applications, unless otherwise noted. Permit processing procedures (e.g., noticing, hearing, appeals, and expiration procedures) and enforcement procedures are provided in Municipal Code Chapter 30 (Zoning and Development Code) shall apply, unless otherwise noted. Where there is a conflict between the provisions in this Specific Plan and those in the Zoning and Development Code, the Specific Plan provisions shall prevail to the extent allowable under Federal or State law. Where there is no conflict, both shall be applied concurrently.

#### **D. Definitions**

Definitions for land uses are provided in Appendix A Definitions. If a definition is not provided, the definitions in the Municipal Code shall apply. The Director of Community Development shall interpret the definitions; make a similar use determination in compliance with Subsection 6.11.C Entitlement Procedures – Similar Use Determination; and/or refer any questions to the Planning Commission for its determination. For the purposes of this Specific Plan, the following definitions shall apply:

1. Commercial Use: Activity involving the sale of goods or services carried out for profit.
2. Industrial Use: Those fields of economic activity including construction; manufacturing; transportation, communication, electric, gas, and sanitary services; and wholesale trade.

**Table 6-2 – Allowable Land Uses and Permit Requirements**

| Land Use                                                        | Permit Requirement                                               |  |
|-----------------------------------------------------------------|------------------------------------------------------------------|--|
|                                                                 | "P"= Use Permitted by Right                                      |  |
|                                                                 | "C"= Conditional Use Permit Required                             |  |
|                                                                 | "M" = Minor Use Permit Required                                  |  |
| Freeway Industrial/Commercial District                          |                                                                  |  |
| Entertainment, Recreation and Public Assembly Uses              |                                                                  |  |
| Adult Businesses                                                | Municipal Code §30-11 & Municipal Code Chapter 15, Article XVIII |  |
| Open Space / Park                                               | P                                                                |  |
| Public Assembly Facilities                                      | C                                                                |  |
| Recreational Facilities                                         | M                                                                |  |
| Industry, Manufacturing, and Processing Uses                    |                                                                  |  |
| Flex-Tech Multi-Use Facilities (3)                              | P                                                                |  |
| Handcraft Industry/Small-Scale Manufacturing                    | P                                                                |  |
| Manufacturing, Light                                            |                                                                  |  |
| • Appliance Manufacturing                                       | P                                                                |  |
| • Electronics & Equipment                                       | P                                                                |  |
| • Glass Product Fabrication                                     | P                                                                |  |
| • Paper Product Manufacturing                                   | P                                                                |  |
| • Product Assembly and Distribution                             | P                                                                |  |
| Research and Development                                        | P                                                                |  |
| Residential Uses                                                |                                                                  |  |
| Caretaker Housing (2)                                           | C                                                                |  |
| Retail Uses                                                     |                                                                  |  |
| Alcohol Sales, Off-Site/On-Site                                 | C                                                                |  |
| Factory/Warehouse Outlet Store                                  | P                                                                |  |
| Retail Sales, General (4)                                       | P                                                                |  |
| Service Uses                                                    |                                                                  |  |
| Business Support Services                                       | P                                                                |  |
| Catering Services                                               | P                                                                |  |
| Financial Facilities                                            | P                                                                |  |
| Food Service                                                    |                                                                  |  |
| • Outdoor Dining                                                | P                                                                |  |
| • Restaurants                                                   | P                                                                |  |
| Hotel                                                           | P                                                                |  |
| Motel (1)                                                       | C                                                                |  |
| Industrial Repair                                               | C                                                                |  |
| Mini Storage Facility (not allowed adjacent to I-10 freeway)(4) | P                                                                |  |
| Offices                                                         | P                                                                |  |
| Personal Services                                               | P                                                                |  |
| School, Commercial                                              | M                                                                |  |

**Table 6-2 – Allowable Land Uses and Permit Requirements (continued)**

| Land Use                                               | Permit Requirement                                     |                                      |
|--------------------------------------------------------|--------------------------------------------------------|--------------------------------------|
|                                                        | "P"= Use Permitted by Right                            | "C"= Conditional Use Permit Required |
|                                                        | "M" = Minor Use Permit Required                        |                                      |
| Freeway Industrial/Commercial District                 |                                                        |                                      |
| Motor Vehicle                                          |                                                        |                                      |
| • Car Wash/ Detailing                                  |                                                        | M                                    |
| • Motor Vehicle Rental, Sales, and Leases              |                                                        | C                                    |
| • Service Stations (4)                                 |                                                        | C                                    |
| • Specialty or Antique Automotive Sales                |                                                        | C                                    |
| • Truck Sales                                          |                                                        | C                                    |
| • Truck Stops (4)                                      |                                                        | C                                    |
| • Vehicle Auctions                                     |                                                        | P                                    |
| Distribution, Wholesaling and Warehousing Uses         |                                                        |                                      |
| Warehousing Facilities                                 |                                                        | P                                    |
| Transportation, Communications and Infrastructure Uses |                                                        |                                      |
| Antennas                                               |                                                        | M                                    |
| Broadcasting Offices or Studios                        |                                                        | P                                    |
| Parking Facilities (4)                                 |                                                        | P                                    |
| Other Uses                                             |                                                        |                                      |
| Drive-Through Uses (4)                                 |                                                        | M                                    |
| Outdoor Display & Sales                                |                                                        | M                                    |
| Public Facilities                                      |                                                        | P                                    |
| Temporary Uses                                         | Municipal Code Chapter 30, Division 14 (Temporary Use) |                                      |

(1) Motels are only permitted at Truck Stop locations

(2) See Section 6.4D

(3) See Section 6.9E

(4) See Section 6.9F



## 6.4 Development Standards

New land uses and structures and alterations to existing land uses and structures in the FID shall be designed, constructed, and established in compliance with the requirements in this Section.

### A. Intensity and Dimensional Standards

Table 6-3 Intensity and Dimensional Standards provides the required intensity and dimensional standards for proposed development. The Director of Community Development is authorized to approve modifications of 10 percent or less of any land use district setback, lot width, lot depth, building coverage, building height, or wall height standard in compliance with the administrative variance procedures in Municipal Code Section 30-51.6 (Findings necessary for granting a variance). See Exhibit 6-2 – Dimensional Standards.

#### Municipal Code Section 30-51.6 : Findings necessary for granting a variance

The Director of Community Development may grant an administrative variance from the requirements of this chapter where practical difficulties, unnecessary hardships, or results contrary to the intent of this chapter would occur from the strict and literal interpretation and enforcement of the Code. An administrative variance may be granted upon conditions which will ensure the protection of the public safety, health and welfare. To grant an administrative variance, the Director of Community Development must find from the facts presented that the following conditions exist.

1. That because of circumstances applicable to the property including size, shape, topography, location or surroundings, the strict application of this chapter will deprive the property of privileges enjoyed by other property in the vicinity and under identical zoning classification;
2. That the granting of such an administrative variance will be subject to conditions assuring that the variance shall not constitute a grant of special privileges inconsistent with the limitations upon other properties in the vicinity and zoning district in which the property is located;
3. That the administrative variance does not authorize a use or activity which is not a specifically allowed use in the zoning district in which the property is located; and
4. That the granting of one administrative variance will not be contrary to the general plan.

**Table 6-3 – Intensity and Dimensional Standards**

| Lot Size and Building Placement |                   |                  |
|---------------------------------|-------------------|------------------|
|                                 | Industrial Use    | Commercial Use   |
| <b>INTENSITY</b>                |                   |                  |
| Floor Area Ratio (3)            | 1.0 max. FAR      | 1.0 max. FAR     |
| <b>LOT DIMENSIONS</b>           |                   |                  |
| Lot Size                        | 35,000 sq ft min. | 20,000 sq ft min |
| Lot Width (C)                   |                   |                  |
| Lots abutting railroad/freeway  | 200 ft min.       | 150 ft min.      |

Table 6-3 – Intensity and Dimensional Standards

| Lot Size and Building Placement                                     |                                                       |                |
|---------------------------------------------------------------------|-------------------------------------------------------|----------------|
|                                                                     | Industrial Use                                        | Commercial Use |
| Lots not abutting railroad/freeway                                  | 150 ft min.                                           | 100 ft min.    |
| Lot Depth (D)                                                       | 150 ft min.                                           | 150 ft min.    |
| <b>BUILDING SETBACKS</b>                                            |                                                       |                |
| Front Setback (1)                                                   |                                                       |                |
| Major Highway ( <i>Cherry, Citrus, and Valley</i> ) (G)             |                                                       |                |
| without building setback                                            | 30 ft min. (4)                                        | 20 ft min. (4) |
| with 15 ft min. building setback                                    | 30 ft min. (4)                                        | 15 ft min. (4) |
| Primary Highway ( <i>Beech, Fontana, Mulberry, and Slover</i> ) (F) |                                                       |                |
| without building setback                                            | 25 ft min. (4)                                        | 20 ft min. (4) |
| with 15 ft min. building setback                                    | 25 ft min. (4)                                        | 25 ft min. (4) |
| Secondary Highway/Collector Street ( <i>Poplar</i> ) (E)            |                                                       |                |
| without building setback                                            | 20 ft min. (4)                                        | 15 ft min. (4) |
| with 15 ft min. building setback                                    | 20 ft min. (4)                                        | 20 ft min. (4) |
| Side (Street) Setback (1)                                           |                                                       |                |
| Major Highway ( <i>Cherry, Citrus, and Valley</i> ) (G)             | 20 ft min. (4)                                        | 20 ft min. (4) |
| Primary Highway ( <i>Beech, Fontana, Mulberry, and Slover</i> ) (F) | 25 ft min. (4)                                        | 20 ft min. (4) |
| Secondary Highway/Collector Street ( <i>Poplar</i> ) (E)            | 20 ft min. (4)                                        | 15 ft min. (4) |
| Side (Interior) Setback (2)                                         | None                                                  | None           |
| Rear Setback (2)                                                    | None                                                  | None           |
| I-10 Freeway Setback (1)                                            | 20 ft min.                                            | 10 ft min.     |
| Railroad Setback (1)                                                | Comply with Public Utilities Commission Regulations   |                |
| Accessory Building Setback                                          | Comply with setbacks applicable to primary structures |                |

(Continued)

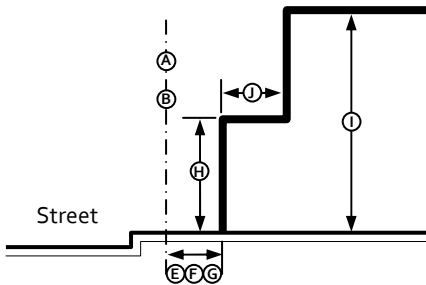
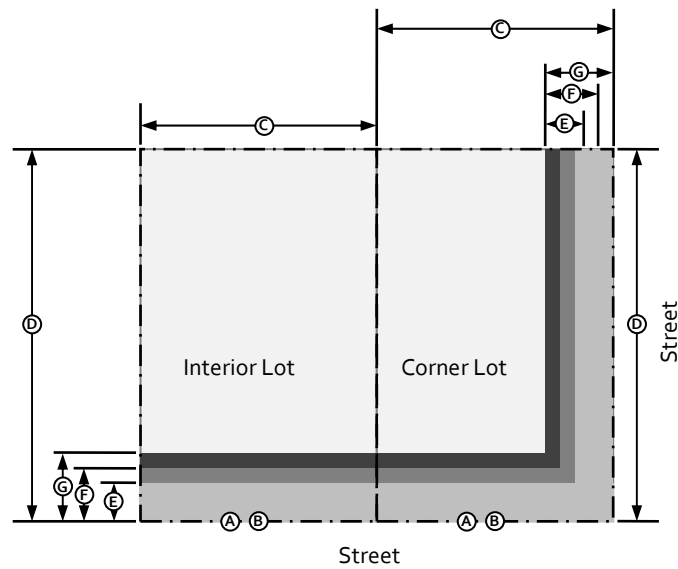
(See footnotes next page)

**Table 6-3 – Intensity and Dimensional Standards (continued)**

| Building Height and Mass                                                                                                                                                                    |                                            |                                                                                                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|--------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                             | Industrial Use                             | Commercial Use                                                                                         |
| <b>HEIGHT</b>                                                                                                                                                                               |                                            |                                                                                                        |
| Primary Building (3)                                                                                                                                                                        | 60 ft max (1)                              | 60 ft max (1)                                                                                          |
| Accessory Building                                                                                                                                                                          | 1-story or 14 ft max. to eave/parapet line | 1-story or 14 ft max. to eave/parapet line                                                             |
| Interior (Floor-to-Floor, excluding parking levels)                                                                                                                                         | Ground floor – 12 ft min.                  | Ground floor – 12 ft min.                                                                              |
| <b>UPPER STORY STEPBACKS</b>                                                                                                                                                                |                                            |                                                                                                        |
| All buildings regardless of street frontage                                                                                                                                                 | Allowed                                    | Allowed                                                                                                |
| Adjacent to Major Highways ( <i>Cherry, Citrus, and Valley</i> ) and residential zones for buildings that have a front setback of between 15 and 30 feet from the public right-of-way line. | Allowed                                    | Required: 15-foot upper story stepback for part of buildings above 30 feet from finished grade (H) (1) |

*Notes:*

- (1) *Setback is measured from public right-of-way line.*
- (2) *Setback is measured from property line.*
- (3) *See Section 6-10 Development Incentives.*
- (4) *Corner cut-off setbacks per Specific Plan.*



- Ⓐ = Public Right-of-Way Line
- Ⓑ = Property Line
- Ⓒ = Lot Width
- Ⓓ = Lot Depth
- Ⓔ = Front/Side Setbacks – Secondary Highway/Collector Street
- Ⓕ = Front/Side Setback – Primary Highway
- Ⓖ = Front/Side Setback – Major Highway
- Ⓗ = 30 foot Height
- Ⓘ = 60 foot Height
- ⓵ = 15 foot Stepback above 30 foot Building Height

Exhibit 6-2 – Dimensional Standards.

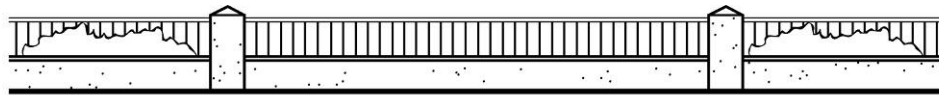
## B. Fences, Walls, and Screening

1. Standards and Guidelines. Table 6-4 contains standards for fences, walls, and screening. Refer to Section 6.9 Design Guidelines for guidelines about the design, materials, and construction of fences, walls, and screening.

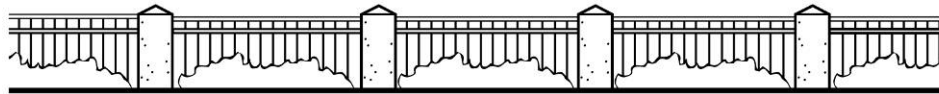
| Table 6-4 – Fence, Wall, and Screening Standards                                                                    |                                                                                                                                                                |                                                                                                           |
|---------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| Location                                                                                                            | Materials<br>See Section 6.9 Design Guidelines                                                                                                                 | Maximum Height (1)                                                                                        |
| Within front setback area                                                                                           | Solid fencing/wall                                                                                                                                             | 36 inches; or<br>42 inches if abutting residential front yard                                             |
|                                                                                                                     | Open fencing/wall                                                                                                                                              | 6 ft                                                                                                      |
| Within street side setback area                                                                                     | Tubular steel construction allowed in required setback area if set back at least 15 ft from lot line. Solid masonry wall not allowed in required setback area. | 8 ft if necessary for security purposes, with 18-inch maximum width pilasters a minimum of 8 ft on center |
| Within interior side setback area                                                                                   | Any type of fence, hedge, or wall allowed, except that if abutting residential zone, solid masonry wall only                                                   | 8 ft                                                                                                      |
| Within rear setback area                                                                                            | Any type of fence, hedge, or wall allowed, except that if abutting residential zone, solid masonry wall only                                                   | 8 ft                                                                                                      |
| Within freeway setback area                                                                                         | Tubular or wrought iron fencing with pilasters                                                                                                                 | 8 ft tall pilasters at 30 ft on center with 8 ft tall tubular or wrought iron fencing between pilasters   |
| Outside of a required setback area                                                                                  | Solid or open fencing/wall                                                                                                                                     | No height limit                                                                                           |
| At intersections of alleys, streets, and driveways                                                                  | Solid or open fencing/wall                                                                                                                                     | 30 inches                                                                                                 |
| Within I-10 Freeway setback area                                                                                    | See Section 6.5.C. (Freeway Edge Design Criteria)                                                                                                              |                                                                                                           |
| Within Railroad setback area                                                                                        | Open fencing/wall                                                                                                                                              | 8 ft                                                                                                      |
| Note: (1) All fences and walls shall meet the City's line of sight regulations, as determined by the City Engineer. |                                                                                                                                                                |                                                                                                           |

### 2. Materials

- a. Open fencing shall mean fencing with over 50 percent of the surface area open for free passage of light and air and through which the area behind the fence is visible to public view. See Exhibit 6-3 – Open and Solid Fencing.
- b. Solid fencing shall mean fencing with 50 percent or less of the surface area open for free passage of light and air and designed to conceal the area behind the fence from public view. See Exhibit 6-3 – Open and Solid Fencing.
- c. Barbed wire fences, electric fences, or similar fencing material is prohibited.
- d. Chain link fencing is allowed on interior property lines that are not visible from public rights-of-way.

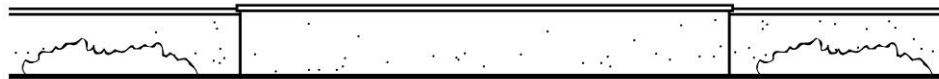


Elevation of Wall / Wrought Iron Combination

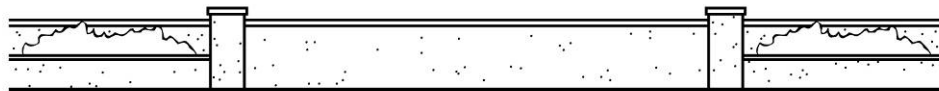


Elevation of Wrought Iron with Pilasters

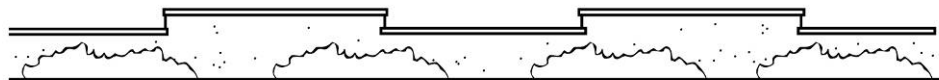
*Examples of Open Fencing*



Elevation of Staggered Wall



Elevation of Planters / Wall



Elevation of Wall with Breaks

*Examples of Solid Fencing*

Exhibit 6-3 – Open and Solid Fencing.

3. Screening and Buffering

- a. Roof-mounted and ground-mounted mechanical equipment, utilities, storage, and solid waste storage areas shall be screened from adjoining properties and public right-of-ways by a visual barrier (e.g., wall, fence, landscape material, etc.) to the satisfaction of the Director of Community Development. Where only landscaping is used for screening, it shall be planted with five-gallon (minimum size) shrubs spaced to provide a continuous dense screen.
- b. Parking lot perimeters shall be screened and planted in compliance with Section 6.6 Parking and Loading Standards.

**C. Outdoor Activities and Storage**

1. Storage in Setback Areas. Material or equipment shall not be stored anywhere in the front yard. Temporary storage of construction materials during construction on the same site is permitted. Boats, campers, motor vehicles, trailers, equipment, materials, or antenna may be stored in side and rear yards, provided that they are outside the required side and rear setback areas identified in Table 6-3 Intensity and Dimensional Standards.
2. Limitations on Outdoor Uses
  - a. All uses shall be conducted entirely within a completely enclosed building that is attached to a permanent foundation, except approved outdoor dining areas, vehicle sales and rental businesses, parking areas, nursery growing areas, industrial activities, and other approved uses that require outdoor activities.
  - b. Areas used for the approved outdoor storage of vehicles, equipment and/or building materials (raw or finished) may use compacted slag, gravel, or other similar material deemed suitable by the Director of Community Development.
3. Outdoor Wholesaling. Outdoor wholesaling of goods and materials shall comply with the following:
  - a. A building shall be provided on the same parcel or on an adjacent parcel associated with the same business.
  - b. All display materials, including vehicles, shall be set back five feet from any landscaped area and shall not be located on required parking areas.
  - c. The entire area used for display purposes shall be surfaced with asphalt or an equally serviceable hard pavement surface. The surface shall be maintained in good condition.
  - d. Storage of equipment or materials, with the exception of the display of vehicles for sale or rent, shall be screened by a visually solid masonry wall of minimum height six feet. The approving authority may determine through the design review process that the subject use requires a solid masonry wall higher than six feet.
  - e. Outdoor display areas shall be maintained in a neat and orderly condition.

***D. Caretaker Housing***

Caretaker housing shall be:

1. Accessory to a principal use;
2. A maximum of 1,500 square feet total floor area unless otherwise approved by the planning commission;
3. Limited to one unit per lot; and
4. Subject to the setback requirements applicable to the principal structure with which it is associated.

***E. Solar Access***

A structure, fence, or wall shall not be constructed or modified, and vegetation shall not be placed or allowed to grow so as to obstruct more than 10 percent of the absorption area of a solar energy system on an abutting or adjacent lot at any time.

***F. Undergrounding of Utilities***

1. Utility service laterals to new development shall be installed underground.
2. Temporary overhead power and telephone facilities are permitted only during construction.
3. Placement, location and screening of utilities of any kind, which cannot be installed underground and must be placed above ground for function and safety reasons, require written approval by the Director of Community Development or the Planning Commission prior to any administrative or discretionary approval.
4. Transformer enclosures shall be designed of durable materials with finishes and colors used that are compatible and harmonious with the overall architectural theme.
5. All utilities including, but not limited to drainage systems, sewers, gas lines, water lines, and electrical, telephone, and communications wires and equipment shall be installed and maintained underground. Placement, location, and screening of utilities of any kind, which cannot be installed underground and must be placed above ground for function and safety reasons, require written approval by the Director of Community Development or the Planning Commission before any administrative or discretionary approval.



## 6.5 Landscape Standards

### A. Required Landscaping

This section provides the required minimum standards for all landscaped areas within any new and rehabilitated private and public development project.

1. Landscaped area means the entire parcel less the building footprint, driveways, non-irrigated portions of parking lots, and hardscapes (e.g., driveways, approaches, sidewalks, etc.). Decorative hardscapes used to enhance the landscape will be considered as part of the landscape area; this would include cobble rock, decomposed granite, brickwork, stamped concrete, gravel, pavers, and water features.
2. Landscape setbacks along public right-of-ways within commercial and industrial areas shall incorporate landscape buffers with undulating and variable height earth mounding (berms), and/or low walls, and required plant materials as shown in Table 6-5 Landscape Standards.
3. Block wall and wrought iron fencing shall be located behind landscape setback area(s).
4. The developer shall submit to the City's Department of Engineering, a Landscape Documentation Package that conforms to the Water Efficient Landscape Ordinance in Municipal Code Chapter 28 Vegetation.
5. All new development landscaping shall comply with the standards shown in Table 6-5 – Landscape Standards. Additional guidelines that should be considered are provided in Section 6.9 Design Guidelines.
6. The Recommended Plant Materials Palette, Table 6-6, can be found immediately after this section. The plant materials palette is provided to ensure the installation of drought-tolerant, water-efficient landscaping that will provide wind breaks and thrive in the local climate conditions. In an effort to provide visual elements that distinguish this district from others, turf (grass) does not appear in the Plant Materials Palette and shall be prohibited, in lieu of drought-tolerant ground covers.
7. Public right-of-way improvements, including street improvements, streetscape/landscape (parkway) improvements, and street tree requirements, are in Section 6.8 Public Right-of-Way Streetscape.

**Table 6-5 – Landscape Standards**

*Note: The Director of Community Development may require additional setbacks.*

|                                                                                                      |                                                                                                                                                                                                                                                                                                                    |
|------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Minimum Landscaped Area<br>Mixture of ground cover, shrubs, trees, and decorative hardscape features | 15% of total site area, not including areas covered by buildings, structures, or areas used for approved outside storage, loading, or other activities.<br>25% of total site area, for hotels, not including areas covered by buildings, or areas used for approved outside storage, loading, or other activities. |
| Decorative hardscape features<br>Brick, stone, art, fountains, ponds, etc.                           | Maximum 15 % of the total required landscaping of site area                                                                                                                                                                                                                                                        |
| Minimum plant sizes in landscaped areas                                                              | Minimum Ratio 1 tree/500 SF of landscape area                                                                                                                                                                                                                                                                      |
| Trees                                                                                                | 50% - 15-gallon<br>40% - 24-inch box<br>10% - 30-inch box or greater                                                                                                                                                                                                                                               |
| Shrubs                                                                                               | 50% - 5-gallon<br>50% - 1-gallon                                                                                                                                                                                                                                                                                   |
| Groundcover                                                                                          | 12-inch maximum on center spacing that will cover area within one year of initial planting                                                                                                                                                                                                                         |
| Street trees in parkways per Master Plan of Parkway Trees                                            | 1 tree of not less than 24-inch box size for each 30 linear feet of street frontage<br>In parkways of inadequate width, street trees shall be planted in abutting setback/yard, in addition to the required buffer landscaping in setback area                                                                     |
| Landscape buffer in front setback area                                                               | 1 tree for each 20 linear feet minimum of street frontage and three 5-gallon shrubs for each tree<br>Undulating earth berms with informal tree and shrub massing and/or low decorative walls may be utilized.<br>Maximum slope: 3:1 for berms                                                                      |
| Additional landscape requirements                                                                    | 1 tree for each 800 square feet minimum of other required landscaped area and 8 shrubs for each tree.                                                                                                                                                                                                              |
| Landscape Buffer in front setback requirements from right-of-way                                     | Major Highways:<br>Cherry Ave, Citrus Ave, and Valley Blvd:<br>30 ft minimum width<br>Primary Highway:<br>Mulberry, Beech, Slover and Fontana Avenues:<br>25 ft minimum width<br>Secondary Highways and Collector/Local Streets:<br>Poplar Ave: 20 ft minimum width                                                |

**B. Recommended Plant Materials Palette**

Table 6-6 – Recommended Plant Materials Palette provides a listing of primarily drought-tolerant trees, shrubs, and ground covers to provide water-efficient landscaping in new projects. The limited selection of landscape material in the palette is envisioned to assist the user in incorporating sustainable landscaping into the project, while including enough variety of size, form, and density, to meet the requirements within buffer setbacks and screening techniques. Final selection shall be approved the City. The Director of Community Development shall approve artificial turf.

| Table 6-6 (a) – Recommended Plant Materials Palette<br>Recommended Trees            |                                                     |                                                                                      |                                                   |
|-------------------------------------------------------------------------------------|-----------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------|
|    | <b>Aleppo Pine</b><br><i>Pinus halepensis</i>       |    | <b>Date Palm</b><br><i>Phoenix dactylifera</i>    |
|   | <b>African Sumac</b><br><i>Rhus lancea</i>          |   | <b>Desert Willow</b><br><i>Chilopsis linearis</i> |
|  | <b>Bottle Tree</b><br><i>Brachychiton populneus</i> |  | <b>Holly Oak</b><br><i>Quercus ilex</i>           |

**Table 6-6 (a) – Recommended Plant Materials Palette**  
**Recommended Trees (continued)**



**California Fan Palm**  
*Washingtonia filifera*



**Honey Locust**  
*Gleditsia triacanthos*



**Chitalpa**  
*Chitalpa tashkentensis*



**Mexican Fan Palm**  
*Washingtonia robusta*

**Table 6-6 (b) – Recommended Plant Materials Palette**  
**Recommended Shrubs**



**Agave**  
*Agave species*



**Kangaroo Paw**  
*Anigozanthus hybrids*



**Aloe**  
*Aloe species*



**Lantana**  
*Lantana species*



Table 6-6 (b) – Recommended Plant Materials Palette  
Recommended Shrubs (continued)



**Gray-Leaved Euryops**  
*Euryops pectinatus*



**Lavender**  
*Lavandula species*



**Grevillea**  
*Grevillea species*



**Purple Fountain Grass**  
*Pennisetum setaceum*  
'Cupreum'



**Red Hot Poker**  
*Kniphofia uvaria*



**Rosemary**  
*Rosmarinus officinalis*  
cultivars



**Red Yucca**  
*Hesperaloe parviflora*



**Silverberry**  
*Elaeagnus pungens*



**Rockrose**  
*Cistus species*

**Table 6-6 (c) – Recommended Plant Materials Palette**  
**Recommended Groundcover**



**Dymondia**  
*Dymondia margaretae*



**Stone Crop**  
*Sedum species*



**Peruvian Verbena**  
*Verbena peruviana*



**Trailing Indigo Bush**  
*Dalea Greggii*



**Prostrate Myoporum**  
*Myoporum parvifolium*

## 6.6 *Parking and Loading Standards*

### **A. *Applicability***

This section contains regulations for off-street parking and loading. Regulations identify required number of parking and loading spaces for all new development projects and those proposing substantial modification to existing buildings. Please refer to Municipal Code Chapter 30 Zoning and Development Code for all parking and loading-related information or regulations not specifically addressed in this section.

### **B. *General Parking and Loading Regulations***

1. Methods of Calculation.
  - a. Multiple Uses. If more than one use is located on a site, the total number of required off-street parking and loading spaces shall be the sum of the requirements for the various uses computed separately. If individual uses on the same site have a floor area less than that for which loading spaces would be required, then the total gross floor area of all uses on the site or lot shall be used in determining the required number of loading spaces.
  - b. Fractional Number. Whenever the computation of the required number of off-street parking or loading spaces results in a fractional number, one additional space shall be required for a fraction of more than one-half, but shall not be required for a fraction of one-half or less.
2. Off-Site Location. Required off-street parking spaces shall be located on the same property as the use that they are intended to serve. Where the required parking spaces cannot be accommodated on the same property, they may be located in a separate off-site parking facility that is not more than 300 feet from the use(s) they serve.
3. Shared Use. Required off-street parking and loading spaces shall not be considered as providing parking or loading spaces for any other use, except where shared use facilities are approved in compliance with Subparagraph 5 Adjustments to Parking Requirements, below.
4. Uses Not Specified. For uses not specified, the Director of Community Development shall determine parking requirements based upon the requirements of the most similar use. See Subsection 6.11.C Entitlement Procedures – Similar Use Determination.
5. Adjustments to Parking Requirements.
  - a. Administrative Variance. The Director of Community Development is authorized to approve alternate parking plans involving a modification of 10 percent or less of any of the off-street parking and loading standards in compliance with Section 30-51.5 of Municipal Code Chapter 30.

- b. **Parking Study Option.** An applicant may submit a separate parking and loading study for new development to the Director of Community Development for review. A parking and loading study shall provide sufficient data and information to justify the need for adjustments to the parking and loading requirements and shall analyze whether:
  - i. Adequate off-street parking will be provided for the project;
  - ii. The project demonstrates the use of creative design concepts, including but not limited to shared parking facilities, transit accessibility, pedestrian amenities, and bicycle amenities;
  - iii. Environmental impacts associated with the project will not be increased by the modification of standards; and
  - iv. Traffic safety and pedestrian safety will be enhanced by the modifications.
- c. **Shared Use Facility.** Required off-street parking and loading spaces may be considered as providing parking or loading spaces for another use where joint facilities serving more than one use contain no less than the total number of spaces deemed necessary for each individual use added together with other uses. Where adjoining uses on the same site have different hours of operation with minimal conflict, the Director of Community Development may determine that some or all of the same spaces may be counted as satisfying the requirements for both uses, provided that the number of spaces shall not be less than the prescribed for the use requiring the greater number.

### ***C. Required Number of Parking Spaces***

Each land use shall provide the number of off-street parking spaces indicated in Table 6-7 – Parking Requirements by Land Use, except where an adjustment has been granted in compliance with Subparagraph B.5 Adjustments to Parking Requirements, above. For the purposes of this Section, the following definitions shall apply:

- 1. **Commercial Use:** Activity involving the sale of goods or services carried out for profit.
- 2. **Industrial Use:** Those fields of economic activity including construction; manufacturing; transportation, communication, electric, gas, and sanitary services; and wholesale trade.



## Southwest Industrial Park Specific Plan

Freeway Industrial/Commercial District

**Table 6-7 – Parking Requirements by Land Use**

| <i>Land Use</i>                                                                  | <i>Vehicle Spaces (Minimum #)<br/>GFA = Gross Floor Area</i>                                                                                                                                                                                                                                                            | <i>Bicycle Spaces<br/>(Minimum #)</i>                                     |
|----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|
| <b>Entertainment, Recreation and Public Assembly Uses</b>                        |                                                                                                                                                                                                                                                                                                                         |                                                                           |
| Adult Businesses                                                                 | Subject to Parking Plan required by Municipal Code §15-918                                                                                                                                                                                                                                                              |                                                                           |
| Open Space / Park                                                                | Public - Determined by Parks and Recreation Department<br>Private - .25 spaces/1,000 sq ft of total park area                                                                                                                                                                                                           | 1 space/ 33 vehicle parking spaces                                        |
| Public Assembly Facilities                                                       | With fixed seats – 1 space/3 fixed seats;<br>Without fixed seats – 25 spaces/1,000 sq ft of seating area;<br>and<br>4 spaces/1,000 sq ft GFA outside assembly area                                                                                                                                                      | 1 space/33 vehicle parking spaces                                         |
| Recreational Facilities – Indoor, except for the following:                      | 1 space/each 4 persons of the facility's allowed maximum capacity, unless otherwise modified in compliance with Section 6.6.B.5–Adjustments to Parking Requirements                                                                                                                                                     |                                                                           |
| Amusement Arcade                                                                 | 1 space/each 4 persons of the facility's allowed maximum capacity                                                                                                                                                                                                                                                       | 1 space/ 3 games up to 20 games;<br>and 1 space/5 games for over 20 games |
| Athletic Club/Gym                                                                | 4 spaces/1,000 sq ft GFA;<br>20 spaces/1,000 sq ft of exercise floor area;<br>3 spaces/outdoor ball court                                                                                                                                                                                                               | .4 spaces/1,000 sq ft GFA                                                 |
| Bowling Alley                                                                    | 4 spaces/lane, and<br>additional spaces required for restaurant and other accessory uses                                                                                                                                                                                                                                | 1 space/33 vehicle parking spaces                                         |
| Dancing                                                                          | 14 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                               |                                                                           |
| Pool/Billiard Hall                                                               | 2 spaces/table                                                                                                                                                                                                                                                                                                          | 1 space/5 tables                                                          |
| Skating Rink                                                                     | 14 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                               | 1 space/33 vehicle parking spaces                                         |
| Recreational Facilities – Outdoor, except for the following:                     | 1 space/each 4 persons of the facility's allowed maximum capacity, unless otherwise modified in compliance with Section 6.6.B.5 –Adjustments to Parking Requirements                                                                                                                                                    |                                                                           |
| • Golf driving range, batting cage                                               | 1 space/tee, cage, or similar; and<br>1 space/employee at maximum shift                                                                                                                                                                                                                                                 | 1 space/33 vehicle parking spaces                                         |
| • Swimming pools                                                                 | 14 spaces/1,000 sq ft of water surface area                                                                                                                                                                                                                                                                             | 1 space/33 vehicle parking spaces                                         |
| <b>Industry, Manufacturing, and Processing Uses</b>                              |                                                                                                                                                                                                                                                                                                                         |                                                                           |
| Flex-Tech Multi-Use Facilities                                                   | 3.5 spaces per 1,000 sq ft GFA                                                                                                                                                                                                                                                                                          | 1 space/33 vehicle parking spaces                                         |
| Handcraft Industry/ Small-Scale Manufacturing                                    | 2 spaces per 1,000 sq ft GFA                                                                                                                                                                                                                                                                                            | None                                                                      |
| Light Manufacturing<br>All uses listed under "Manufacturing, Light" in Table 6-2 | 1.85 spaces/1,000 sq ft GFA;<br>4 spaces/1,000 sq ft GFA of office space, sales, or similar use where those uses exceed 10% GFA; and<br>1 space/1 facility vehicle<br>Where multiple tenants and or uses occupy the same building, the parking shall be calculated based upon the floor area used by each tenant or use | 1 space/33 vehicle parking spaces                                         |
| Research and Development                                                         | 2 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                                | 1 space/33 vehicle parking spaces                                         |
| <b>Residential Uses</b>                                                          |                                                                                                                                                                                                                                                                                                                         |                                                                           |
| Caretaker Housing                                                                | 2 spaces in an enclosed garage                                                                                                                                                                                                                                                                                          | None                                                                      |

**Table 6-7 – Parking Space Requirements by Land Use (continued)**

| <i>Land Use</i>                                                                                                                  | <i>Vehicle Spaces (Minimum #)<br/>GFA = Gross Floor Area</i>                                                                                                                                                                                                                                                        | <i>Bicycle Spaces<br/>(Minimum #)</i>                                                               |
|----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| <b>Retail Uses</b>                                                                                                               |                                                                                                                                                                                                                                                                                                                     |                                                                                                     |
| Alcohol Sales,<br>Off-Site/On-Site                                                                                               | Same as required spaces for the underlying use (e.g., restaurant, public assembly facility, retail store, etc.), unless otherwise modified in compliance with Section 6.6.b.5 – Adjustments to Parking Requirements                                                                                                 |                                                                                                     |
| Factory/Warehouse Outlet Store                                                                                                   | 5 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                            | None                                                                                                |
| Retail Sales, General <ul style="list-style-type: none"> <li>Not in shopping center or factory/warehouse outlet mall)</li> </ul> | 4 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                            | 1 space/33 vehicle parking                                                                          |
| <ul style="list-style-type: none"> <li>Shopping Center</li> </ul>                                                                | 5 spaces/1,000 sq ft GFA for the initial 10,000 sq ft; and<br>4 spaces/1,000 sq ft GFA for over 10,000 sq ft                                                                                                                                                                                                        | 1 space/33 vehicle parking spaces                                                                   |
| <b>Service Uses</b>                                                                                                              |                                                                                                                                                                                                                                                                                                                     |                                                                                                     |
| Business Support Services                                                                                                        | 4 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                            | None                                                                                                |
| Catering Services                                                                                                                | 2.5 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                          | None                                                                                                |
| Financial Facilities                                                                                                             | 4 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                            | 2 spaces                                                                                            |
| <b>Food Service:</b>                                                                                                             |                                                                                                                                                                                                                                                                                                                     |                                                                                                     |
| <ul style="list-style-type: none"> <li>Fast food restaurant with drive through, walk-in area</li> </ul>                          | Indoor Seating: 13 spaces/1,000 sq ft GFA*<br>*GFA shall not include play areas without seating.<br>Outdoor Seating (patio area):<br>Less than 50% of indoor area: 6.5 spaces/1,000 sq ft<br>50% or more of indoor area: 13 spaces/1,000 sq ft                                                                      | 4 spaces                                                                                            |
| <ul style="list-style-type: none"> <li>Other restaurant</li> </ul>                                                               | Indoor Seating: 10 spaces per 1,000 sq ft GFA<br>Outdoor Seating (patio area):<br>Less than 50% of indoor area: 5 spaces/1,000 sq ft<br>50% or more of indoor area: 10 spaces/1,000 sq ft                                                                                                                           | 2 spaces                                                                                            |
| Hotel                                                                                                                            | 1.25 spaces per guest room;<br>10 spaces/1,000 sq ft GFA for lounge/restaurant;<br>Spaces at following rates for conference/banquet facilities:<br>Less than 20 sq ft per room – 0 spaces<br>20 sq ft per room – 30 spaces/1,000 sq ft GFA<br>1 space per employee on maximum shift                                 | 1 space/33 vehicle parking spaces                                                                   |
| Industrial Repair                                                                                                                | 2 spaces/1,000 sq ft GFA for the initial 40,000 sq ft<br>1.3 spaces/1,000 sq ft additional GFA greater than 40,000 sq ft<br>4 spaces/1,000 sq ft GFA of office space, where those uses exceed 10% of GFA<br>OR<br>1 space for each employee on the maximum shift as determined by Director of Community Development | None                                                                                                |
| Mini-Storage Facility                                                                                                            | 1.75 spaces/100 units; and<br>1 space/employee                                                                                                                                                                                                                                                                      |                                                                                                     |
| Offices                                                                                                                          | 4 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                            | Under 50,000 sq ft – 2 spaces<br>50,001 – 100,000 sq ft – 3 spaces<br>Over 100,000 sq ft – 5 spaces |
| Personal Services                                                                                                                | 4.4 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                          | None                                                                                                |
| School, Commercial                                                                                                               | 1 space/teaching and non-teaching position on maximum shift; and<br>1 space/2 students on maximum enrollment                                                                                                                                                                                                        | 1 space/33 vehicle parking spaces                                                                   |

## Southwest Industrial Park Specific Plan

Freeway Industrial/Commercial District

**Table 6-7 – Parking Space Requirements by Land Use (continued)**

| <b>Land Use</b>                                               | <b>Vehicle Spaces (Minimum #)<br/>GFA = Gross Floor Area</b>                                                                                                                                                                                                                                                                                                               | <b>Bicycle Spaces<br/>(Minimum #)</b> |
|---------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| <b>Motor Vehicle</b>                                          |                                                                                                                                                                                                                                                                                                                                                                            |                                       |
| • Car Wash Full-Service                                       | 1 space/employee;<br>Stacking for 5 vehicles for car wash lane<br>Reserve spaces equal to 3 times the wash lane capacity                                                                                                                                                                                                                                                   | None                                  |
| • Car Wash Self-Service                                       | 2 spaces/bay                                                                                                                                                                                                                                                                                                                                                               | None                                  |
| • Motor Vehicle Rental, Sales, and Leases                     | Indoor display/sale/service = 3.3 spaces/1,000 sq ft GFA;<br>Outdoor display/sale = .40 spaces/1,000 sq ft GFA; and<br>1 space/employee                                                                                                                                                                                                                                    | None                                  |
| • Service Stations                                            |                                                                                                                                                                                                                                                                                                                                                                            |                                       |
| -With convenience market                                      | 5 spaces/1,000 sq ft GFA; and 5 spaces/service bay                                                                                                                                                                                                                                                                                                                         | 1 space/10 vehicle parking spaces     |
| -Without convenience market                                   | 3.3 spaces/1,000 sq ft or 5 spaces/service bay, whichever is more; minimum of 4 spaces                                                                                                                                                                                                                                                                                     |                                       |
| • Specialty/Antique Automotive Sales                          | Indoor display/sale/service = 3.3 spaces/1,000 sq ft GFA;<br>Outdoor display/sale = .40 spaces/1,000 sq ft GFA; and<br>1 space/employee                                                                                                                                                                                                                                    | None                                  |
| • Truck Sales                                                 | Indoor display/sale/service = .20 spaces/1,000 sq ft GFA;<br>Outdoor display/sale/service = .33 spaces/1,000 sq ft GFA; and<br>1 space/employee                                                                                                                                                                                                                            | None                                  |
| • Truck Stops                                                 | 1 truck parking space/10,000 sq ft of site area;<br>5 vehicle parking spaces/1,000 sq ft of building area; and<br>additional spaces required for restaurant, lodging, and other accessory uses                                                                                                                                                                             | None                                  |
| • Vehicle Auctions                                            | <b>Automobile or boat sales (new/used/auction)</b><br>1 space/300 sq ft of indoor display, sales, or service area;<br>1 space/2,500 sq ft of outdoor sales or display area; and<br>1 space/employee<br><b>Truck sales/services (new/used/auction)</b><br>1 space/250 sq ft of sales area;<br>1 space/3,000 sq ft of outdoor sales or display area; and<br>1 space/employee | None                                  |
| <b>Distribution, Wholesaling and Warehousing Uses</b>         |                                                                                                                                                                                                                                                                                                                                                                            |                                       |
| Warehousing Facilities                                        | 1 space/1,000 sq ft GFA for the initial 40,000 square feet; plus<br>1 space/4,000 sq ft of additional GFA greater than 40,000 sq ft; plus 1 space/250 sq ft of GFA of office space. Where multiple tenants and/or uses occupy the same building, parking shall be calculated based upon floor area used by each tenant or use                                              | None                                  |
| <b>Transportation, Communications and Infrastructure Uses</b> |                                                                                                                                                                                                                                                                                                                                                                            |                                       |
| Ancillary Parking Facilities                                  | Per approved plan                                                                                                                                                                                                                                                                                                                                                          | None                                  |
| Antennas                                                      | 1 space                                                                                                                                                                                                                                                                                                                                                                    | None                                  |
| Broadcasting Offices or Studios                               | 5 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                                                                                   | None                                  |
| <b>Other Uses</b>                                             |                                                                                                                                                                                                                                                                                                                                                                            |                                       |
| Drive-Through                                                 | Stacking for 7 vehicles at each bay, window, lane, ordering station, or machine                                                                                                                                                                                                                                                                                            | None                                  |
| Outdoor Display & Sales                                       | 1 space/1,000 sq ft of outdoor merchandise areas                                                                                                                                                                                                                                                                                                                           | None                                  |
| Public Facilities                                             | Per public agency                                                                                                                                                                                                                                                                                                                                                          |                                       |
| Temporary Uses                                                | Per Temporary Use Permit                                                                                                                                                                                                                                                                                                                                                   |                                       |

*Note: Sources consulted to compile the table entries include the Municipal Code; The Dimensions of Parking, ULI and National Parking Association, 5th Edition, 2010; Recommended Zoning Ordinance Provisions, National Parking Association, December 2006; and Parking Standards, APA Planning Advisory Service Report 510/511; November 2002.*

**D. Required Number of Loading Spaces**

Each land use shall provide the number of off-street loading spaces indicated in Table 6-8 – Loading Space Requirements by Land Use. Requirements for uses not specifically listed shall be determined by the Director of Community Development based upon the requirements for comparable uses and upon the particular characteristics of the proposed use. For other standards (e.g., size of loading spaces, location, turning radius, etc.), refer to Article XI Off-Street Parking and Loading Standards, Division 4 Loading Area Regulations, in Municipal Code Chapter 30 Zoning and Development Code.

| Table 6-8 – Loading Space Requirements by Land Use                           |                                                                                                                                                                                         |                     |
|------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| Land Use                                                                     | Loading Spaces (Minimum #)                                                                                                                                                              | Type                |
| Entertainment, Recreation and Public Assembly Uses                           |                                                                                                                                                                                         |                     |
| Public Assembly Facilities                                                   | 1 space; and<br>Additional spaces as required by design review                                                                                                                          | Van (1)             |
| Recreational Facilities                                                      | 0 – 29,999 sq ft: 1 space<br>30,000 – 99,999 sq ft: 2 spaces<br>Over 100,000 sq ft: 3 spaces                                                                                            | Truck (2)           |
| Industry, Manufacturing, and Processing Uses                                 |                                                                                                                                                                                         |                     |
| Flex-Tech Multi-Use Facilities                                               | 5,000 – 30,000 sq ft: 1 space; and<br>1 additional space for each additional 30,000 sq ft                                                                                               | Truck (2)           |
| Handcraft Industry/ Small-Scale Manufacturing                                |                                                                                                                                                                                         |                     |
| All uses listed under “Manufacturing, Light” in Table 6-2                    |                                                                                                                                                                                         |                     |
| Research and Development                                                     |                                                                                                                                                                                         |                     |
| Retail Uses                                                                  |                                                                                                                                                                                         |                     |
| Retail Sales, General and Factory/Warehouse Outlet Store                     | Up to 10,000 sq ft: 1 space                                                                                                                                                             | Truck (2)           |
|                                                                              | 10,001 – 30,000 sq ft: 1 space<br>30,001 – 90,000 sq ft: 2 spaces<br>Over 90,000 sq ft: 2 spaces; and 1 additional space for each additional 50,000 sq ft over the initial 90,000 sq ft | Tractor Trailer (3) |
| Service Uses                                                                 |                                                                                                                                                                                         |                     |
| All uses listed under “Service Uses” in Table 6-2; except for the following: | Up to 10,000 sq ft: 1 space                                                                                                                                                             | Truck (2)           |
|                                                                              | 10,001 – 30,000 sq ft: 1 space<br>30,001 – 90,000 sq ft: 2 spaces<br>Over 90,000 sq ft: 2 spaces; and 1 additional space for each additional 50,000 sq ft over the initial 90,000 sq ft | Tractor Trailer (3) |
| Hotel                                                                        | 10,000 – 50,000 sq ft: 1 space                                                                                                                                                          | Van (1)             |
|                                                                              | Over 50,000 sq ft: 1 space                                                                                                                                                              | Truck (2)           |
| Industrial Repair                                                            | 5,000 – 30,000 sq ft: 1 space; and<br>1 additional space for each additional 30,000 sq ft                                                                                               | Truck (2)           |
| Offices                                                                      | 5,000 – 50,000 sq ft: 1 space                                                                                                                                                           | Van (1)             |
|                                                                              | Over 50,000 sq ft: 1 space                                                                                                                                                              | Truck (2)           |

| Table 6-8 – Loading Space Requirements by Land Use (continued)                                                              |                                                                                                                    |                     |
|-----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|---------------------|
| Land Use                                                                                                                    | Loading Spaces (Minimum #)                                                                                         | Type                |
| Personal Services                                                                                                           | Up to 10,000 sq ft: 1 space                                                                                        | Van (1)             |
|                                                                                                                             | 10,001 - 30,000 sq ft: 1 space                                                                                     | Truck (2)           |
|                                                                                                                             | 30,001 - 90,000 sq ft: 2 spaces                                                                                    |                     |
|                                                                                                                             | Over 90,000 sq ft: 2 spaces; and 1 additional space for each additional 50,000 sq ft over the initial 90,000 sq ft |                     |
| School, Commercial                                                                                                          | 1 space; and additional spaces required by design review                                                           | Van (1)             |
| <b>Motor Vehicle</b>                                                                                                        |                                                                                                                    |                     |
| • Motor Vehicle Rental, Sales, and Leases                                                                                   | 1 space                                                                                                            | Tractor Trailer (3) |
| • Service Stations                                                                                                          | 1 space                                                                                                            | Tractor Trailer (3) |
| • Specialty or Antique Automotive Sales                                                                                     | 1 space                                                                                                            | Tractor Trailer (3) |
| • Truck Sales                                                                                                               | 1 space                                                                                                            | Tractor Trailer (3) |
| • Truck Stops                                                                                                               | 1 space                                                                                                            | Tractor Trailer (3) |
| <b>Distribution, Wholesaling and Warehousing Uses</b>                                                                       |                                                                                                                    |                     |
| Warehousing Facilities                                                                                                      | 5,000 - 30,000 sq ft: 1 space; and 1 additional space for each additional 30,000 sq ft                             | Tractor Trailer (3) |
| Notes:                                                                                                                      |                                                                                                                    |                     |
| (1) A van loading space shall be a minimum of 12 ft wide by 19 ft long with a minimum 10 ft overhead clearance.             |                                                                                                                    |                     |
| (2) A truck loading space shall be a minimum of 12 ft wide by 45 ft long with a minimum 14 ft overhead clearance.           |                                                                                                                    |                     |
| (3) A tractor trailer loading space shall be a minimum of 12 ft wide by 70 ft long with a minimum 14 ft overhead clearance. |                                                                                                                    |                     |

### E. Landscaping Standards for Parking Areas

Within any parking area, one tree shall be planted for every five single-row parking stalls or 10 double-row parking stalls. Eighty percent of these shall be 15 gallons in size and the remaining 20 percent shall be 24-inch box or larger in size. If for some reason the contractor is unable to distribute trees in the interior of the parking area in compliance with these standards, the Director of Community Development may approve the placement of no more than 40 percent of the trees within the perimeter of the parking area. Planters shall not have a dimension less than four feet, excluding the thickness of the curbing. These requirements may be reduced for industrial parking areas that are screened from public view.

1. Parking areas shall contain a minimum landscape area equivalent to 30 percent of the total required 15 percent landscaping for the total site area.
2. Parking area perimeter landscaping.
  - a. Parking areas for nonresidential uses abutting or adjacent to residentially zoned property shall provide a landscape strip that is a minimum of 10 feet in width, excluding overhang, curb, and walkways, between the parking area and the common property line bordering the residentially zoned property. Parking areas shall be screened from the residentially zoned property by a solid decorative masonry wall that is a minimum of six feet in height.

- b. Parking areas for nonresidential uses abutting or adjacent to non-residentially zoned property or a street shall install a landscape strip that is a minimum of five feet in width, excluding overhang, curb, and walkways, between the parking area and the common property line, or the parking area and the street right-of-way. This requirement may be reduced or modified if a joint access agreement exists that is satisfactory to the Director of Community Development. Parking areas shall be screened from streets through combinations of plant materials, earth berms, raised planters, grade separations, or low walls not more than 42 inches in height. Slopes shall not exceed three to one or exceed 36 inches in height measured from the parking lot surface.
  - c. Plant materials, walls, or structures within a traffic sight area shall not block sight lines from driveways to streets and shall not exceed 36 inches in height.
  - d. The minimum width of a landscape finger shall be five (5) feet.
  - e. End of aisle spaces adjacent to landscape finger shall be two feet wider for step out area.
3. Parking area interior landscaping.
- a. Tree number and location. One tree shall be provided for each four parking spaces and shall be evenly spaced throughout the interior parking area at a rate of one tree for every eight parking spaces. The required number of trees in the interior area shall not include trees required around the parking area perimeter. Trees are not required for tractor-trailer parking areas. A minimum of one cluster of trees shall be provided for each 100 feet of a row or double row of parking spaces. Trees shall be located in planters that are bounded on at least two sides by parking area paving. Planters shall have a minimum exterior dimension of five feet.

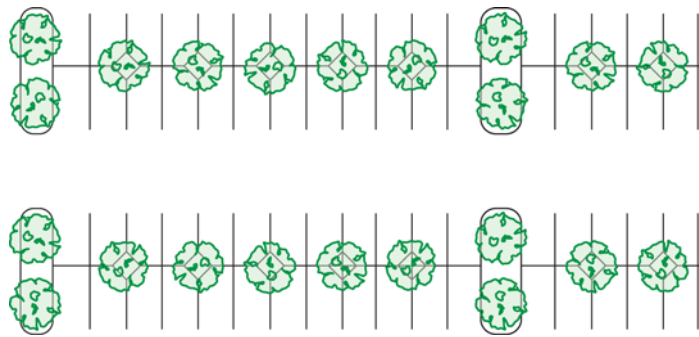


Exhibit 6-4 – Parking Lot Landscaping

- b. Tree size. All trees within the parking area shall be a minimum 24-inch box container at time of planting.
- c. Landscape protection. Landscaping shall be protected by concrete curbs of at least six inches in height. An end-of-aisle planter shall be provided at the ends of all parking aisles. Finger aisle planters shall be a minimum of nine feet wide and end-

of-aisle planters shall be a minimum of seven feet wide, as measured from the inside of the curb. The parking space side of finger and end-of-aisle planters shall have a 24-inch wide concrete surface measured from the face of the curb. Planters shall be landscaped with a mixture of trees, shrubs, and ground cover. Planting areas shall have round corners instead of 90 degree corners and shall be shaped to allow vehicle movements. The Director of Community Development may approve alternative barriers designed to protect landscaped areas from vehicle damage. Wheel stops may be placed to allow for two feet of vehicle overhang area within the dimension of the parking space. To increase the parking lot landscaped area, a maximum of two feet of the parking stall depth may be landscaped with low-growth, hardy materials in-lieu of paving, allowing a bumper overhang while maintaining the required parking dimensions. However, the overhang area shall not be counted as part of the minimum landscape area required by paragraph (1) above, and when adjacent to a required landscaping strip shall be in addition to the minimum required width. Fixtures (e.g., lights, sprinklers) that are higher than the curb are prohibited within a bumper overhang area. Curbing that creates a bumper overhang barrier shall not exceed a height of five inches.

- d. Parking areas with more than 100 spaces shall provide an appropriate entry feature consisting of a concentration of landscape elements, including trees, flowering plants, enhanced paving, and project identification.
4. Parking structures. A landscaping strip 10 feet wide shall be provided on all sides of a parking structure. One tree shall be provided for each 20 to 40 feet of perimeter of the structure, based on species selected. These trees shall be distributed evenly throughout the subject landscape area.

## 6.7 Sign Standards

### A. Applicability

This section contains standards and guidelines for signage to ensure that signs are consistent with the overall quality and character of anticipated new development. Regulations identify permitted sign types; provide standards for number of signs, size, and location; and provide design guidelines for color, materials, and illumination. Refer to the Fontana Municipal Code for all sign-related information or regulations not specifically addressed in this section.

### B. Standards and Guidelines

1. Standards. The following standards shall apply to all signs, regardless of type:
  - a. Sign types not listed in this Section are not permitted.
  - b. Linear Frontage Ratio. For each establishment, one and one-half (1 ½) square feet of total sign area shall be allowed for each linear foot of building frontage ("Linear Frontage Ratio"). Unless otherwise noted, all signs (including temporary signs) shall count toward the total sign area permitted based on the Linear Frontage Ratio. For multi-tenant buildings, each establishment shall be calculated individually. For corner establishments, each facade shall be calculated individually. Permitted sign area based on the linear frontage of one establishment or facade shall not be placed on another establishment or facade.
  - c. Signs shall not be animated.
  - d. Commercial messages that identify, advertise, or attract attention to a business, product, service, or event or activity sold, existing, or offered elsewhere than upon the same property where the sign is displayed are expressly prohibited.
  - e. In the event of a conflict between this Section and any other City regulation, the provisions of this Section shall apply.
  - f. All issues not specifically addressed herein (e.g., signage in the public right-of-way, exempt signs, permit processing, etc.) shall be addressed pursuant to the Fontana Municipal Code.
2. Guidelines. The following guidelines shall apply to all signs, regardless of type.
  - a. Design compatibility.
    - Provide signage that is compatible with the building architecture and coordinate sign materials and colors with the building facade/storefront design.
    - Place signs in accordance with facade rhythm, scale, and proportion.
    - Ensure that signs associated with multi-tenant buildings are complementary to one another. A consistent location for tenant identification signs is recommended.



b. Location.

- Signs shall be placed at or near the public entrance to a building or main parking area to indicate the most direct access to the business.
- Signs shall not be located so that they cover or interrupt the architectural details or ornamentation of a building's facade.
- Signs shall not project above the edge of the rooflines and shall not obstruct windows and/or doorways.

c. Sign legibility.

- Avoid hard-to-read, intricate typefaces. Typefaces that are difficult to read reduce the sign's ability to communicate.
- Avoid spacing letters and words too close together. Lettering shall not occupy more than 75 percent of the sign face.
- Limit the number of lettering styles in order to increase legibility. Signs shall be limited to no more than two styles for small signs (generally up to 10 square feet) and three styles for larger signs.
- Use significant contrast through incorporating light colored letters and a darker, contrasting background to provide the most visible and best-looking image.
- Incorporate business identity symbols and logos.
- Logo means any symbol or any combination thereof adopted and used by an individual or corporation to identify goods made or sold or services rendered by an individual or corporation and to distinguish them from goods made or sold or services rendered by others and that is nationally or State of California registered.

d. Color and materials.

- Bright day-glo (fluorescent) colors shall be avoided as they are distracting and do not blend well with other background colors.
- Sign colors shall relate to and complement the materials or color scheme of the buildings, including accent and trim colors.
- Sign materials shall be selected with consideration for the architectural design of the building's façade and also contribute to the legibility of the sign.
- Construct signs of durable, high-quality materials.
- Wood, paper and cloth signs, and painted wall signs are prohibited.

e. Illumination.

- Individually illuminated letters, either internally illuminated or back-lighted solid letters (reverse channel), are a preferred alternative to internally illuminated plastic-faced cabinet signs.
- Signs shall be comprised of individual letters.
- The use of backlit, individually cut letter signs is strongly encouraged for all types of business and signs, including monument-type signs.
- Whenever indirect lighting fixtures are used, care shall be taken to properly shield the light source.

- f. Electrical raceways and conduits.
- Electrical transformer boxes and raceways shall be concealed from public view.
  - All exposed conduit and junction boxes shall be appropriately concealed from public view.

### C. Sign Types

For the purposes of this plan, Table 6-9 – Sign Types indicates the signs that are allowed in the Freeway Industrial/Commercial District.

| Table 6-9 – Sign Types |                                                                                                                   |
|------------------------|-------------------------------------------------------------------------------------------------------------------|
| 1                      | <b>Grand Wall Sign</b><br>Non-residential uses with unfenestrated wall areas of 2,000 square feet or greater      |
| 2                      | <b>Wall Sign</b><br>Non-residential uses with a dedicated ground floor entrance                                   |
| 3                      | <b>Projecting Sign</b><br>Non-residential uses with a dedicated ground floor entrance                             |
| 4                      | <b>Awning Valance Sign</b><br>Non-residential uses with a dedicated ground floor entrance                         |
| 5                      | <b>Awning Side Sign</b><br>Non-residential uses with a dedicated ground floor entrance                            |
| 6                      | <b>Canopy Fascia Sign</b><br>Non-residential uses with a dedicated ground floor entrance                          |
| 7                      | <b>Under-Awning and Under-Canopy Sign</b><br>Non-residential uses with a dedicated ground floor entrance          |
| 8                      | <b>Recessed Entry Sign</b><br>Non-residential uses with a dedicated ground floor entrance                         |
| 9                      | <b>Window Sign</b><br>Non-residential uses with a dedicated ground floor entrance                                 |
| 10                     | <b>Temporary Window Sign</b><br>Non-residential uses with a dedicated ground floor entrance                       |
| 11                     | <b>Temporary Wall Sign</b><br>Non-residential uses with a dedicated ground floor entrance                         |
| 12                     | <b>Monument Sign</b><br>Any building with continuous linear street frontage of 200 feet or greater                |
| 13                     | <b>Pylon Sign</b><br>Any building with continuous linear street frontage of 200 feet or greater                   |
| 14                     | <b>Freeway Identification Sign</b><br>Any building with continuous linear freeway frontage of 200 feet or greater |
| 15                     | <b>Directional Sign</b><br>Each vehicle entrance                                                                  |
| 16                     | <b>Accessory Sign</b><br>Specific identified uses                                                                 |

## **D. Sign Type Standards and Guidelines**

This section provides Standards and Guidelines for each Sign Type.

### **1. Grand Wall Sign**

Grand Wall Signs are large signs located on, and parallel to, large unfenestrated building wall areas.

#### **a. Standards**

- i. A Grand Wall Sign shall only be located on unfenestrated wall areas of 2,000 square feet in size or greater.
- ii. Only one (1) Grand Wall Sign shall be permitted per establishment.
- iii. The Grand Wall Sign area shall not count towards the total sign area permitted based on the Linear Frontage Ratio.
- iv. A Grand Wall Sign shall not exceed 1,000 square feet or 25 percent of the total wall area, whichever is less.
- v. A Grand Wall Sign shall project no more than one (1) foot from the façade of the building.

#### **b. Commercial Guidelines**

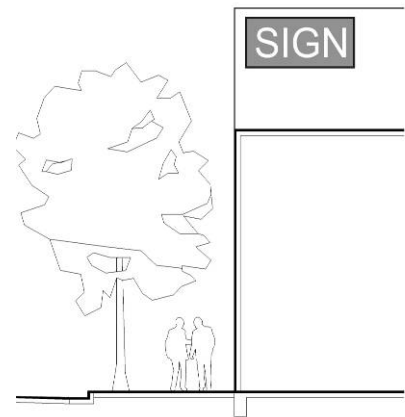
- i. Materials used in Grand Wall Signs shall be wood, ceramic, metal, or paint only.
- ii. Grand Wall Signs shall be illuminated by external illumination only.

#### **c. Industrial Guidelines**

- i. Materials used in Grand Wall Signs shall be ceramic or metal.
- ii. Grand Wall Signs shall be illuminated by external illumination only.

### **2. Wall Sign**

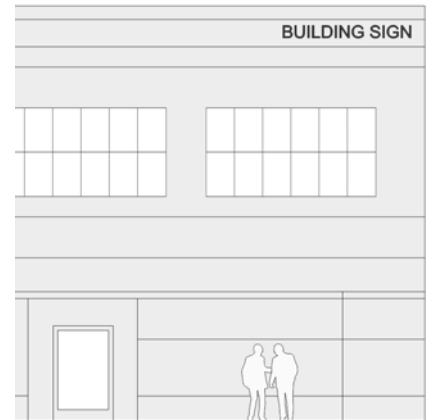
Wall Signs are signs that located on, and parallel to, a building wall. Business Identification Wall Signs are signs that announce the name of a business within a building and Building Identification Wall Signs are signs that announce the name of a building. Both are located on, and parallel to, a building wall.



1) Grand Wall Sign.

a. Standards

- i. Wall Signs shall be located below the second floor and within the middle 50 percent of the building or tenant frontage measured from lease line to lease line. Building Identification Wall Signs shall be located only on the frieze or fascia (articulated banding across the top of every building floor) area of storefront level; frieze or fascia, parapet of the uppermost floor; or above the entrance to main building lobby.
- ii. No Wall Sign shall exceed 150 square feet in size. Building Identification Wall Signs shall be no taller than 24 inches in height.
- iii. Wall Signs shall count towards the total sign area permitted based on the Linear Frontage Ratio, except that the area of Building Identification Wall Signs shall not count towards the total sign area permitted based on the Linear Frontage Ratio.
- iv. Wall Signs shall project no more than one (1) foot from the façade of the building.



2) Building Identification Wall Sign.

b. Commercial Guidelines

- i. Materials used in wall signs shall be wood, ceramic, and/or metal. Wall signs may also be inscribed into the façade of the building. Building Identification Wall Signs shall be inscribed into the façade or constructed of individual metal letters.
- ii. Wall Signs shall be illuminated by external illumination or halo illumination only.
- iii. Where individual letters are used, letters shall be three-dimensional, created by raised letter forms mounted to the building façade or sign panel, or by incised openings cut out from the sign panel.
- iv. New wall signs for individual businesses in a shopping center shall be placed consistent with the location of signs for other businesses in the center. This will establish visual continuity among storefronts and create a unified appearance for the center.
- v. When signs that are attached to a wall are removed, holes and other disfigurements of the wall's surface shall be patched and painted to match surrounding areas.



2) Business Identification Wall Sign.

c. Industrial Guidelines

- i. Materials used in wall signs shall be ceramic, and/or metal. Wall signs may also be inscribed into the façade of the building. Building Identification Wall Signs shall be inscribed into the façade or constructed of individual metal letters.
- ii. Wall signs shall be illuminated by external illumination, exposed neon tube illumination, exposed incandescent bulb illumination, or halo illumination only. Building Identification Wall Signs shall be illuminated by external illumination or halo illumination only.
- iii. Where individual letters are used, letters shall be three-dimensional, created by raised letter forms mounted to the building façade or sign panel, or by incised openings cut out from the sign panel.
- iv. When signs that are attached to a wall are removed, holes and other disfigurements of the wall's surface shall be patched and painted to match surrounding areas.

3. **Projecting Sign**

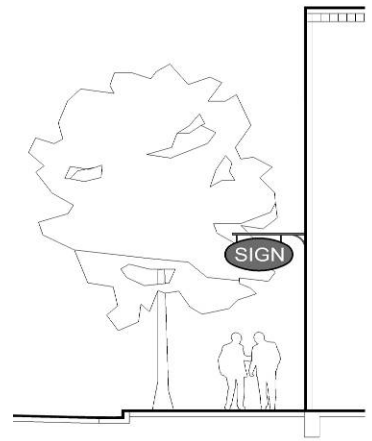
Projecting Signs are signs that are oriented perpendicularly to the building façade and are either (1) suspended under a bracket, armature, or other mounting device or (2) are cantilevered (i.e., structurally affixed to the building).

a. Standards

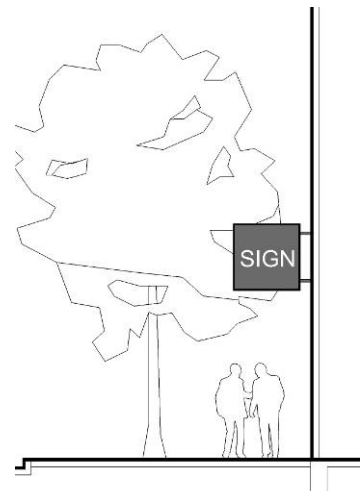
- i. Projecting Signs shall only be mounted on the wall area below the second floor.
- ii. No Projecting Sign shall exceed 16 square feet in size.
- iii. Projecting Signs shall project no more than four feet from the façade of the building.
- iv. No portion of a Projecting Sign shall be lower than eight feet above the level of the walkway over which it projects.

b. Commercial and Industrial Guidelines

- i. Projecting Signs that are suspended under a bracket, armature, or other mounting device shall be metal and paint materials only and shall be illuminated by external illumination only.



3) Suspended Projecting Sign.



3) Cantilevered Projecting.

- ii. Projecting Signs that are cantilevered signs shall be metal and paint only and shall be illuminated by external illumination or halo illumination only.
- iii. Sign supports and brackets shall be compatible with the design and scale of the sign and the architectural design of the building.

#### 4. ***Awning Valance Sign***

Awning Valance Signs are signs applied to the awning valance and are contained completely within the valance.

##### a. Standards

- i. Lettering for Awning Valance Signs shall include one (1) line of lettering not to exceed two-thirds (2/3) the height of the valance or 12 inches, whichever is less.
- ii. Awning Valance Signs shall project no farther from the building than its associated awning.
- iii. No portion of an Awning Valance Sign shall be less than eight feet above the level of the walkway over which it projects.

##### b. Commercial and Industrial Guidelines

- i. Awning Valance Signs shall consist of metal, or vinyl or paint applied directly to the awning.
- ii. Awning Valance Signs shall be illuminated by external illumination only.
- iii. The shape, design, and color of awnings shall be carefully designed to coordinate with, and not dominate, the architectural style of the building. Where multiple awnings are used on the building, the design and color of the sign awnings shall be consistent with all other awnings.
- iv. The use of temporary signs/letters on awnings is not allowed. Only permanent signs that are an integral part of the awning or canopy shall be used.
- v. The use of adhesive/press on lettering is not allowed. Awning signs shall be painted directly on the canvas awning.
- vi. To avoid having to replace awnings or paint out previous tenant signs when a new tenant moves in to a building, the use of replaceable valances shall be considered.

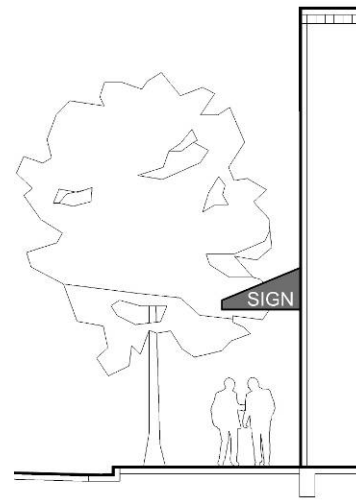


4) Awning Valance Sign.

## 5. *Awning Side Sign*

Awning Side Signs are signs applied to the side panel of an awning.

- a. Standards
  - i. The area of Awning Side Signs shall not count towards the total sign area permitted based on the Linear Frontage Ratio.
  - ii. Lettering for Awning Side Signs shall not exceed 12 inches in height with total sign area not to exceed 20 percent of the area of the awning side area.
  - iii. Awning Side Signs shall project no farther from the building than its associated awning.
  - iv. No portion of an Awning Side Sign shall be less than eight feet above the level of the walkway over which it projects.



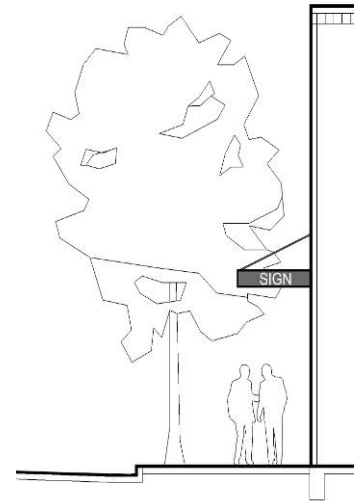
5) Awning Side Sign.

- b. Commercial and Industrial Guidelines
  - i. Awning Side Signs shall consist of vinyl or paint applied directly to the awning.
  - ii. Awning Side Signs shall be illuminated by external illumination only.
  - iii. The shape, design, and color of awnings shall be carefully designed to coordinate with, and not dominate, the architectural style of the building. Where multiple awnings are used on the building, the design and color of the sign awnings shall be consistent with all other awnings.
  - iv. The use of temporary signs/letters on awnings is not allowed. Only permanent signs that are an integral part of the awning or canopy shall be used.
  - v. The use of adhesive/press on lettering is not allowed. Awning signs shall be painted directly on the canvas awning.
  - vi. To avoid having to replace awnings or paint out previous tenant signs when a new tenant moves in to a building, the use of replaceable valances shall be considered.

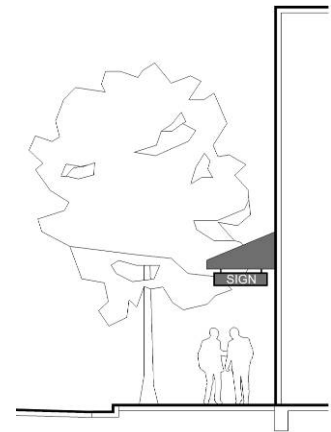
## 6. *Canopy Fascia Sign*

Canopy Fascia Signs are signs that are mounted to the front or side fascia of a canopy and contained completely within that fascia.

- a. Standards
  - i. The height of Canopy Fascia Signs shall not exceed two-thirds ( $\frac{2}{3}$ ) the height of the fascia or 12 inches, whichever is less.
  - ii. The width of Canopy Fascia Signs shall not exceed two-thirds ( $\frac{2}{3}$ ) of the canopy width.
  - iii. Canopy Fascia Signs shall project no farther from the building than its associated canopy.
  - iv. No portion of a Canopy Fascia Sign shall be less than eight feet above the level of the walkway over which it projects.
  - v. Canopy Fascia Signs shall consist of only one (1) line of lettering articulated as individual letters mounted directly to the canopy.
- b. Commercial and Industrial Guidelines
  - i. Materials used in Canopy Fascia Signs shall be metal and paint only.
  - ii. Canopy Fascia Signs shall be illuminated by external illumination only.



6) Canopy Fascia Sign.

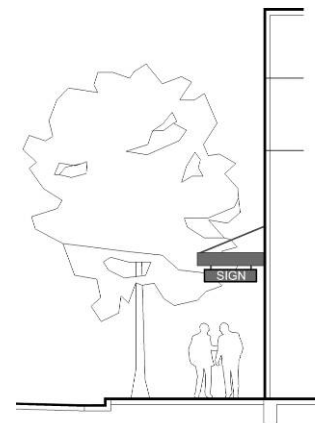


7) Under-Awning Sign.

## 7. *Under-Awning or Under-Canopy Sign*

Under-Awning or Under-Canopy Signs are signs that are suspended under an awning or canopy, perpendicular to the building facade.

- a. Standards
  - i. Under-Awning or Under-Canopy Signs shall be located adjacent to a public entrance.
  - ii. No more than one (1) Under-Awning or Under-Canopy Sign shall be permitted per establishment per façade.
  - iii. The area of Under-Awning or Under-Canopy Signs shall not count towards the total sign area permitted based on the Linear Frontage Ratio.
  - iv. Under-Awning or Under-Canopy Signs shall not exceed three (3) square feet in area.



7) Under-Canopy Sign.

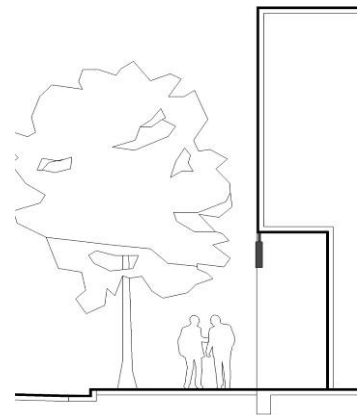


- v. Under-Awning or Under-Canopy Signs shall project no farther from the building than its associated awning or canopy.
  - vi. No portion of an Under-Awning or Under-Canopy Sign shall be less than eight feet above the level of the walkway over which it projects.
- b. Commercial Guidelines
- i. Materials used in Under-Awning or Under-Canopy Signs shall be wood, metal, and paint only.
  - ii. Under-Awning or Under-Canopy Signs shall be illuminated by external illumination only.
- c. Industrial Guidelines
- i. Materials used in Under-Awning or Under-Canopy Signs shall be metal and paint only.
  - ii. Under-Awning or Under-Canopy Signs shall be illuminated by external illumination only.

**8. Recessed Entry Sign**

Recessed Entry Signs are signs that are oriented parallel to the building façade and that are suspended over a recessed entry.

- a. Standards
- i. No Recessed Entry Sign shall exceed twenty (20) square feet in size.
  - ii. Recessed Entry Signs shall not project beyond the façade of the building.
  - iii. A Recessed Entry Sign shall not be lower than eight feet above the level of the walkway.
- b. Commercial Guidelines
- i. Materials used in Recessed Entry Signs shall be wood, metal, and paint only.
  - ii. Recessed Entry Signs shall be illuminated by external illumination only.



8) Recessed Entry Sign-  
Section View.



8) Recessed Entry Sign-  
Elevation View.

c. Industrial Guidelines

- i. Materials used in Recessed Entry Signs shall be metal and paint only.
- ii. Recessed Entry Signs shall be illuminated by external illumination only.

**9. Window Sign**

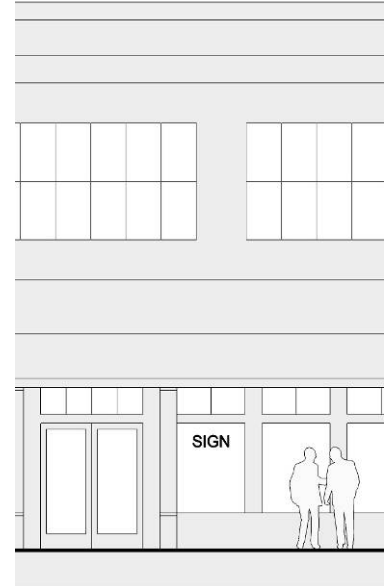
Window Signs are signs that are applied directly to a window or mounted or suspended directly behind a window.

a. Standards

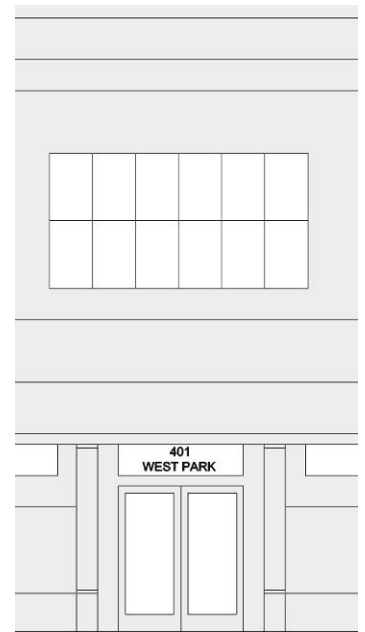
- i. Window Signs shall be permitted on windows below the second floor level only. A Window Sign that only identifies a building shall be located on a transom window above a primary entrance, or the glazed area of primary door.
- ii. Window signs shall count towards total sign area permitted based on the Linear Frontage Ratio, except that the area of a Window Sign that only identifies a building shall not count towards the total sign area permitted based on the Linear Frontage Ratio. One (1) Window Sign that only identifies a building shall be permitted per building per street-facing façade.
- iii. A maximum of 25 percent of any individual window area shall be covered or otherwise occupied by signage.
- iv. The letter height of each Window Sign shall not exceed 12 inches.

b. Commercial and Industrial Guidelines

- i. Ground-floor Window Signs shall consist of vinyl or paint applied to the glass, neon mounted or suspended behind the glass, or framed and mounted paper signs. Window Signs that only identify a building shall consist of vinyl or paint applied to the glass only.
- ii. Ground-floor Window Signs may be illuminated by external illumination only. A Window Sign that only identifies a Building Identification shall not be illuminated.



g) Window Sign – Business Identification.

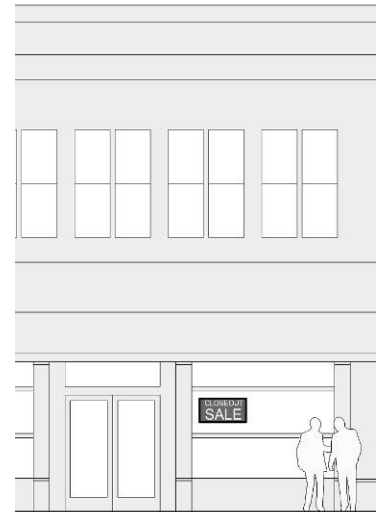


g) Window Sign – Building Identification.

### 10. Temporary Window Sign

Temporary Window Signs are signs that are applied directly to a window or mounted or suspended directly behind a window and are designed, constructed, and intended for display on private property for a period of not more than 90 consecutive days per year. Examples include “grand opening”, “special sale,” and seasonal signage.

- a. Standards
  - i. Temporary Window Signs shall be located only on ground floor windows on building facades that face a public street or a parking lot.
  - ii. Temporary Window Signs shall not exceed six square feet in size.
  - iii. Temporary Window Signs shall not cause the total amount of the window area covered with signage to exceed 25 percent.
  - iv. Temporary Window Signs that satisfy the above standards and General Standards do not require a permit.
- b. Commercial and Industrial Guidelines
  - i. Temporary Window Signs shall be constructed of paint applied directly to the glass or framed paper signs placed behind the glass.
  - ii. Temporary Window Signs shall not be illuminated.
  - iii. Temporary Window Signs that satisfy the above guidelines and General Guidelines do not require a permit.



10) Temporary Window Sign.

### 11. Temporary Wall Sign

Temporary Wall Signs are signs that are located on, and parallel to, a building wall and are designed, constructed, and intended for display on private property for a period of not more than ninety (90) consecutive days per year. Examples include “grand opening”, “special sale,” and seasonal temporary banner signage.

- a. Standards
  - i. Temporary Wall Signs shall only be mounted on a wall area below the second floor level that faces a public street or a parking lot.



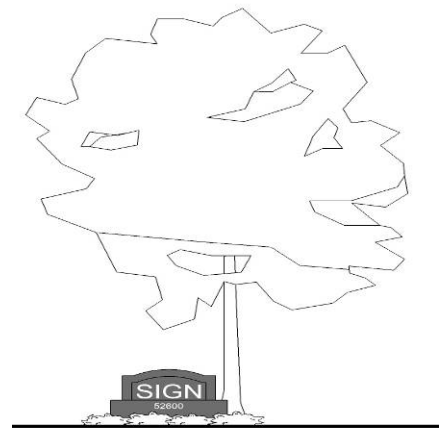
11) Temporary Wall Sign.

- ii. A maximum of one (1) Temporary Wall Sign is allowed per establishment.
  - iii. Temporary Wall Signs shall not exceed 32 square feet in area.
  - iv. Temporary Wall Signs shall project no more than one (1) foot from the façade of the building.
- b. Commercial and Industrial Guidelines
- i. Materials used in Temporary Wall Signs shall consist of a flexible vinyl material with grommet holes installed around the edges to accommodate attachment to a building.
  - ii. Temporary Wall Signs shall not be illuminated.

## 12. Monument Sign

A Monument Sign is a freestanding sign supported by a solid architectural element at its base.

- a. Standards
- i. A maximum of one Monument Sign is allowed per street frontage for single-purpose buildings, multi-tenant buildings or complexes and shopping centers on a parcel with one or more street frontages of at least 100 feet.
  - ii. A Monument Sign shall not exceed eight feet in length or six feet in height.
  - iii. Monument Signs shall be placed perpendicular or parallel to the street. The base of a Monument Sign shall be set back a minimum of five feet from any public right-of-way or interior property line; a minimum of 10 feet from the edge of a driveway; and a minimum of 50 feet from any Monument Signs or Pylon Signs on adjoining sites. Monument Signs shall not block sight lines at entry driveways and circulation aisles.
  - iv. The sign copy for a Monument Sign shall only identify the name of the center, complex, or building and the address; however, the name of the primary tenant, if any, may be included in the copy. The minimum letter size allowed shall be six inches. Sign copy shall not be located closer than one half-letter height to the sign edge or other line of copy. Between 5 to 10 percent of the sign area should be dedicated to identification of the street address.
  - v. The area of Monument Signs shall not count towards the total sign area permitted based upon Linear Frontage.



12) Monument Sign.

- vi. Monument Signs shall not project over any on-site driveway or vehicle circulation area.
  - vii. Landscaping with automatic irrigation shall be provided at the base of the supporting structure equal to twice the area of one face of the sign or 75 square feet, whichever is greater. For example, 40 sq. ft. of sign area = 80 sq. ft. of landscaped area.
- b. Commercial and Industrial Guidelines
- i. Monument Signs may be illuminated, however the sign copy should be the only portion of the sign face that is illuminated. The sign background or field shall be opaque with a nonglossy, nonreflective finish.
  - ii. The sign area and height of the sign should be in proportion to the site and surrounding buildings. Signs shall not be overly large so as to be a dominant feature of the site.
  - iii. Monument Signs shall incorporate architectural elements, details, and articulation as follows:
    - Provide a solid architectural base that supports the sign. The base shall be a minimum of one-foot in height.
    - Provide architectural elements on the sides and top to frame the sign pane(s). Use columns, pilasters, cornices, and similar details to provide design interest.
    - Incorporate materials and colors into the sign support structures to match or be compatible with materials and colors of the development the sign serves so it does not appear out of scale with its adjacent building(s).
    - Keep the overall size of the sign in proportion with the development it serves so it does not appear out of scale with its adjacent building(s).

### **13. Pylon Sign**

A Pylon Sign is a freestanding sign that is supported by two or more uprights, or braces in or upon the ground that are not a part of a building or enclosed within the exterior walls of a building and are separated from any other structures by a distance of at least six inches. This includes a sign that is supported by two or more uprights that are surrounded by a decorative cover to form one solid sign support. The following standards and guidelines do not apply to pylon signs oriented

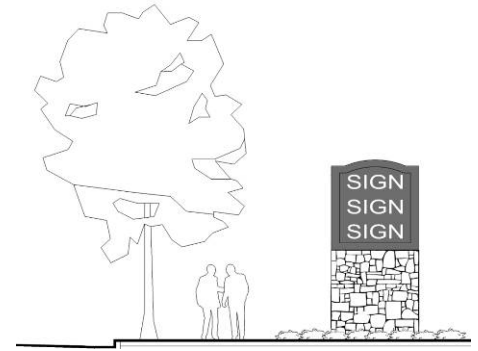
towards the I-10 Freeway. Pylon signs shall only be allowed for commercial properties.

a. Standards

- i. A maximum of one Pylon Sign is allowed per street frontage for single-purpose buildings, multi-tenant buildings or complexes, and shopping centers on a -parcel with one or more street frontages of at least 200 feet. Either a Pylon Sign or a Monument Sign is allowed on a street frontage, but not both.
- ii. A Pylon Sign shall not exceed 20 feet in height.
- iii. Pylon Signs are only allowed when a building is set back from the front property line a minimum of 40 feet. The base of a Pylon Sign shall be set back a minimum of five feet from any public right-of-way or interior property line; a minimum of 10 feet from the edge of a driveway; and a minimum of 50 feet from a property line of any residentially zoned property and from any Monument Signs or Pylon Signs on adjoining sites. Pylon Signs shall not block sight lines at entry driveways and circulation aisles.
- iv. The sign copy for a Pylon Sign shall only identify the name of the center, complex, or building and the address; however, the name of the primary tenant, if any, may be included in the copy. Sign copy shall not be located closer than one half-letter height to the sign edge or other line of copy.
- v. The area of Pylon Signs shall not count towards the total sign area permitted based upon Linear Frontage.
- vi. Pylon Signs shall not project over any building, on-site driveway, or vehicle circulation area.
- vii. Landscaping with automatic irrigation shall be provided at the base of the supporting structure equal to twice the area of one face of the sign or 75 square feet, whichever is greater. For example, 40 sq. ft. of sign area = 80 sq. ft. of landscaped area.

b. Guidelines

- i. Pylon Signs may be illuminated; however the sign copy shall be the only portion of the sign face that is illuminated. The sign background or field shall be opaque with a nonglossy, nonreflective finish.
- ii. The sign area and height of the sign should be in proportion to the site and surrounding buildings. Signs



13) Pylon Sign.

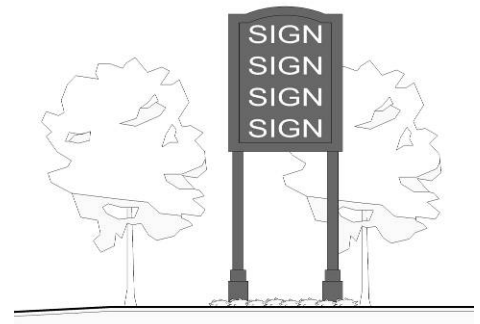
shall not be overly large so as to be a dominant feature of the site.

- iii. Pylon Signs should incorporate architectural elements, details, and articulation as follows:
  - The supporting structures of Pylon Signs shall not include exposed metal pole(s), but shall be surrounded by a decorative cover that is architecturally compatible with the sign cabinet and the architectural character of buildings on the site.
  - Incorporate materials and colors into the sign support structures to match or be compatible with materials and colors of the development the sign serves so it does not appear out of scale with its adjacent building(s).
  - Keep the overall size of the sign in proportion with the development it serves so it does not appear out of scale with adjacent building(s).

#### **14. Freeway Adjacent Sign**

A Freeway Adjacent Sign is an on-site sign of a pylon-type design that is oriented towards traffic traveling on the I-10 freeway.

- a. Standards
  - i. One Freeway Adjacent Sign is allowed for single-purpose buildings, multi-tenant buildings, or complexes with at least 20,000 square feet of building area on a parcel that has at least 200 linear feet of continuous frontage along the I-10 freeway easement or right-of-way and is at least four net acres in size. A parcel with a Freeway Adjacent Sign shall not be permitted any other freestanding sign of any type.
  - ii. Freeway Identification Signs shall not exceed 200 square feet in area and a maximum height of 40 feet. If additional sign height and/or area is requested, the Planning Commission, at the Planning Commission's discretion, may approve additional sign height and/or area (up to a maximum height of 50 feet and maximum sign area of 250 square feet) after either or both of the following modeling simulations is conducted by the applicant as a part of the Design Review:
    - A "flag test" to simulate the visual impact of the proposed sign structure;



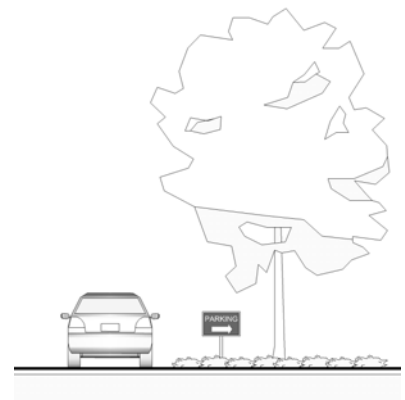
14) Freeway Adjacent Sign.

- A line of sight study to determine what size of sign could be seen from any given distance, and whether the additional height and/or area are warranted.
- b. Commercial and Industrial Guidelines
    - i. Freestanding freeway-oriented signs shall be of a pylon-type design, supported by two or more appropriately dimensioned columns. Pole signs are not allowed.
    - ii. Signs should incorporate architectural design elements into the sign copy portion of the sign as well as the supporting structure. The overall design theme shall be compatible with the associated development.
    - iii. Materials and colors used on the sign and supporting structure shall be compatible with those of the development the sign serves.
    - iv. Signs shall be internally illuminated, however, the sign copy shall be the only portion of the sign face that is illuminated.
    - v. Signs shall incorporate a significant landscaped area at the base of the sign equal to two times the size of the sign face.

#### 15. *Directional Sign*

A Directional Sign is an on-premise sign giving directions, instructions, or facility information of an establishment (e.g., parking signs, exit and entrance signs, etc.).

- a. Standards
  - i. One (1) directional sign for each vehicle entry to a site with a maximum area of three square feet per sign. Maximum sign height shall be four feet. Additional directional signs may be allowed with approval of a Comprehensive Sign Program.
- b. Commercial and Industrial Guidelines
  - i. Directional signs and their supports shall use the same color palette of the proposed building.
  - ii. Directional signs shall be located to maintain sight lines along major circulation routes and shall be illuminated for visual clarity and safety.
  - iii. Directional signs shall be designed with easy-to-read fonts, contrasting colors from the surrounding support panels, and durable materials.



15) Directional Sign.

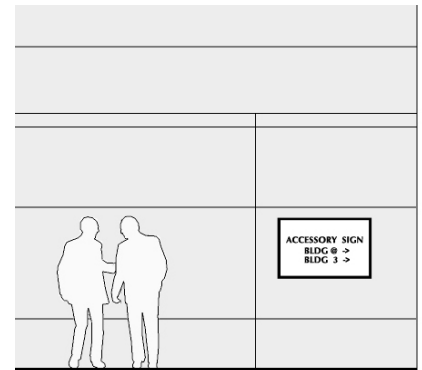


- iv. Double-sided parking directional signs shall incorporate messaging and direction arrows on both sides of sign.
- v. Parking directional signage shall be used consistently throughout each individual development.

### 16. Accessory Signs

Accessory Signs are signs that provide incidental information about a project site or a business and its goods or services. For the purposes of this plan, Accessory Signs include:

- Directory Sign. A sign listing the tenants or occupants of a building or building complex.
- Fuel Price Sign. Fuel price signs only advertise the price and grade of fuel for sale at a service station.
- Nameplate Sign. A sign indicating the name and/or address of a building or occupant.
- Restaurant Menu Sign. Menus displayed on the exterior premises of a restaurant.



16) Accessory Sign.

- a. Standards
  - i. The area of Accessory Signs shall not count towards the total sign area permitted based upon Linear Frontage.
  - ii. Directory Signs: Limited to a total sign area of 10 square feet.
  - iii. Fuel Price Signs: One per street frontage with a maximum sign area of 12 square feet and a maximum height of four feet. Fuel price signs shall only advertise the price and grade of fuel and no other advertising shall be allowed. Located in a landscaped planter with a minimum area equal to the area of the sign.
  - iv. Nameplate Sign: One non-illuminated sign not to exceed one square foot in area.
- b. Commercial and Industrial Guidelines
  - i. Materials used in Accessory Signs shall be wood and metal.
  - ii. Accessory Signs shall be illuminated by internal or external illumination as appropriate.

## 6.8 Public Right-of-Way Streetscape

This section establishes standards for streetscape landscaping improvements within the public rights-of-way along the major highways, primary highways, and secondary highways as identified in the General Plan, Circulation Master Plan, as well as district gateway/intersection enhancements. The intent of these streetscape improvement concepts, and gateway enhancements is to provide a “sense of place” or identity, while interweaving the standards and tree palettes that may be provided by any overriding Master Street Tree Plan.

### A. Street Classifications

Streets within the FID are classified as follows:

1. Major highways:
  - a. Six-lane major highway – Citrus Avenue.
  - b. Modified six-lane no median major highway – Valley Boulevard.
  - c. Eight-lane major highway – Cherry Avenue.
2. Primary highways – Beech Avenue, Fontana Avenue, Mulberry Avenue, and Slover Avenue.
3. Secondary highway – Poplar Avenue.

### B. General Design Criteria

The following general design criteria are intended to articulate consistent landscape treatments on similar classifications of corridors and provide a hierarchy of conceptual treatments for district gateway/intersection enhancements, within the FID.

1. Landscaping should be used to accentuate and frame important view corridors.
2. Landscaping shall employ a common three-tiered approach to design:
  - a. Trees
  - b. Shrubs, vines and tall grass-like materials
  - c. Groundcovers (does not include turf)
3. Landscaping should be consistent and accentuated along arterial corridors and gateway intersections to emphasize district areas.
4. Street trees on major highways, and primary highways shall consist of on-center planting of deciduous trees in medians (whenever medians are required) and evergreen trees in parkways to provide seasonal variations of views during fall and winter months (clearer air and snow-capped peaks).
5. Secondary highways shall provide single species of evergreen trees planted in parkways.

6. Gateway intersection enhancements should incorporate the adjacent property tree species (used in buffer setback) in order to provide background and screening, and be enhanced with accent trees selected for their character and shape.
7. Primary and secondary gateways will include thematic monumentation for district identification and reflect elements of local identity (i.e. river rock, concrete, City logo, etc.).
8. All gateway intersection enhancements shall incorporate decorative paving at corner areas and plant materials that promote the best of water-efficient landscaping.

### **C. Streetscape Concept**

The Streetscape Concept Plan for the project area is shown on Exhibit 6-5. The plan identifies major, primary, and secondary highways, as well as collector streets and the gateway intersections within the Specific Plan area. Roadway classifications are consistent with the General Plan, Circulation Master Plan.

1. **Major Highway Streetscape.** Major highway streetscapes define the image of the City and its districts, while providing arterial linkages within and beyond the City. There are four streetscape concepts for major highways: Six-Lane Major Highway, Modified Six Lane No Median Major Highway, Modified Six Lane Residential Adjacent Major Highway, and Eight-Lane Major Highway. These major highway streetscapes are designed in response to special design needs, right-of-way, and adjacencies. Major highways within the FID are short sections of Cherry Avenue, Citrus Avenue, and Valley Boulevard. Streetscape cross-sections are in Exhibits 6-6, 6-7, and 6-8.
2. **Primary/Secondary Highway Streetscape.** Primary/Secondary highway streetscapes define thoroughfares throughout the City. Primary highways within the FID are Beech Avenue, Fontana Avenue, Mulberry Avenue, and Slover Avenue. The only secondary highway is Poplar Avenue. Streetscape cross-sections are in Exhibit 6-9 and 6-10.

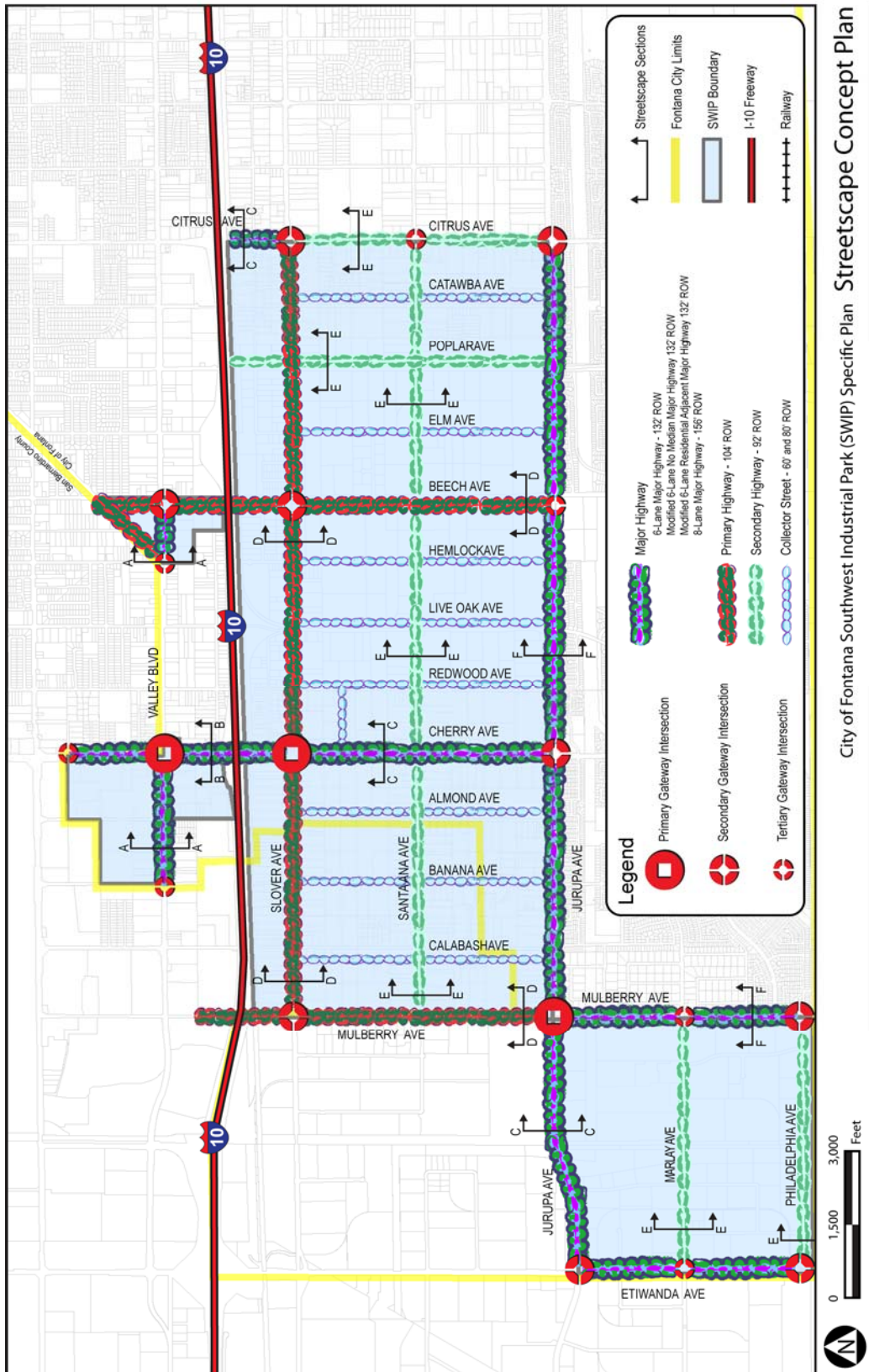


Exhibit 6-5 – Streetscape Concept Plan

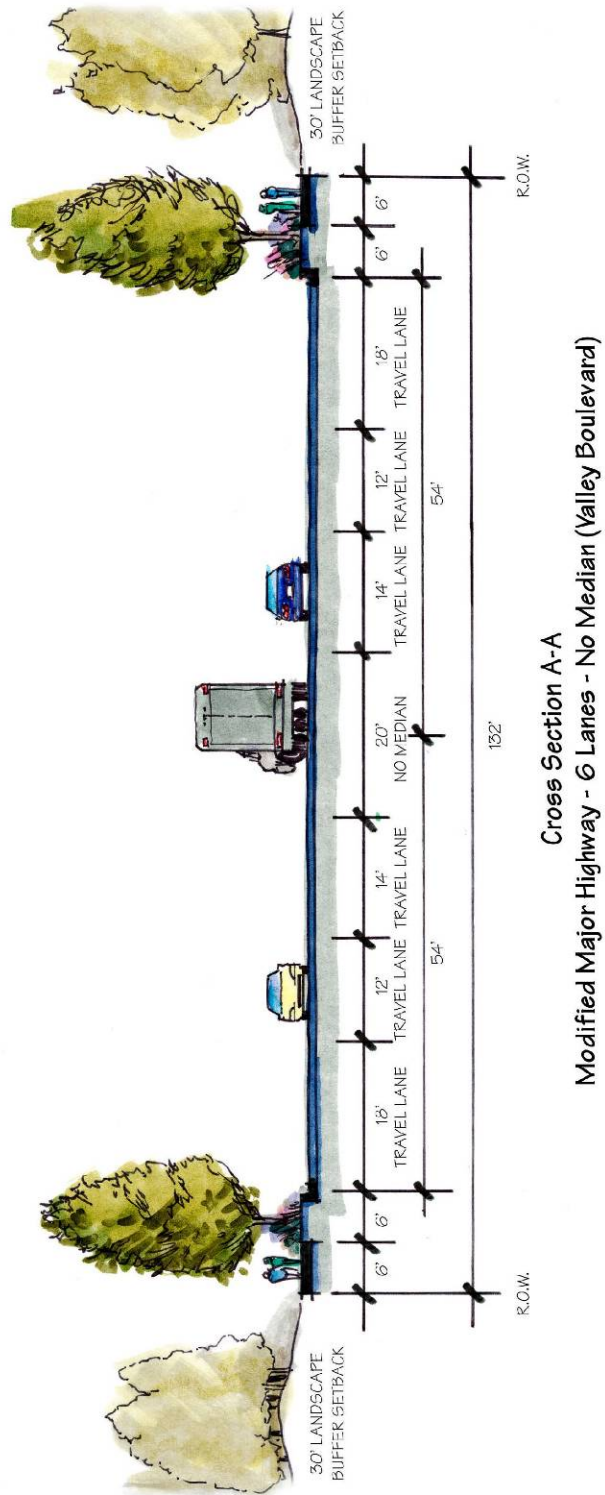


Exhibit 6-6 – Modified Major Highway – 6 Lanes – Cross-Section A-A (Valley Boulevard)

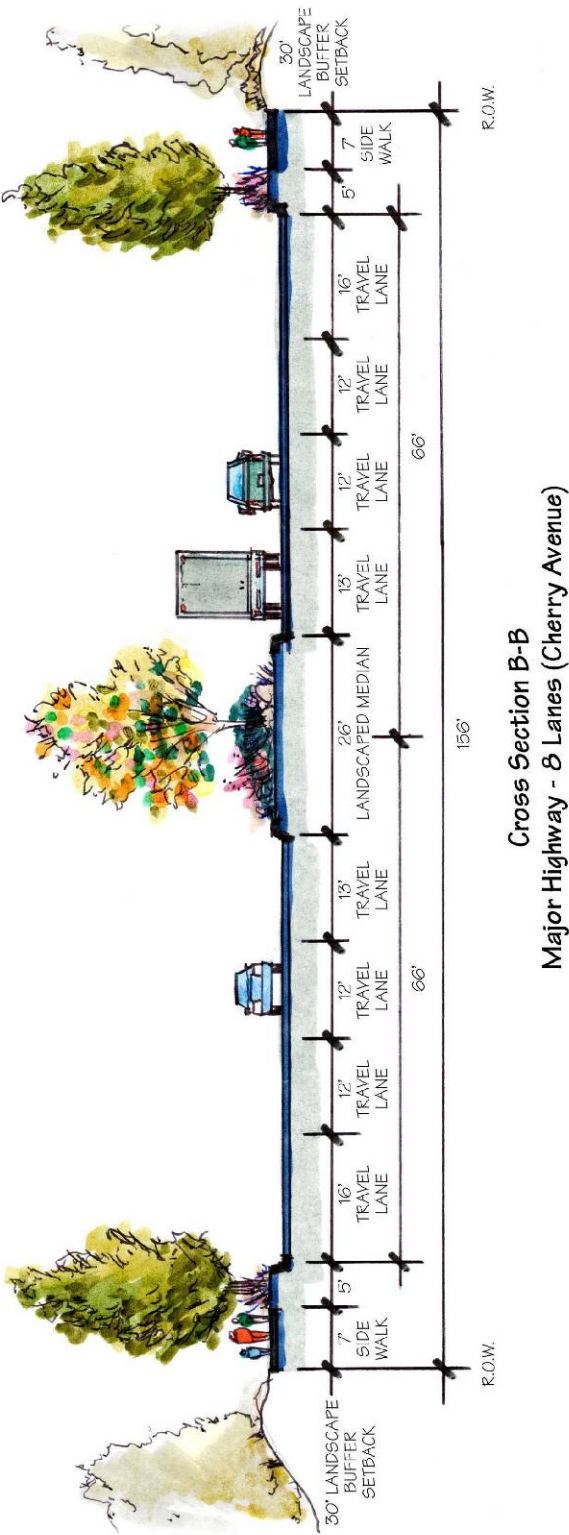


Exhibit 6-7 – Major Highway – 8 Lanes – Cross-Section B-B (Cherry Avenue)

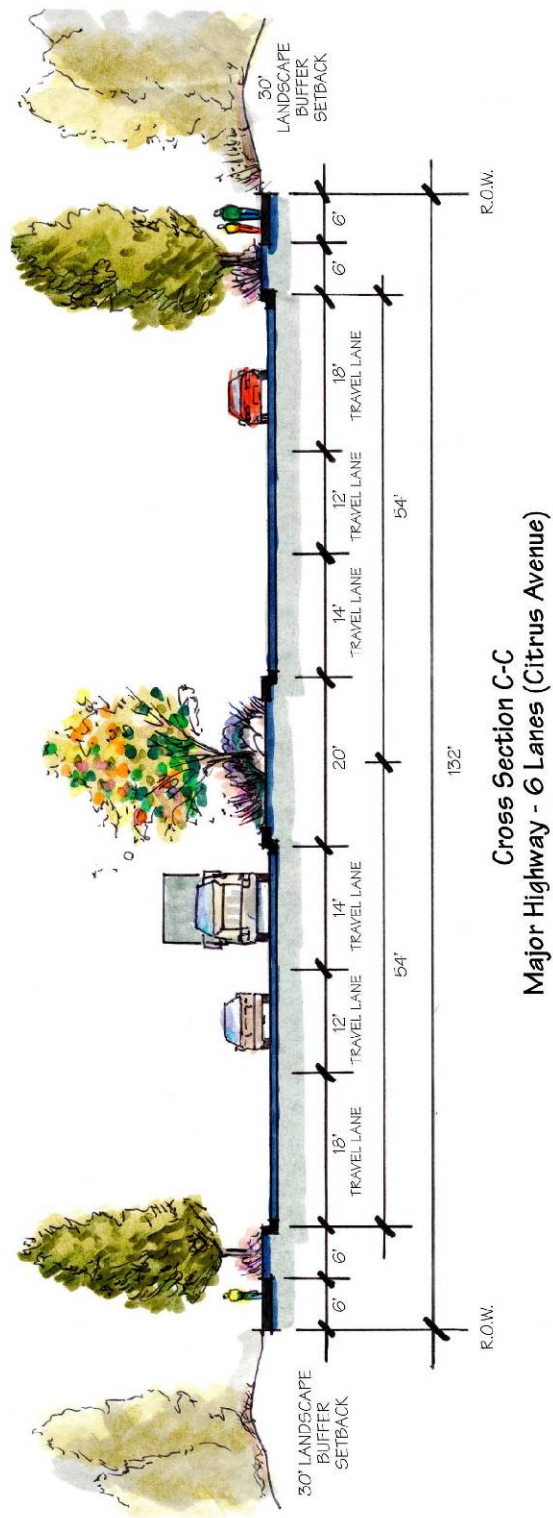
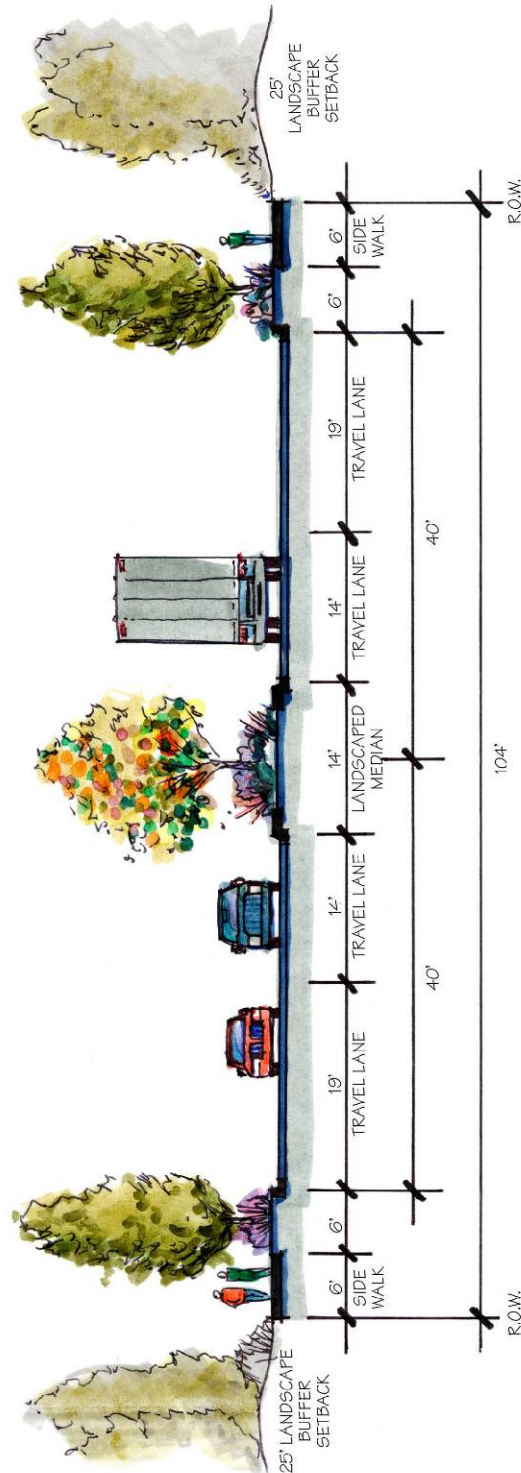


Exhibit 6-8 – Major Highway – 6 Lanes – Cross-Section C-C (Citrus Avenue)





**Cross Section D-D**  
**Primary Highway - 4 Lanes**  
**(Beech, Fontana, Mulberry, and Slover Avenues)**

Exhibit 6-9 – Primary Highway – 4 Lanes – Cross-Section D-D (Beech Avenue, Fontana Avenue, Mulberry Avenue, and Slover Avenue)



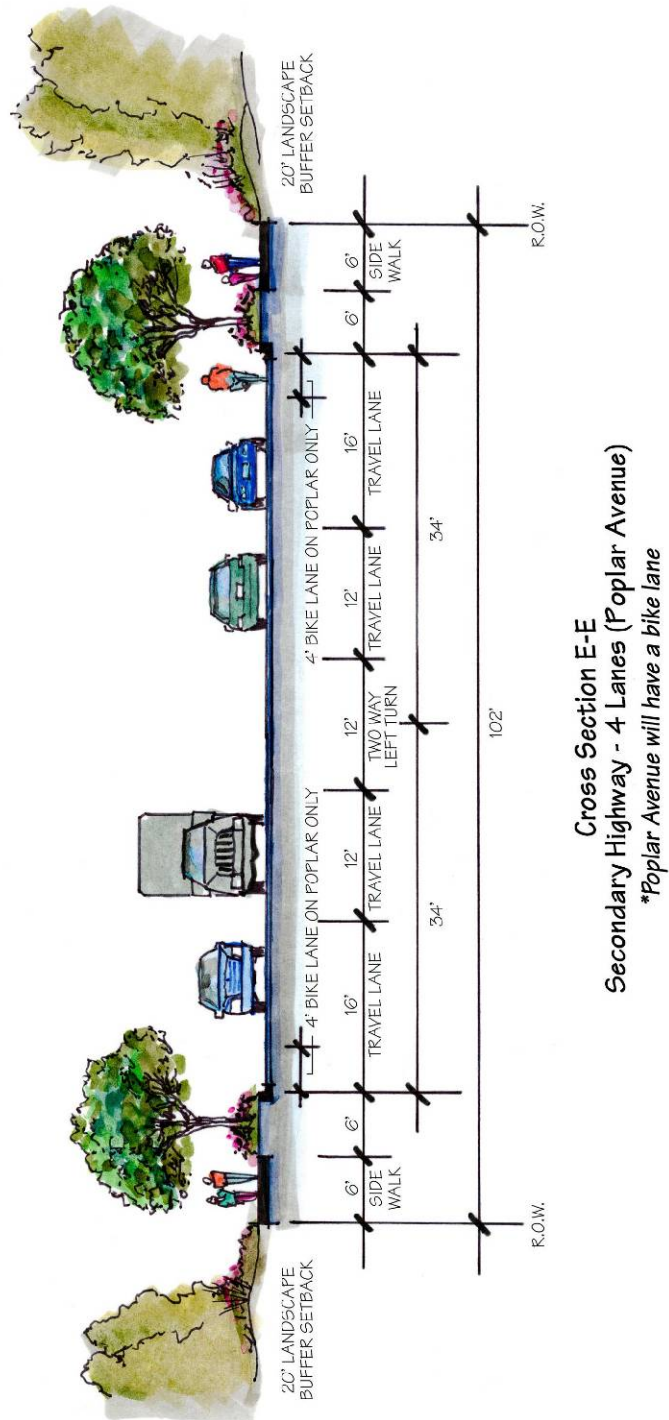


Exhibit 6-10 – Secondary Highway – 4 Lanes – Cross-Section E-E (Poplar Avenue)

### **3. Gateways**

#### **A. Concept Plan**

The Streetscape Concept Plan Exhibit 6-5 identifies a hierarchy of primary, secondary, and tertiary gateways. The intent of the gateway intersection enhancements is to provide a visual statement that you are within the Specific Plan area.

The gateway intersection enhancements should all incorporate uniform treatments (to varying degrees) within expanded corner setback areas (45 degree diagonal right-of-way). Depending on the hierarchy level, each gateway shall include special corner/sidewalk paving, planting schemes that highlight drought tolerant species, and monumentation signage. Monument signs are optional on tertiary gateway intersections.

Each corner planting scheme shall incorporate the three-tiered planting concept, consisting of accent trees, shrubs, or tall grass-like plant material, and a ground cover. Dense planting of evergreen tree species consistent with adjacent buffer setback plantings shall provide a background/screen for each corner setback area.

Gateway conceptual designs with typical dimensions (plan views) are illustrated in Exhibits 6-11, 6-12, and 6-13. The monument sign concept as it would appear in front of the planting treatment is illustrated in Exhibit 6-14.

Gateway enhancements and monument sign enhancements shall meet the City's line of sight regulations, as determined by the City Engineer. Dimensions of monument signs shall comply with Section 6.7.D.12. Monument Sign.

#### **B. Dedication and Maintenance of Gateway Intersection Enhancements**

1. When dedication and maintenance is required.
  - a. Whenever a development project is proposed on land that is designated as a location for gateway intersection enhancements in Section 6.8.B Public Right-of-Way Streetscape-Gateways, the developer shall:
    - i. Dedicate any necessary right-of-way area to the City or provide an easement in favor of the City for the installation of gateway intersection enhancements;
    - ii. Construct the gateway intersection enhancements to the standards indicated in Section 6.5., Public Right-of-Way Streetscape; and

- iii. Enter into an agreement with the City that specifies perpetual maintenance.
- b. The applicable review authority shall impose the dedication (or easement) requirement as a condition of project approval.
- c. The City Attorney and the Director of Community Development shall approve the form and content of any dedication or easement instrument used to ensure the installation and perpetual maintenance of the gateway intersection enhancements.

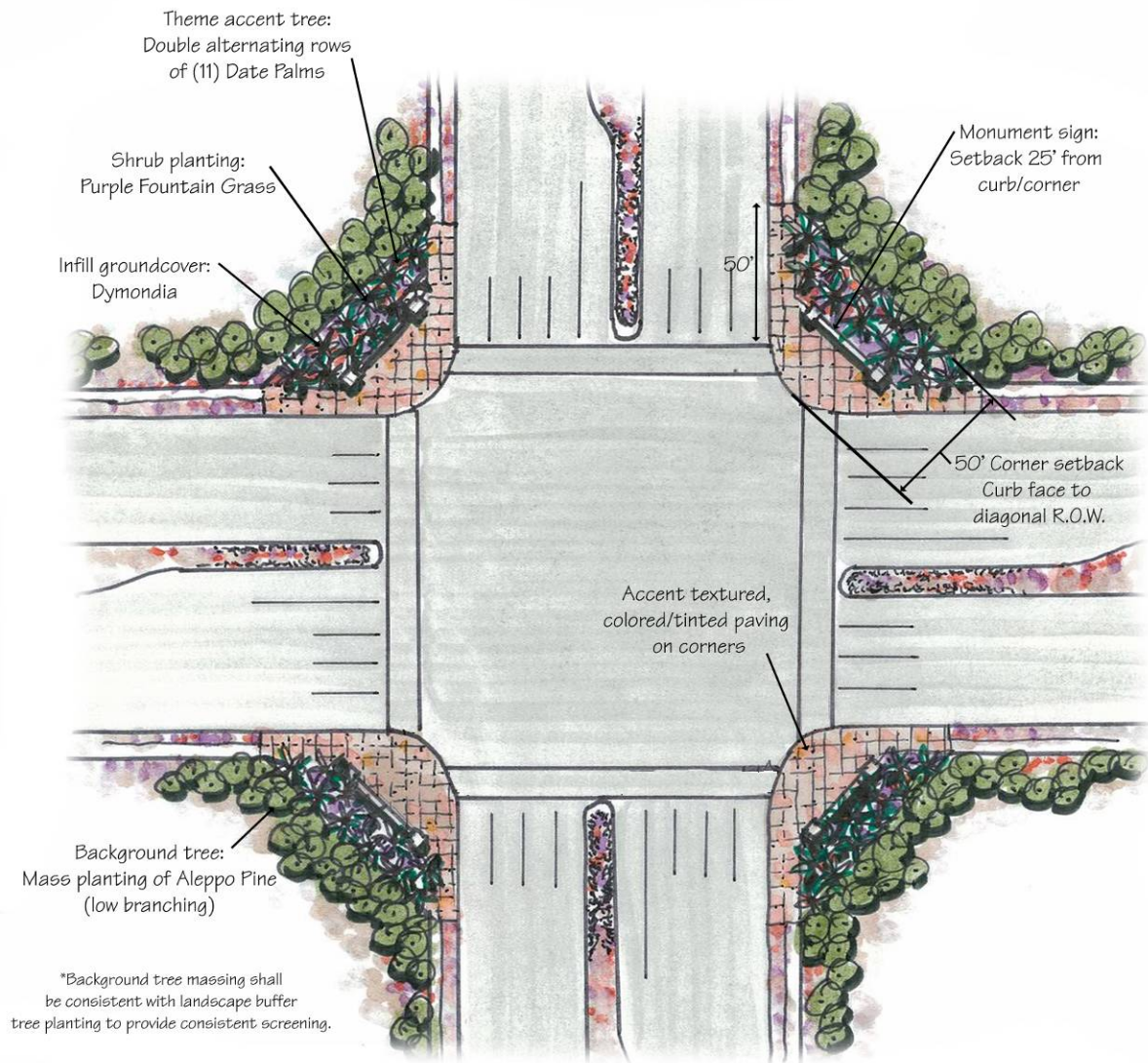


Exhibit 6-11 – Primary Gateway Intersection Enhancement Concept

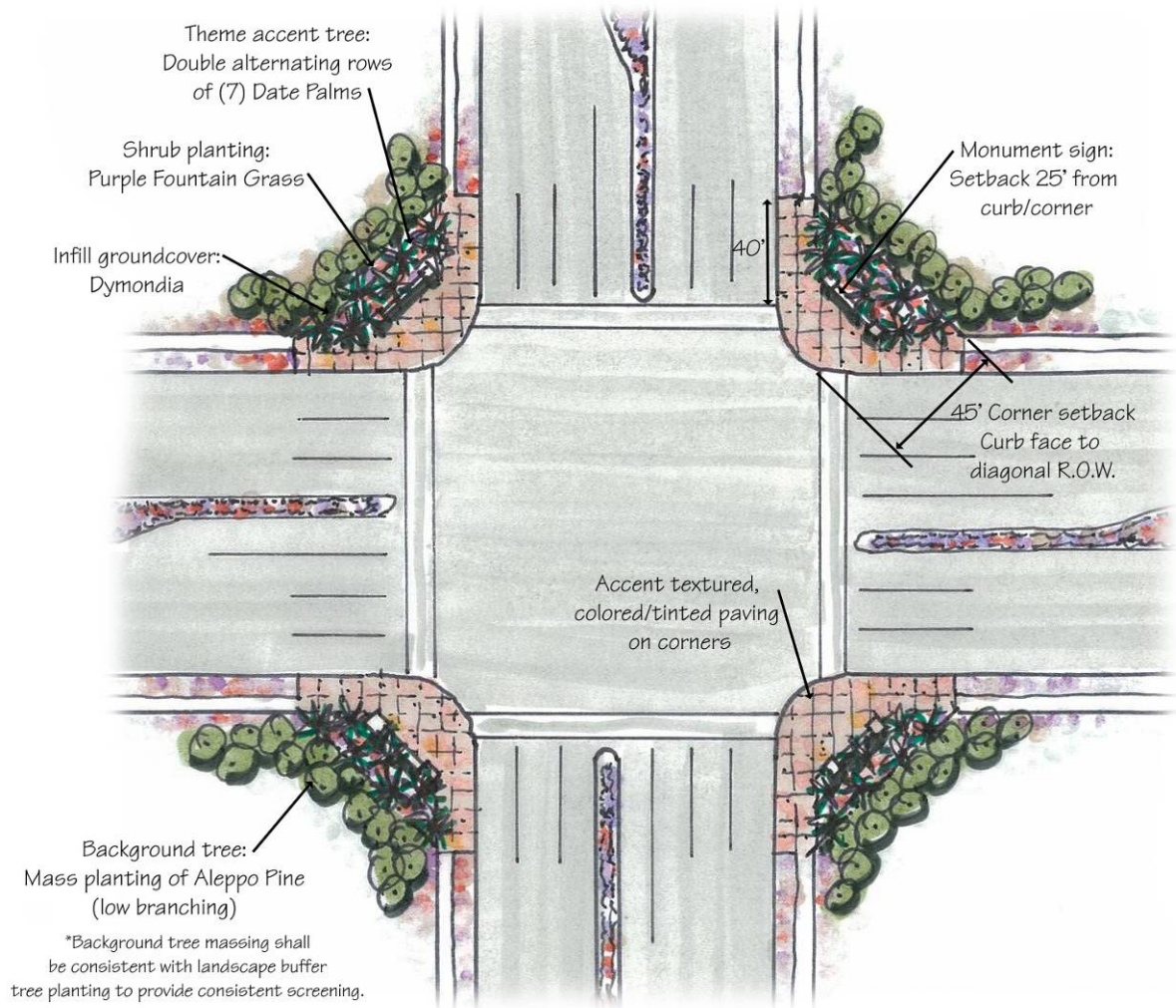


Exhibit 6-12 – Secondary Gateway Intersection Enhancement Concept



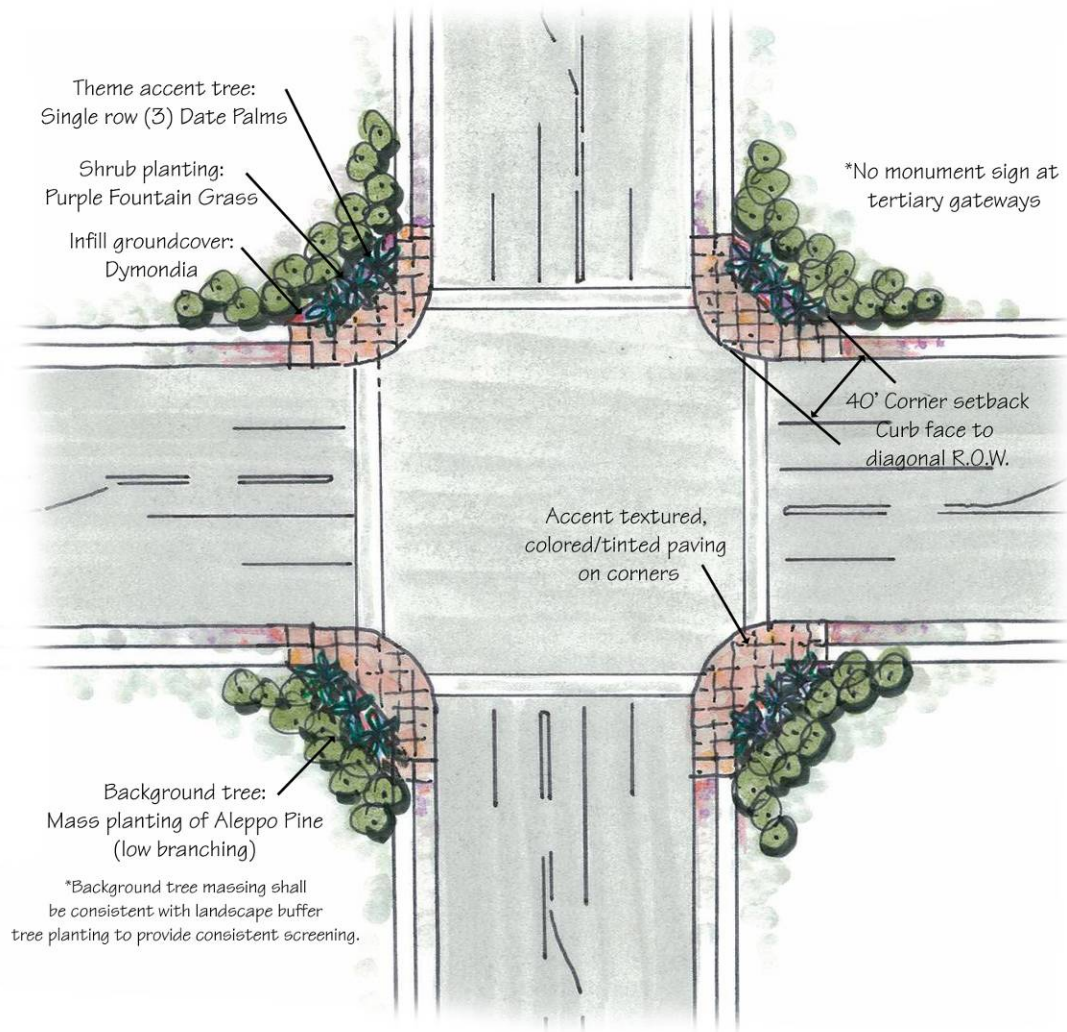


Exhibit 6-13 – Tertiary Gateway Intersection Enhancement Concept

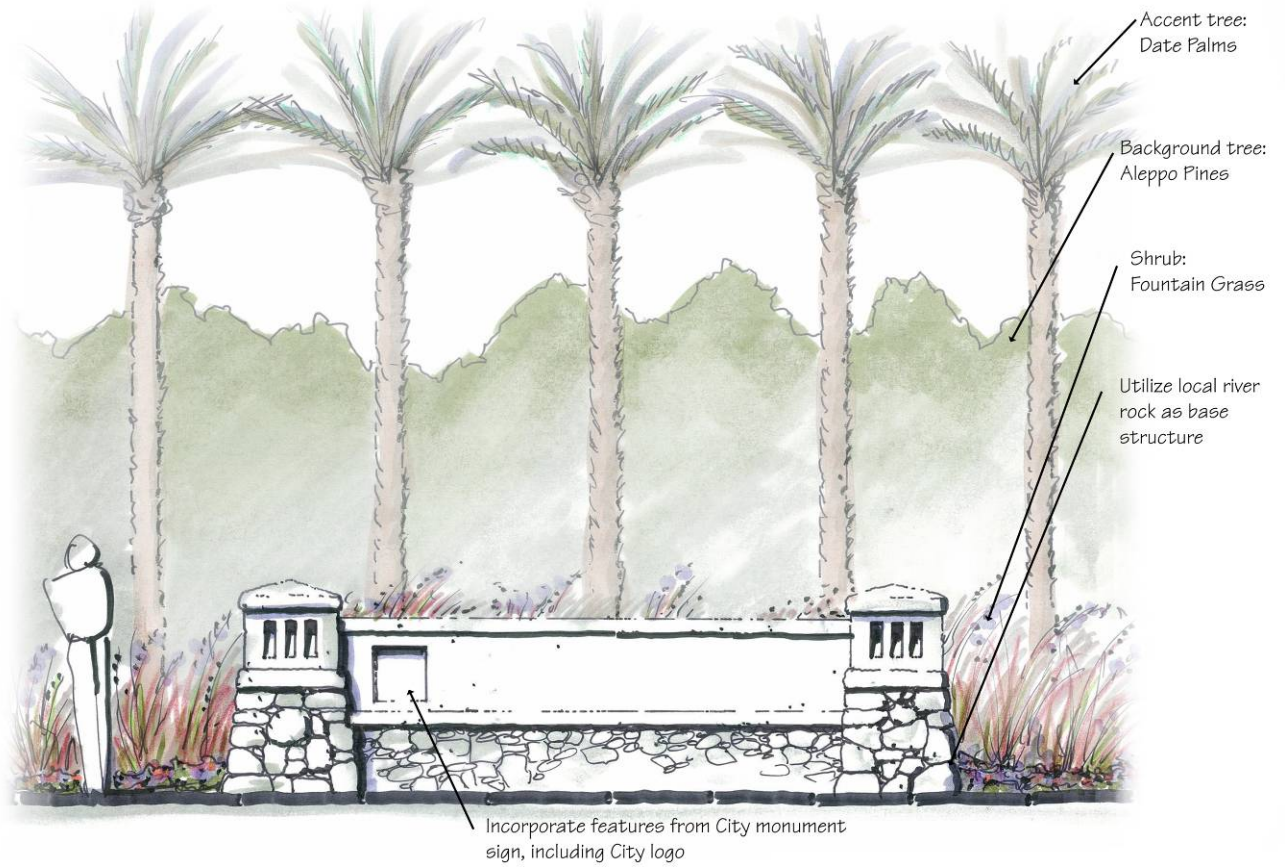


Exhibit 6-14 – Monument Sign Concept

#### 4. Street Furniture

Exhibit 6-15 – Street Furniture Palette, identifies recommended street furniture components, including lighting, trash receptacles, and benches, for the district. The palette is intended to ensure a unified visual identity for the district, which is distinct from the other districts within the Specific Plan area.



Wall/building lighting  
Domus Series Lighting  
by Phillips Lumec  
DMS 55 - SG



Pole/pedestrian and parking lot lighting



Austin Series  
Trash receptacle  
and bench by  
LandscapeForms



Exhibit 6-15 – Street Furniture Palette.



**C. Freeway Edges Design Criteria**

Freeway edges are an important part of the overall specific plan area and should be consistent with the overall Specific Plan landscape palette. General guidelines include:

1. A minimum of a 20-foot landscape zone (measured from the private property line to the adjacent I-10/railroad right of way). Plantings should reflect the primary highway planting palette to the extent feasible.
2. Landscape treatments along the freeway corridor should serve as a windbreak to protect the sites from seasonal strong winds. Windbreak elements include a row of medium height (20 to 25 feet) dense trees, a row of taller trees (40 to 45 feet) and a row of medium height (8 to 10 feet) dense shrubs.
3. Undesirable views such as parking lots and loading/service areas visible from the I-10 freeway are prohibited.

## **6.9 Design Guidelines**

### **A. Design Objectives**

The Design Guidelines will promote and reinforce the City's commitment to high quality development. In general, the guidelines are intended to ensure that development preserves or improves the positive characteristics of the City's image. The objectives of these guidelines are to:

- Promote orderly development by implementing the SWIP Specific Plan objectives, policies, and principles found in Chapter 2.o.
- Protect and enhance property values by ensuring that development fits properly within the context of its surroundings and does not negatively impact adjacent uses.
- Encourage individual creativity and innovative solutions by allowing flexibility in how a particular guideline is met as long as the intent of the guideline is achieved.
- Ensure functional pedestrian and motor vehicle circulation within a project and convenient pedestrian linkages to and from adjacent residential, commercial, industrial, and school areas.

### **B. Design Intent**

The FID encourages innovative architecture and site design that relate to the adjacent freeway, local roads, and surrounding neighborhoods. Scale, building articulation, on-site circulation patterns, and interface with adjacent uses are important in developing well-planned, integrated commercial and industrial uses.

### **C. Industrial, Distribution, and Business Park Uses**

The design guidelines in this Subsection shall apply to all industrial projects within this land use district.

### 1. Site Design

#### Site Layout

- The arrangement of multiple buildings and associated circulation, and parking areas should reflect a well-organized site plan that emphasizes pedestrian connectivity and landscaped areas responsive to the public.
- Site development may utilize variations on building placement and landscaping adjacent to the public street. Appropriate configurations may include, but are not limited to the following:
  - Fully landscaped setback between building and street
  - Parking in front of building with a landscape buffer between parking and street. **See Figure 1.**

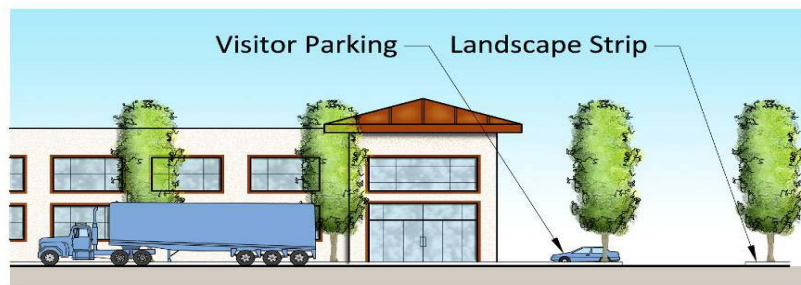


Figure 1. Appropriate building and landscape placement adjacent to public street.

- Visitor parking may be located at the front of the building adjacent to the main entry while employee parking and service areas are located at the sides and rear of the building. **See Figure 2.**

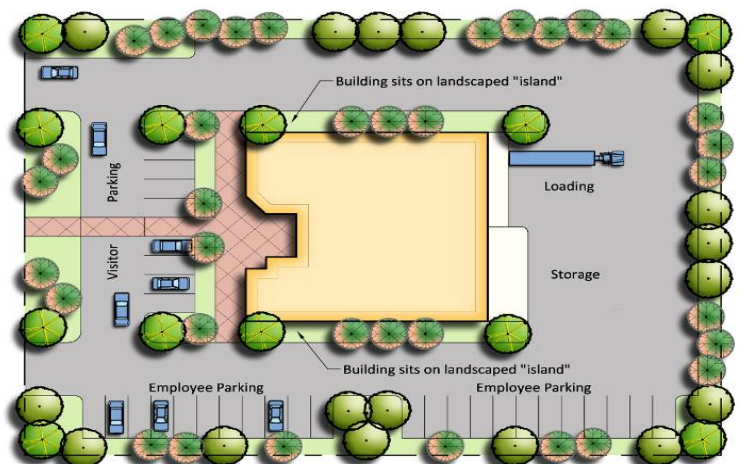


Figure 2. Parking layout.

- Service and loading should not be located on building side(s) adjacent to a public street.
- When buildings abut residential properties or the I-10 freeway, parking and loading areas should be located at the side of the building instead of the rear. The rear setback area shall be fully landscaped. **See Figure 3.**
- The design and location of accessory buildings (e.g., security kiosks, maintenance buildings, and outdoor equipment enclosures) shall be incorporated into and be compatible with the overall design of the project and the main buildings on the site.
- With the exception of security kiosks, accessory buildings shall be located as far back from the front and street side setback area as possible.
- Sea/train-type metal containers are prohibited.
- Noise-generating activities and storage areas shall be located as far as possible from adjacent properties. Sound attenuation walls shall be used where appropriate to reduce noise.
- Outdoor storage, work, and loading areas shall be incorporated within the building design and located to the rear or side of buildings and screened from view from adjacent public streets. **See Figure 4.**



Figure 3. Fully landscaped setback adjacent to freeway.

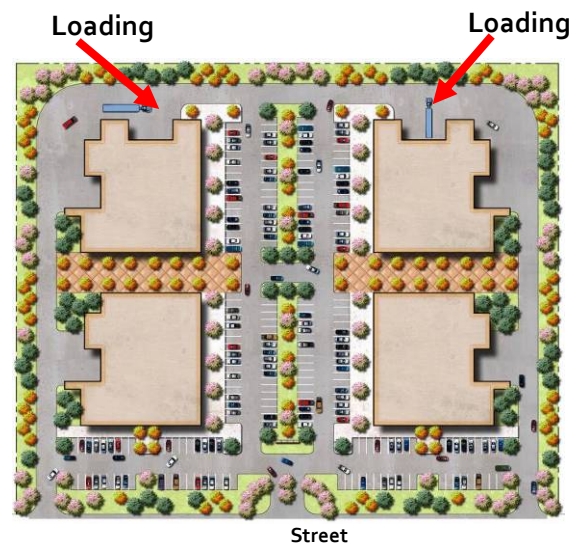


Figure 4. Appropriate location of loading areas.

### Courtyards and Plazas

- Buildings should be arranged to create opportunities for open space amenities (e.g., plazas, courtyards, outdoor eating areas, recreation areas, etc.).
- Business park developments should provide recreational facilities (e.g., bicycle

paths, tennis courts, volleyball courts, gymnasiums, etc.).

## 2. Building Orientation

- Multiple building developments should be oriented in a manner that will form gateways through facade enhancement, maximize public view, and capture public interest along adjacent major streets. **See Figure 5.**
- The organization of buildings, parking areas, and landscaping shall recognize the existing characteristics of the site and shall relate to the surrounding development in scale and character.
- Buildings should generally be placed at or near setback lines with development oriented in a manner that will provide visual interest, especially for development located along the I-10 Freeway. **See Figure 6.**
- Buildings should be oriented in a manner that takes advantage of passive solar design.
- Buildings shall be oriented to provide a buffer between sensitive uses and outdoor work areas, loading, and storage.

## 3. Site Elements

### Fences and Walls

- Walls and fencing materials shall consist of wrought iron, tubular steel, stone, stucco, or brick, and shall be compatible with the overall design character/style of the development. The use of chain-link fence material is not allowed if visible from the public right-of-way. **See Figure 7.**
- Walls and fences shall be integrated with landscaping along the base of the wall or fence.



Figure 5. Buildings are oriented to create gateway into development.



Figure 6. Buildings are oriented to provide architectural features visible from the freeway.



Figure 7. Tubular steel and stone pillars are appropriate fencing materials.

- Wall heights and surfaces shall be articulated with varying facade depths or pilasters to promote architectural interest, and shall include a cap along the top of the wall. **See Figure 8.**
- Landscaping shall be used in combination with walls and fences to visually soften blank surfaces and to deter graffiti. **See Figure 8.**



Figure 8. Wall is articulated with pillars and incorporates landscaping at the base and vines to deter graffiti.

### Screening

- Loading bays and service areas shall be screened by building placement, decorative walls or landscaping to the fullest extent feasible so that views of loading areas are minimized from adjacent public streets. **See Figure 9.**
- Trash storage enclosures and outdoor mechanical equipment shall be screened from public view, especially adjacent to the I-10 freeway.
- Roof-mounted equipment shall be screened from public view through use of parapet walls or other screening devices. Special consideration shall be given to the screening of roof-mounted equipment on building rooftops that are visible from the I-10 freeway. **See Figure 10.**

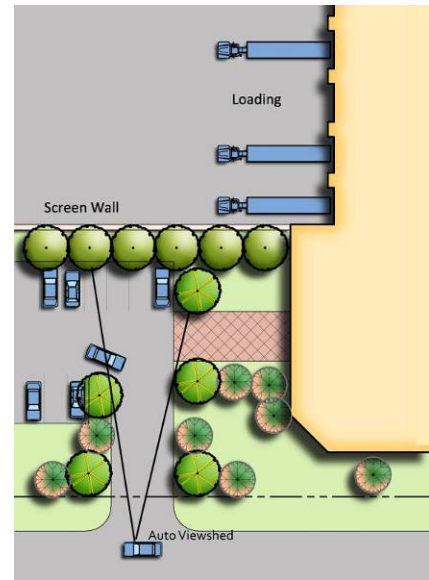


Figure 9. Appropriate placement, orientation and screening of service areas.

### Trash Enclosures

- Trash enclosures shall be incorporated as part of the building design.

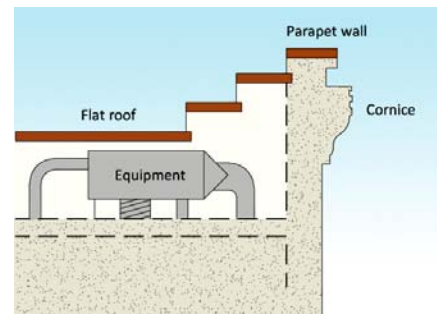


Figure 10. Screening of roof mounted equipment.



- If trash enclosures cannot be located out of public view, the design of trash storage areas shall incorporate architectural screening elements and landscaping compatible with the design of buildings and landscaping on the site. **See Figure 11.**
- Trash enclosures shall integrate horizontal screening such as trellises.



Figure 11. Trash enclosures with architectural screening elements.

### Lighting

- Outdoor lighting plans shall take into consideration the location and potential growth pattern of nearby trees (existing and planned) so that appropriate lighting levels are maintained over time.
- Energy efficiency shall be considered through use of proper light location and placement, as well as use of energy-efficient bulbs or fixtures.
- Lighting fixtures shall include hoods or other design techniques to reduce glare and light pollution, especially along major streets and the I-10 freeway and adjacent to residential zones, and to prevent light spillover onto adjacent properties. **See Figure 12.**
- Lighting shall be provided in project entryways, walkways, parking lots, and plazas or courtyards to promote safety. **See Figure 13.**
- Lighting may be mounted on poles or bollards, affixed to building walls, or placed within paved or landscaped areas. Appropriate materials and construction methods shall be used to ensure proper function of project lighting fixtures.
- Decorative light fixtures shall be consistent with the architectural design of the building. **See Figure 14.**



Figure 12. Hooded light fixture directs light downward.



Figure 13. Bollard lighting along pedestrian walkway.



Figure 14. Decorative light fixtures.

#### 4. Parking and Access

##### Parking

- Parking lots shall not be the dominant visual element on the site.
- Parking lots adjacent to and visible from public streets shall be appropriately screened to minimize undesirable visual impacts.
- Surface parking areas shall integrate trees and landscape improvements to reduce the heat island effect. **See Figure 15.**

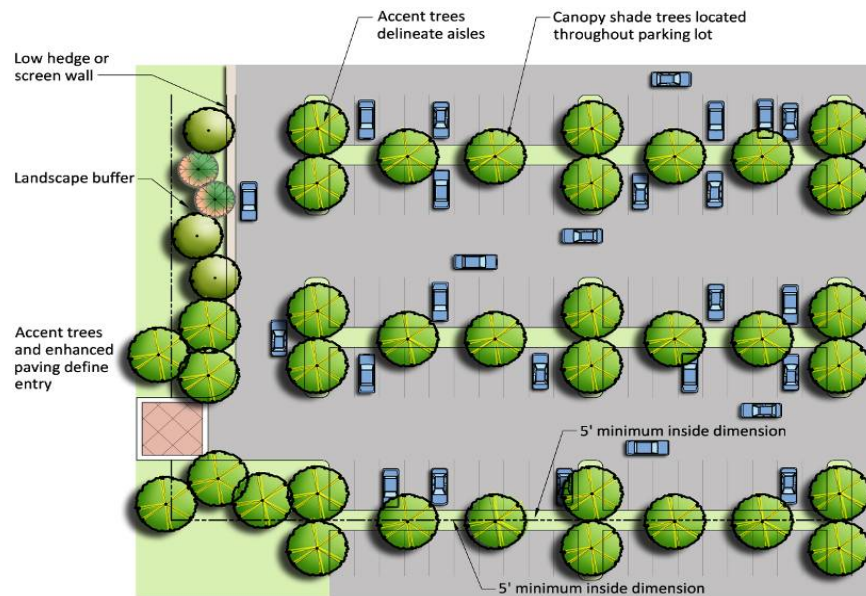


Figure 15. Parking lot landscaping.

- Large parking lots (usually over 100 spaces) shall be divided into multiple, smaller areas and provided with canopy trees located throughout the parking area to reduce the effects of heat and the visual impacts of large parking areas.
- Employee parking areas should be located behind the building or alongside of the building so as not to be visible from adjacent streets.
- Internal vehicular and pedestrian circulation within a development involving



multiple buildings or lots shall interconnect in an obvious and consistent manner. **See Figure 16.**

- Parking shall be provided within walking distance of all tenants and public sidewalks.
- Parking lot design shall include water quality stormwater facilities consistent with City standards. **See Figure 17.**

### Access

- The use of common (shared) access points and driveways is encouraged; placement of vehicle access points close to building entries shall be avoided to minimize pedestrian and vehicular conflicts. **See Figure 18.**

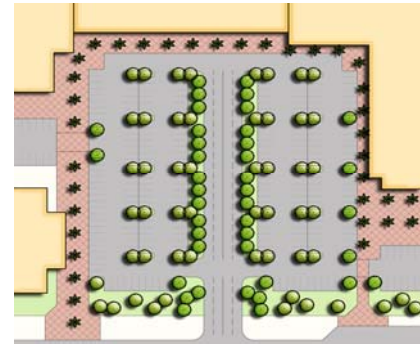


Figure 16. Pedestrian circulation is consistent along perimeter of parking lot.

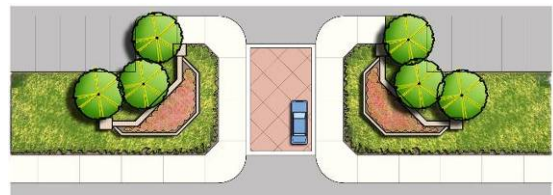


Figure 17. On-site stormwater capture system.



Figure 18. Shared parking access.

- Entry drives shall be clearly marked by special features, (e.g., enhanced paving, prominent landscape features, low-level decorative walls, and well-designed monument-type signs). **See Figure 19.**
- Access to each development site shall be clearly visible to pedestrians and motorists.
- Service and loading areas should take access from shared access points to reduce curb cuts along streets.



Enhance project entries with landscaping and special paving for visual impact.

Figure 19. Entry drive.

## 5. Architecture

### Mass and Scale

- The mass and scale of the buildings shall respect the visual and physical relationship to the adjacent buildings and surrounding sensitive uses. Taller building elements should be placed towards the center of the site, with lower elements adjacent to surrounding properties.
- Buildings should be stepped back when adjacent to or in close proximity to sensitive uses (e.g., residential, schools, etc.).
- Vertical and horizontal offsets shall be provided to reduce the visual bulk of the building. **See Figure 20.**



Figure 20. Incorporation of vertical offsets and material changes.

### Building Facades

- Building facades shall incorporate architectural elements such as windows, pillars, wall plane breaks to minimize blank walls and to create visual interest. **See Figure 21.**
- All building elevations, whether front, side, or rear shall be architecturally detailed.
- Architectural accents (e.g., cornices, tiles, trim around windows, grooves in building faces, accent band details, bulkheads, etc.) shall be used to create variation along building facades. **See Figure 22.**



Figure 21. Façade articulation.



Figure 22. Use of cornices, window trim and grooves.

- Higher facades and rooftops should be incorporated at corners and intersections, and appropriate massing and scale shall be considered for the remainder of the building spanning public street frontage. **See Figure 23.**



Figure 23. Enhanced corner elements.

- The orientation of windows in buildings adjacent to a residential zone shall preclude a direct line of sight into residential properties.
- Primary building entries shall be easily identified through the use of prominent architectural elements, signage, landscaping, lighting, canopies, roof form, hardscape, architectural projections, columns, vertical elements, or other design features that help emphasize a building's entry. **See Figure 24.**



Figure 24. Articulated Entries.

Roofs shall be designed as an integral component of building form, mass, and facade. Building form should be enhanced by sloped or offset roof planes, eave heights, and rooflines. **See Figure 25.**

- Locate and/or screen rooftop equipment so that it is not visible from the street. Rooftop screening shall be integral to the building's form.



Figure 25. Offset roof planes.

## Color and Materials

- Colors and materials for all structures on-site should consist of earth tones. Use of at least two to three different colors, materials or textures is encouraged.
- Building materials shall be durable and able to withstand long-term exposure to the elements.
- Large expanses of smooth material (e.g., concrete) shall be broken up with expansion joints, reveals, or changes in texture and color. **See Figure 26.**
- To the fullest extent feasible, buildings should use large windows along walls and skylights in rooftop designs to capture natural light during working hours.



Figure 26. Use of expansion joints.

## 6. Landscaping

- Landscaping shall be in scale with adjacent structures, streets, and public spaces, and shall be sized appropriately when fully grown.
- Landscaped areas should incorporate a three-tiered planting system:
  - 1) trees;
  - 2) shrubs and vines; and
  - 3) ground covers

**See Figure 27.**

See suggested Plant Palette in Table 6-6.



Figure 27. Three-tiered planting system: trees, shrubs, and ground covers.

- Special landscape features, such as specimen trees, shall be provided at major focal points (e.g., project entries, building entries, and pedestrian gathering areas).



- Entry and exit points shall be highlighted through a combination of distinctive landscape and hardscape features. Incorporation of appropriate public art is highly encouraged.
- Development on corner lots shall be enhanced with a combination of specimen trees, accent plantings, upgraded perimeter wall surfaces, hardscape treatments and landscape lighting adjacent to the street intersection.
- Drought-tolerant and low-maintenance trees, vines, and groundcovers shall be used on-site. Drip irrigation systems shall be installed where feasible to ensure the highest possible level of water conservation.
- Planting materials shall be used in plaza areas to provide shade and soften the appearance of hard walls. Water features and public art are also encouraged. **See Figure 28.**
- The use of vines is encouraged on walls to soften the appearance of buildings and screen walls, and to help deter graffiti. **See Figure 29.**
- Planting materials shall be installed to provide a buffer against noise and should be integrated with walls or fences to achieve desired sound reduction. **See Figure 30.**



Figure 28. Plaza area.



Figure 29. Wall incorporates landscaping to soften appearance and deter graffiti.

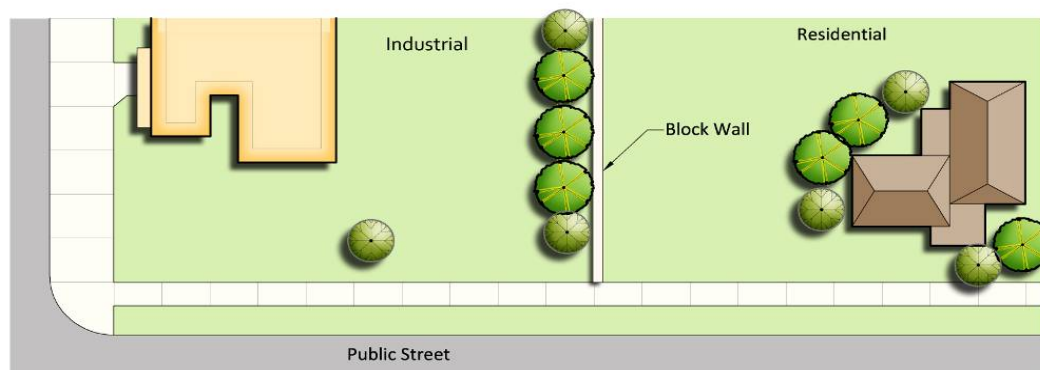
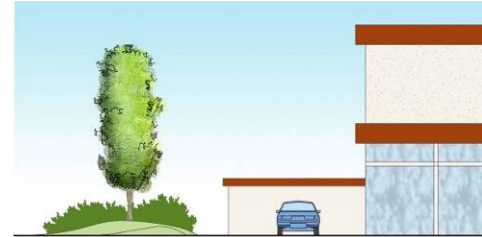


Figure 30. Plant material along buffer wall.

- Landscaping and trellises with vines are encouraged for screening trash storage areas, service areas and mechanical equipment.
- Setbacks adjacent to residential zones shall include dense landscaping to provide visual screening and noise abatement.
- Landscaped berms along site edges may be used to screen parking, loading and service areas and to serve as a sound reduction measure. **See Figure 31.**

Surface parking lots shall be well-landscaped to reduce heat island effect and visually reduce the expanse of paved area. **See Figure 32.**

- Pervious paving materials are strongly encouraged for sidewalks, pathways, parking lots, plazas or gathering areas or other paved surfaces on-site.
- An automatic irrigation system using current equipment and technology shall be provided for planted areas.
- Run-off retention and on-site water filtration/stormwater treatment features and bioswales should be a part of the overall landscape design, and can also serve as buffering methods for adjacent businesses. **See Figure 33.**
- Trees shall be selected and placed to provide canopy and shade for walkways, pedestrian open spaces, and parking areas.
- Landscape material in the setback and visible from the public right-of-way shall blend with and seem a part of the public right-of-way landscaping.
- Tree and shrub planting shall be in large masses.



Wall, landscaping and berms screen industrial buildings and storage

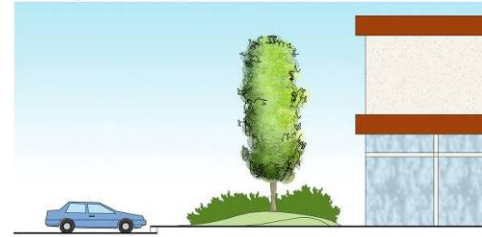


Figure 31. Landscaped berms.



Figure 32. Landscaped parking lot.



Figure 33. One site water filtration.

- Plant material selected shall be suited to the specific soil and micro climatic conditions.
- Trees shall be healthy and have a uniform branching pattern.
- All ground cover shall be healthy and densely foliated and comprised of well rooted cuttings or container plants.
- Availability and specific site conditions should be considered in final selection.
- Ground cover shall achieve 100% coverage in one year.
- Informal tree masses should be planted in a mix of sizes.

### D. Commercial Uses

#### 1. Site Design

##### Site Layout

- The arrangement of multiple buildings and associated circulation and parking shall reflect a well-organized site plan that emphasizes pedestrian connectivity and landscaped areas enhance publicly-accessible spaces. **See Figure 34.**
- Loading areas, access and circulation driveways, trash enclosures, storage areas, and rooftop equipment shall be located as far as possible from adjacent residentially zoned properties.
- Site design shall take into consideration the public street and relationship to freeway access and adjacent uses.

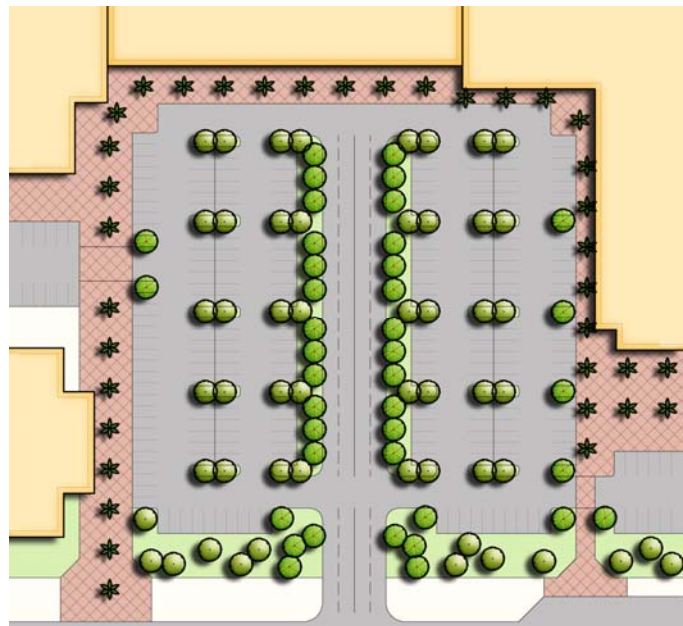


Figure 34. Site plan emphasizes pedestrian connectivity.

- Buildings may be located adjacent to the street with a fully landscaped setback or buildings may be set back with limited parking in front. **See Figure 35.**



Figure 35. Limited parking adjacent to street with landscape setback.

## Courtyards and Plazas

- The organization and design of buildings shall encourage and facilitate pedestrian activity.
- Buildings should be organized to create usable open space, courtyards, plazas and dining areas. **See Figure 36.**
- Pedestrian-oriented open spaces, courtyards and plazas shall include a focal element such as a sculpture and/or water feature and sitting areas. **See Figure 37.**

### 2. Building Orientation

- The organization of buildings, parking areas, and landscaping shall recognize the existing characteristics of the site and shall relate to the surrounding development in scale and character.



Figure 36. Buildings create courtyard.



Figure 37. Open plaza areas with seating.



- Commercial buildings on corner parcels shall establish a strong tie to both streets and should encourage pedestrian activity at corner locations. **See Figure 38.**
- Buildings associated with service retail and restaurant uses shall be pedestrian-scaled, with entries fronting onto streets, plazas or courtyards to reinforce pedestrian orientation.
- Commercial development shall be oriented away from residential streets. At corner locations, if the side street primarily serves a residential neighborhood, development and access shall be oriented away from the side street.
- Buildings adjacent to sensitive uses (e.g. schools, residential) should be buffered. This may be accomplished by providing masonry walls, landscaped berms, appropriate building orientation, building height stepbacks and limitations on activities adjacent to sensitive uses. **See Figure 39.**



Figure 38. Commercial/retail buildings on corners should establish strong tie to the street.

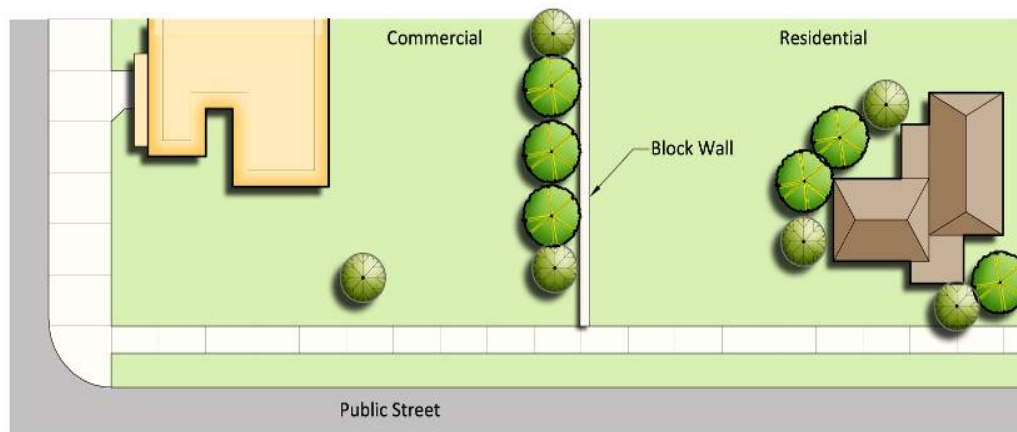


Figure 39. Masonry wall and landscaping separates uses.

- Commercial and retail buildings should generally be placed at or near setback lines with developments oriented in a manner that will provide visual interest, especially for developments located along I-10 Freeway.
- Buildings should be oriented in a manner that takes advantage of passive solar design to the maximum extent feasible.

### 3. Site Elements

#### Fences and Walls

- Wall heights and surfaces shall be articulated with varying façade depths or pilasters to promote architectural interest, and may include a cap along the top of the wall. **See Figure 40.**
- Walls visible from public streets shall be decorative and complement the design of on-site buildings.
- Wall and fencing materials may consist of brick, stone, stucco, wrought iron or tubular steel. Wall and fencing colors should match building colors, with neutral earth tones.
- Walls and fences shall be integrated with landscaping along the base of the wall or fence. **See Figure 41.**
- Electric fences, barbed wire, concertina wire, or other security wire is prohibited.



Figure 40. Wall incorporates pilasters and cap.



Figure 41. Stone wall.

## Screening

- Service and delivery areas shall be screened by building placement, decorative walls or landscaping to the fullest extent feasible so that views of loading areas are minimized from adjacent public streets. **See Figure 42.**
- Outdoor mechanical equipment shall be screened from public view, especially adjacent to the I-10 freeway.
- Roof-mounted equipment shall be screened from public view through use of parapet walls or other screening devices. Special consideration shall be given to the screening of roof-mounted equipment on building rooftops that are visible from the I-10 freeway. **See Figure 43.**

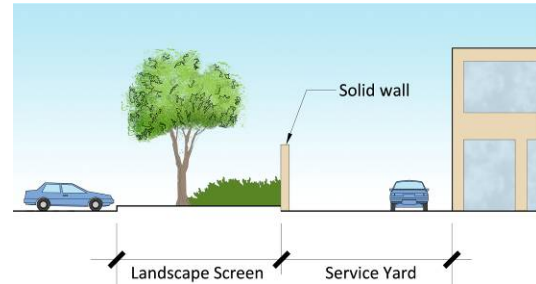


Figure 42. Screened delivery area.

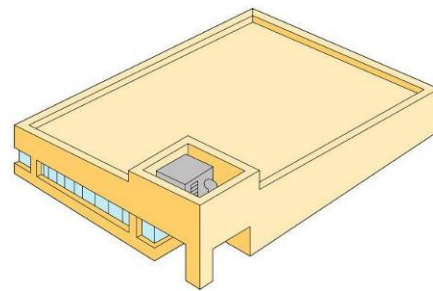


Figure 43. Screening of roof-mounted equipment.

## Trash Enclosures

- Trash enclosures shall be incorporated as part of the building design.
- If trash enclosures cannot be located out of public view, the design of trash storage areas shall incorporate architectural screening elements and landscaping compatible with the design of buildings and landscaping on the site.
- Trash enclosures visible from the public view shall integrate horizontal screening such as trellises.

## Lighting

- Outdoor lighting plans shall take into consideration the location and potential growth pattern of nearby trees (existing and planned) so that appropriate lighting levels are maintained over time.

- Energy efficiency shall be considered through use of proper light location and placement, as well as use of energy-efficient bulbs or fixtures.
- Lighting fixtures shall include hoods or other design techniques to reduce glare and light pollution, especially along major streets and the I-10 freeway and adjacent to residential zones, and to prevent light spillover into adjacent properties. **See Figure 44.**
- Lighting shall be provided in project entryways, walkways, parking lots, and plazas or courtyards to promote safety. **See Figure 45.**
- Lighting may be mounted on poles or bollards, affixed to building walls, or placed within paved or landscaped areas. Appropriate materials and construction methods shall be used to ensure proper function of project lighting fixtures. **See Figure 46**
- Decorative light fixtures are encouraged, as long as fixtures are consistent with the architectural design of the building. **See Figure 47.**

#### 4. Parking and Access

##### Parking

- Parking lots should be designed with a clear hierarchy of circulation: major access drives with no direct access to parking spaces; major circulation drives with little or no parking; and parking aisles for direct access to parking.
- Large commercial and retail parking areas should be located behind building facades so as not to be visible from major streets.
- Parking lots shall not be the dominant visual element on the site.



Figure 44. Hooded light fixture directs light downward.



Figure 45. Bollard lighting along pedestrian walkway.



Figure 46. Pole mounted light.



Figure 47. Decorative light fixtures.

- Surface parking areas shall integrate trees and landscape improvements to reduce the heat island effect. **See Figure 48.**
- Large parking lots (usually over 100 spaces) shall be divided into multiple, smaller areas and provided with canopy trees located throughout the parking area to reduce the effects of heat gain and the visual impacts of large parking areas.
- Internal vehicular and pedestrian circulation within a development involving multiple buildings or lots shall interconnect in an obvious and consistent manner. **See Figure 49.**
- Parking lot design shall include water quality stormwater facilities consistent with City standards. **See Figure 50.**

### Access - Vehicular

- Access to parking lots shall be from commercially developed streets to discourage cut through traffic from adjacent residential neighborhoods.
- Site access shall promote safety by providing an adequate stacking distance for vehicles between the back of the sidewalk and the first parking stall or circulation aisle.
- Conflict between vehicles and pedestrians shall be avoided at access driveways by providing a walkway on at least one side of the driveway.
- The number of access driveways shall be minimized and located as far as possible from street intersections.
- Site access locations shall be coordinated with existing or planned median openings and driveways on the opposite side of the roadway.



Figure 48. Landscaped parking lot.

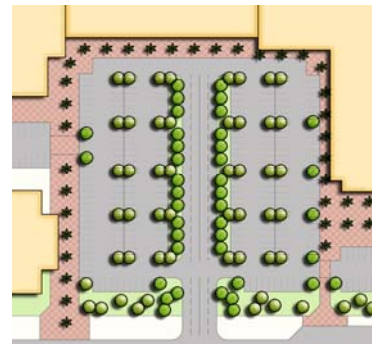


Figure 49. Pedestrian circulation is consistent along perimeter of parking lot.



Figure 50. On-site storm water capture.



- Unobstructed line of sight at corners and driveways shall be provided to reduce vehicular conflicts. **See Figure 51.**
- Avoid placing primary vehicle access in close proximity to major building entrances in order to minimize pedestrian and vehicular conflicts. **See Figure 52.**

#### Access - Pedestrian

- Clearly defined pedestrian walkways or paths should be provided from parking areas to primary building entrances. Clear and convenient pedestrian access shall be provided between the public sidewalk and the pedestrian areas of the development. **See Figure 53.**
- Raised walkways, decorative paving, landscaping and/or bollards shall be used to separate pedestrian paths from vehicular circulation areas. **See Figure 54.**

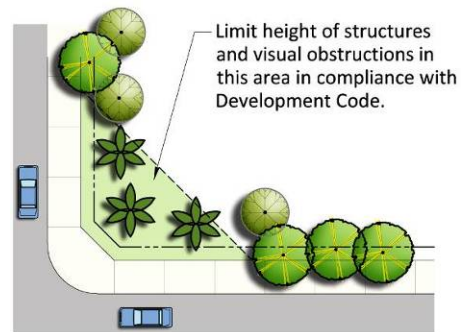


Figure 51. Unobstructed sight lines.



Figure 52. Vehicle access is placed away from building entrances.

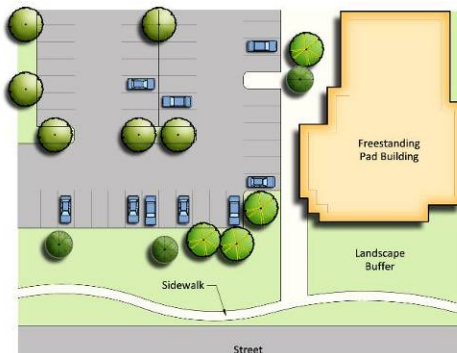


Figure 53. Clearly defined pedestrian walkways.



Figure 54. Raised walkway and landscaping in parking lot.

- Parking areas should be designed so that pedestrians walk parallel to moving cars. **See Figure 55.**

### Loading and Delivery

- Loading and delivery service areas shall be located and designed to minimize their visibility, circulation conflicts, and adverse noise impacts to the maximum extent feasible.
- Loading and delivery service areas shall be screened with portions of the building, architectural wing walls, freestanding walls or landscape planting.
- When commercial buildings abut a residential zone or the I-10 freeway, loading areas shall not be visible from adjacent residentially-zoned properties or the I-10 Freeway.
- Loading areas shall be designed to not interfere with circulation or parking, and to permit trucks to fully maneuver on the property without backing from or onto a public street. **See Figure 56.**
- Service, loading and delivery areas should take access from planned shared access points to reduce curb cuts along project frontages.

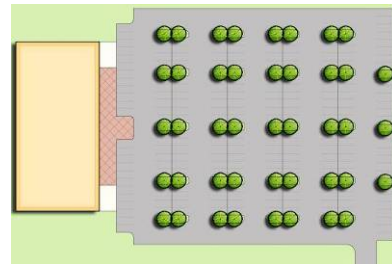
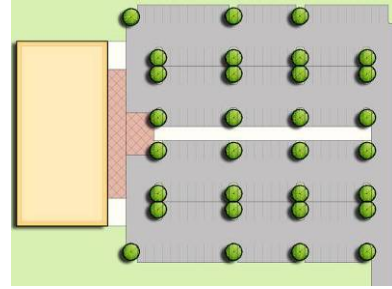


Figure 55. Pedestrian circulation.



Figure 56. Loading area placed behind building outside of circulation lanes.

## 5. Architecture

### Mass and Scale

- The mass and scale of new developments shall be compatible with the existing, adjacent structures. This can be accomplished by transitioning from the height of adjacent buildings to the tallest elements of the new development by stepping back the upper portions of taller buildings.
- Human-scale elements, such as pedestrian-scaled doors, windows and building modules shall be used to emphasize pedestrian orientation.
- The size and location of various building elements (e.g., roofs, parapet walls, wing walls, etc.) shall be in scale to the building as a whole and provide visual interest. **See Figure 57.**



Figure 57. Building elements add visual interest.

### Building Facades

- Buildings shall include enhanced and articulated facades along public streets.
- Design details shall be continued or repeated upon all building elevations.
- Building entrances should be readily identifiable. The use of recesses, projections, columns, and other design elements to articulate entrances are encouraged. **See Figure 58.**
- Facades shall provide visual interest with vertical and horizontal variations in wall and roof planes, building projections, door and window bays, arcades, and similar elements/techniques. **See Figure 59.**



Figure 58. Building Entry.



Figure 59. Horizontal and vertical articulation.



- Buildings shall undergo a break in façade approximately every 40 feet, to create a varied wall surface along public areas. Higher facades and rooftops should be incorporated at corners and intersections, and appropriate massing and scale shall be considered for the remainder of the building spanning public right-of-way frontage.
- Buildings shall be well-articulated along the freeway frontage with a high degree of architectural detail.
- Buildings should include vertical elements (e.g., clock tower, building articulation) that create points of visual interest when viewed from the freeway.
- Roof designs that are visually interesting and designed to completely screen all roof-top equipment from public streets and freeway views are required. **See Figure 6o.**
- The location of windows in commercial buildings adjacent to residential zones shall preclude a direct line of sight into residential properties.
- Buildings should use large windows along walls and skylights in rooftop designs to capture natural light during operating hours.
- The interior areas of commercial development should have shaded or covered walkways.

### Storefronts

- Storefronts shall be comprised predominantly of transparent surfaces (windows). **See Figure 61.**
- The use of clear glass on the first floor strongly encouraged.



Figure 6o. Full roof screens all equipment and provides visual interest.



Figure 61. Storefront windows.

- Storefront windows shall be large and a minimum of 24 inches off the ground. The maximum bulkhead (wall plane between the ground and the bottom of the windows) height should be approximately 36 inches.
- Storefront entries should promote a sense of entry into the structure as well as provide a sense of shelter by incorporating elements such as overhangs, canopies, awnings, and recesses. **See Figure 62.**
- If security grilles are necessary, they shall be placed inside the building behind the window display area at a minimum distance of two feet behind the window.
- Product storage racks shall not block views through storefront windows.

#### Colors and Materials

- The use of a coordinated three-color palette for the base color and major and minor trim accents is encouraged.
- Colors for all structures on-site should be varied and should consist of neutral, earth tones. **See Figure 63.**
- Exterior finish materials shall be appropriate for the architectural style and/or theme of the entire development and should contribute towards a high-quality image. **See Figure 64.**
- Changes in materials shall occur at inside corners to make building volumes appear substantial.
- Materials shall be varied to provide architectural interest; however, the number of materials shall be limited and not exceed what is required for contrast and accent of architectural features.



Figure 62. Storefront overhangs provide a sense of shelter and entry.



Figure 63. Use of neutral, earth tones.



Figure 64. Exterior finish materials.

- Exterior materials and architectural details shall relate to each other in ways that are traditional and logical. For example, heavy materials should appear to support lighter ones. **See Figure 65**

### 6. Landscaping

#### Plants and Irrigation

- Landscaping should help complete the design of the site and enhance the quality of commercial developments by framing and softening the appearance of buildings, screening undesirable views, and buffering incompatible uses.
- Landscaped areas should generally incorporate planting utilizing a three-tiered system:
  - 1) trees
  - 2) shrubs and vines, and
  - 3) ground covers (including flowering plants—annuals and perennials).
- Entry and exit points shall be highlighted through a combination of distinctive landscape and hardscape features. **See Figure 66.**
- Planting materials shall be used in plazas or gathering areas to provide shade and soften the appearance of hard surfaces. Water features and public art are also encouraged in these places. **See Figure 67.**
- Trees located along street frontages shall be selected to match or complement existing or proposed street trees in the public right-of-way.
- A minimum five-foot landscape strip shall be used along circulation aisles in parking lots, and along building side/rear elevations if a walkway is not used. A landscape strip is also encouraged in nonpublic areas and service areas between pavement and buildings.



Figure 65. Heavy materials at base of building with lighter materials above.



Figure 66. Highlighting entry points.



Figure 67. Public plaza area within commercial development incorporates water feature.

- On-site water filtration features and bioswales are strongly encouraged, and can also be used as buffering methods for adjacent businesses.
- Drought-tolerant and low-water trees, vines, and groundcovers shall be used on-site. When feasible, drip irrigation systems shall be installed to provide on-site vegetation with appropriate irrigation and ensure the highest possible volume of water conservation.
- Planting materials shall be used to provide a buffer against noise, and may be integrated with walls or fences to achieve desired sound reduction and appearance.
- Tree and shrub planting shall be done in large masses.
- Plant material selected shall be suited to the specific soil and micro climatic conditions.
- Trees shall be healthy and have a uniform branching pattern.
- All ground cover shall be healthy and densely foliated and comprised of well rooted cuttings or container plants.
- Availability and specific site conditions should be considered in final selection. Ground cover shall achieve 100% coverage in one year.
- Informal tree masses should be planted in a mix of sizes.



### Site Furniture

- Outdoor furniture and fixtures (e.g., lighting, directional signs, trellises, raised planters, works of art, benches, trash receptacles, fencing, etc.) shall be integral elements of the building and landscape design. **See Figure 68.**
- Outdoor furniture shall be of a sturdy construction to withstand daily use. Wood should be avoided.
- Outdoor furniture shall be located so it will not conflict with the pedestrian and motor vehicle circulation patterns. **See Figure 69.**
- Outdoor seating should be shaded.

### Paving

- Decorative paving shall be incorporated into courtyards, plazas, pedestrian walkways, and crosswalks. **See Figure 70.**
- Paving materials shall complement the architectural design of the building and landscape design of the project. The use of stamped concrete, stone, brick, permeable pavers, exposed aggregate, or colored concrete is encouraged. The use of slippery materials (e.g., polished marble or granite) is prohibited.



Figure 68. Trellis.



Figure 69. Outdoor furniture outside of pedestrian walkway.



Figure 70. Enhanced paving in pedestrian areas.

### ***E. Flex-Tech Multi-Use Facility***

The design guidelines in this Subsection shall apply to all flex-tech projects within this land use district.

#### **1. Site Design**

##### **Site Layout**

- The arrangement of multiple buildings and associated circulation, and parking areas should reflect a well-organized site plan that emphasizes pedestrian connectivity and landscaped areas responsive to the public.
- Site development may utilize variations on building placement and landscaping adjacent to the public street. Appropriate configurations may include, but are not limited to the following:
  - Fully landscaped setback between building and street. **See Figure 71.**
  - Parking in front of building with a landscape buffer between parking and street.
- Visitor parking may be located at located near the front/visitor entries to the businesses, while employee parking and service areas are located at the sides and rear of the building.
- Service and loading area should not be located on building side(s) adjacent to a public street. Service and loading areas should be located to the rear of the buildings or in the interior of a multiple building complex. **See Figure 72.**
- When buildings abut residential properties or the I-10 freeway, parking and loading areas should be located at the side of the building instead of the rear. The rear setback area shall be fully landscaped.
- Outdoor storage, work, and loading areas shall be incorporated within the building



Figure 71. Fully landscaped setback.



Figure 72. Loading and service areas accessed between buildings in a multiple building complex.

design and located to the rear or side of buildings and screened from view from adjacent public streets. Accessory buildings such as equipment enclosures or storage buildings should be minimized. These service areas should be incorporated into the building design to the greatest extent feasible. **See Figure 73.**

- The design and location of accessory buildings (e.g., security kiosks, maintenance buildings, and outdoor equipment enclosures) shall be incorporated into and be compatible with the overall design of the project and the main buildings on the site.
- With the exception of security kiosks, accessory buildings shall be located as far back from the front and street side setback area as possible.
- Sea/train-type metal containers are prohibited.
- Noise-generating activities and storage areas shall be located as far as possible from adjacent properties. Sound attenuation walls shall be used where appropriate to reduce noise.

### Courtyards and Plazas

- Buildings should be arranged to create opportunities for open space amenities (e.g., plazas, courtyards, outdoor eating areas, recreation areas, etc.). **See Figure 74.**
- Larger developments should provide recreational facilities (e.g., bicycle paths, tennis courts, volleyball courts, gymnasiums, etc.).

### 2. Building Orientation

- Multiple building developments should be oriented in a manner that will form

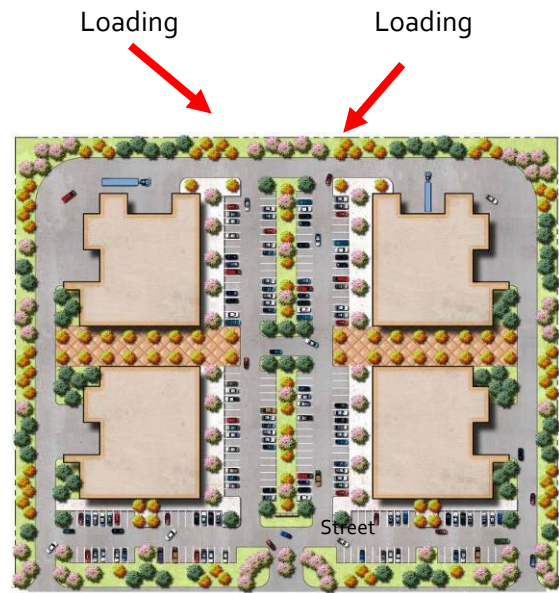


Figure 73. Appropriate location of loading areas.



Figure 74. Outdoor seating area provided between buildings.

gateways through facade enhancement, maximize public view, and capture public interest along adjacent major streets.

- Retail and office space should be located on the front of the building, visible from the public realm and adjacent to visitor parking. Flex areas used for warehousing, distribution, light manufacturing, research and development and other uses without a visitor component should be located to the sides or rear of the building.
- The organization of buildings, parking areas, and landscaping shall recognize the existing characteristics of the site and shall relate to the surrounding development in scale and character.
- Buildings should generally be placed at or near setback lines with development oriented in a manner that will provide visual interest, especially for development located along the I-10 Freeway.
- Buildings should be oriented in a manner that takes advantage of passive solar design.
- Buildings shall be oriented to provide a buffer between surrounding properties and outdoor work areas, loading, and storage.

### **3. Site Elements**

#### **Fences and Walls**

- Walls and fencing materials shall consist of wrought iron, tubular steel, stone, stucco, or brick, and shall be compatible with the overall design character/style of the development. The use of chain-link fence material is not allowed if visible from the public right-of-way.
- Walls and fences shall be integrated with landscaping along the base of the wall or fence.



- Wall heights and surfaces shall be articulated with varying facade depths or pilasters to promote architectural interest, and shall include a cap along the top of the wall.
- Landscaping shall be used in combination with walls and fences to visually soften blank surfaces and to deter graffiti.

### Screening

- Loading bays and service areas shall be screened by building placement, decorative walls or landscaping to the fullest extent feasible so that views of loading areas are minimized from visitor areas and adjacent public streets.
- Trash storage enclosures and outdoor mechanical equipment shall be screened from public view, especially adjacent to the I-10 freeway.
- Roof-mounted equipment shall be screened from public view through use of parapet walls or other screening devices. Special consideration shall be given to the screening of roof-mounted equipment on building rooftops that are visible from the I-10 freeway. **See Figure 75.**

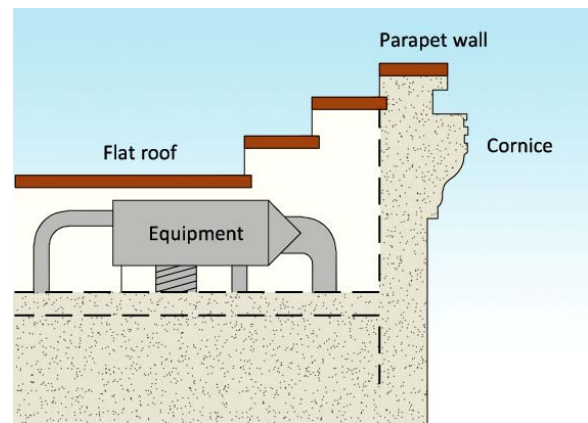


Figure 75. Screening of roof mounted equipment.

### Trash Enclosures

- Trash enclosures shall be incorporated as part of the building design.

- If trash enclosures cannot be located out of public view, the design of trash storage areas shall incorporate architectural screening elements and landscaping compatible with the design of buildings and landscaping on the site. **See Figure 76.**
- Trash enclosures shall integrate horizontal screening such as trellises.

### Lighting

- Outdoor lighting plans shall take into consideration the location and potential growth pattern of nearby trees (existing and planned) so that appropriate lighting levels are maintained over time.
- Energy efficiency shall be considered through use of proper light location and placement, as well as use of energy-efficient bulbs or fixtures.
- Lighting fixtures shall include hoods or other design techniques to reduce glare and light pollution, especially along major streets and the I-10 freeway and adjacent to residential zones, and to prevent light spillover onto adjacent properties.
- Lighting shall be provided in project entryways, walkways, parking lots, and plazas or courtyards to promote safety. **See Figure 77.**
- Lighting may be mounted on poles or bollards, affixed to building walls, or placed within paved or landscaped areas. Appropriate materials and construction methods shall be used to ensure proper function of project lighting fixtures.
- Decorative light fixtures shall be consistent with the architectural design of the building.



Figure 76. Trash enclosures with architectural screening elements.



Figure 77. Lighting along pedestrian walkway.

## 4. Parking and Access

### Parking

- Parking lots shall not be the dominant visual element on the site.
- Parking lots adjacent to and visible from public streets shall be appropriately screened to minimize undesirable visual impacts.
- Surface parking areas shall integrate trees and landscape improvements to reduce the heat island effect.
- Large parking lots (usually over 100 spaces) shall be divided into multiple, smaller areas and provided with canopy trees located throughout the parking area to reduce the effects of heat and the visual impacts of large parking areas.
- Employee parking areas should be located behind the building or alongside of the building so as not to be visible from adjacent streets.
- Internal vehicular and pedestrian circulation within a development involving multiple buildings or lots shall interconnect in an obvious and consistent manner. **See Figure 78.**
- Parking shall be provided within walking distance of all tenants and public sidewalks.
- Parking lot design shall include water quality stormwater facilities consistent with City standards. **See Figure 79.**

### Access

- The use of common (shared) access points and driveways is encouraged; placement of vehicle access points close to building entries shall be avoided to minimize pedestrian and vehicular conflicts.

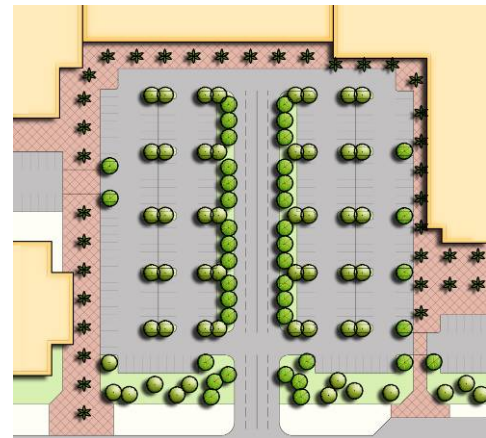


Figure 78. Pedestrian circulation is consistent along perimeter of parking lot.



Figure 79. On-site stormwater capture system.

Entry drives shall be clearly marked by special features, (e.g., enhanced paving, prominent landscape features, low-level decorative walls, and well-designed monument-type signs). **See Figure 80.**

- Access to each development site shall be clearly visible to pedestrians and motorists.
- Service and loading areas should take access from shared access points to reduce curb cuts along streets.



Figure 80. Entry drive.

## 5. Architecture

### Mass and Scale

- The mass and scale of the buildings shall respect the visual and physical relationship to the adjacent buildings and surrounding sensitive uses. Taller building elements should be placed towards the center of the site, with lower elements adjacent to surrounding properties.
- Buildings should be stepped back when adjacent to or in close proximity to sensitive uses (e.g., residential, schools, etc.).
- Vertical and horizontal offsets shall be provided to reduce the visual bulk of the building. **See Figure 81.**
- Buildings should be designed to accommodate a wide range of uses, from office to small scale retail and service to light manufacturing. Interior spaces should allow for a variety of configurations, combining and dividing spaces as needed based on the uses.



Figure 81. Façade articulation.

### Building Facades

- Building facades shall incorporate architectural elements such as windows, pillars, wall plane breaks to minimize blank walls and to create visual interest.



- All building elevations, whether front, side, or rear shall be architecturally detailed.
- Architectural accents (e.g., cornices, tiles, trim around windows, grooves in building faces, accent band details, bulkheads, etc.) shall be used to create variation along building facades. **See Figure 82.**
- Higher facades and rooftops should be incorporated at corners and intersections, and appropriate massing and scale shall be considered for the remainder of the building spanning public street frontage. **See Figure 82.**
- The orientation of windows in buildings adjacent to a residential zone shall preclude a direct line of sight into residential properties.
- Visitor entries to retail and office uses shall be easily identified through the use of prominent architectural elements, signage, landscaping, lighting, canopies, roof form, hardscape, architectural projections, columns, vertical elements, or other design features that help emphasize a space's entry. **See Figure 83.**
- Roofs shall be designed as an integral component of building form, mass, and facade. Building form should be enhanced by sloped or offset roof planes, eave heights, and rooflines. **See Figure 84.**



Figure 82. Enhanced corner elements.



Figure 83. Awnings articulate entries to tenant spaces.

### Color and Materials

- Colors and materials for all structures on-site should consist of earth tones. Use of at least two to three different colors, materials or textures is encouraged.
- Building materials shall be durable and able to withstand long-term exposure to the elements.



Figure 84. Offset roof planes.

- Large expanses of smooth material (e.g., concrete) shall be broken up with expansion joints, reveals, or changes in texture and color.
- To the fullest extent feasible, buildings should use large windows along walls and skylights in rooftop designs to capture natural light during working hours.

## **6. Landscaping**

- Landscaping shall be in scale with adjacent structures, streets, and public spaces, and shall be sized appropriately when fully grown.
- Landscaped areas should incorporate a three-tiered planting system:
  - 1) trees;
  - 2) shrubs and vines; and
  - 3) ground covers

See suggested Plant Palette in Table 6-6.

- Special landscape features, such as specimen trees, shall be provided at major focal points (e.g., project entries, building entries, and pedestrian gathering areas).
- Entry and exit points shall be highlighted through a combination of distinctive landscape and hardscape features.
- Development on corner lots shall be enhanced with a combination of specimen trees, accent plantings, upgraded perimeter wall surfaces, hardscape treatments and landscape lighting adjacent to the street intersection.
- Drought-tolerant and low-maintenance trees, vines, and groundcovers shall be used on-site. Drip irrigation systems shall be installed where feasible to ensure the highest possible level of water conservation.

- Planting materials shall be used in plaza areas to provide shade and soften the appearance of hard walls.
- The use of vines is encouraged on walls to soften the appearance of buildings and screen walls, and to help deter graffiti. **See Figure 85.**
- Planting materials shall be installed to provide a buffer against noise and should be integrated with walls or fences to achieve desired sound reduction.
- Landscaping and trellises with vines are encouraged for screening trash storage areas, service areas and mechanical equipment.
- Setbacks adjacent to residential zones shall include dense landscaping to provide visual screening and noise abatement.
- Landscaped berms along site edges may be used to screen parking, loading and service areas and to serve as a sound reduction measure. **See Figure 86.**
- Surface parking lots shall be well-landscaped to reduce heat island effect and visually reduce the expanse of paved area.
- Pervious paving materials are strongly encouraged for sidewalks, pathways, parking lots, plazas or gathering areas or other paved surfaces on-site.
- An automatic irrigation system using current equipment and technology shall be provided for planted areas.
- Run-off retention and on-site water filtration/stormwater treatment features and bioswales should be a part of the overall landscape design, and can also



Figure 85. Wall incorporates landscaping at the base.



Figure 86. Landscaped berm buffers parking.



Figure 87. One site water filtration.



serve as buffering methods for adjacent businesses. **See Figure 87.**

- Trees shall be selected and placed to provide canopy and shade for walkways, pedestrian open spaces, and parking areas.
- Landscape material in the setback and visible from the public right-of-way shall blend with and seem a part of the public right-of-way landscaping.
- Tree and shrub planting shall be in large masses.
- Plant material selected shall be suited to the specific soil and micro climatic conditions.
- Trees shall be healthy and have a uniform branching pattern.
- All ground cover shall be healthy and densely foliated and comprised of well rooted cuttings or container plants.
- Availability and specific site conditions should be considered in final selection.
- Ground cover shall achieve 100% coverage in one year.
- Informal tree masses should be planted in a mix of sizes.

## F. Special Commercial Uses

### 1. Drive-Through Uses

#### Site Design

- The predominant feature along the street frontage should be the building, not parking lots or the drive-through aisle.
- The building shall be located to maximize the distance for vehicle queuing while screening the drive-through operations. **See Figure 88.**
- When adjacent to residential zones, outdoor order kiosks, loading/unloading areas, and storage areas shall be located as far as possible from residential properties.
- Drive-through aisles shall be located in the rear of the building away from the street frontage whenever possible. If the drive-through aisle is located between the building and the street, dense landscaping and landscaped berms shall be provided to screen the drive-through aisle from street view or provide screen wall (42 or less). **See Figure 89.**

#### Building Design

- All building elevations shall receive the same level of architectural detailing.
- Buildings shall incorporate roof designs with built-in equipment wells or other built-in screening methods, so that screening devices do not appear added-on.
- If the drive-through facility is a pad building within a shopping center, the architecture shall relate to and be compatible with the design of the center. The only feature that identifies the franchise shall be the company's logo and signs.

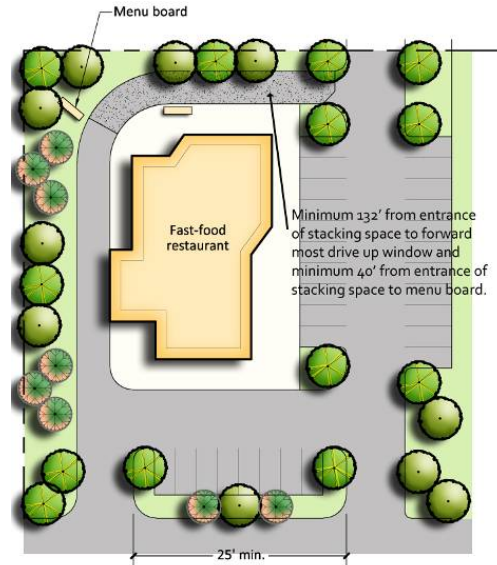


Figure 88. Vehicle queuing.



Figure 89. Example of appropriately landscaped and screened drive-through aisle.

## 2. Mini-Storage Facilities

### Site Design

- Offices and customer service areas shall be located adjacent to the street frontage to provide convenient access and help visually break up the front façade.

### Building Design

- Long, flat, unarticulated walls shall be avoided along street frontages. **See Figure 90.**
- Building walls and screen walls shall incorporate substantial articulation, and changes in plane and height to add visual interest.
- A minimum of two different building materials shall be used on building walls and screen walls adjacent to street frontages (e.g., stucco, brick, stone).
- Building materials, textures and landscaping shall be chosen to deter graffiti.

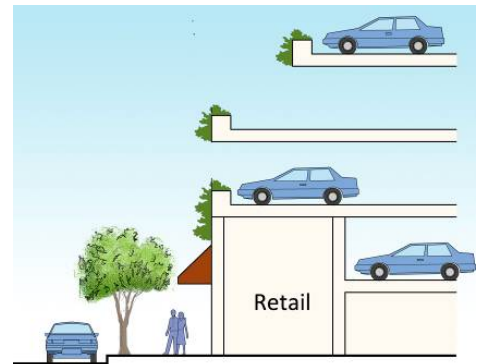


Figure 90. Articulated wall of mini-storage facility.

## 3. Parking Garages

### Site Design

- Where appropriate, parking garages should incorporate ground floor retail adjacent to the public sidewalk. **See Figure 91.**
- A minimum 5-foot wide landscaped strip shall be provided on all sides of the parking structure except where ground floor retail space is provided.



Incorporate retail or other compatible uses on ground floor whenever possible.

Figure 91. Liner shops.

### Building Design

- Parking garages shall be designed to help reduce the mass and scale of the garage and to ensure their compatibility with surrounding uses.
- Conceal view of vehicles in the garage through a combination of screen walls and plantings. **See Figure 92.**
- Avoid a monolithic appearance. This can be accomplished as follows:
  - Minimize horizontal and vertical banding by balancing both horizontal and vertical elements.
  - Use simple, clean geometric forms, and coordinated massing.
  - Step back upper levels of the garage 5 to 10 feet above the first floor. **See Figure 93.**
- Coordinate openings in the parking garage with the size and modulation of adjacent windows, structural bays, and storefronts if the parking garage contains other uses.
- Size openings in the parking garage to resemble large windows as in an office building.
- Use masonry materials that are predominantly light in color, but avoid unpainted concrete.
- Avoid a sloping ramp appearance by providing level and uniform wall panels between floors.
- Visually define and differentiate between pedestrian and vehicular entrances through appropriate architectural detailing. **See Figure 94.**



Figure 92. Parking structure with landscaping.



Figure 93. Horizontal and vertical articulation breaks up parking structure elevation.



Figure 94. Paving differentiates between pedestrian and vehicular entries.

## Access and Circulation

- Vehicle stacking areas for entering and exiting traffic shall be sufficient in length to minimize traffic backup into surrounding streets or within the garage. A minimum of two vehicle lengths of stacking distance shall be provided between the back of the sidewalk and the control gate.
- One inbound lane shall be provided for a garage with a capacity of up to 500 vehicles. At least two inbound lanes shall be provided for garages with a capacity of more than 500 vehicles.
- The maximum aisle length shall not exceed 400 feet without providing a cross aisle.
- Ramp grades shall not exceed 10 percent and parking areas shall not exceed a slope of four to five percent.

## Security and Lighting

- The design of the garage shall eliminate possible hiding places and openings that could allow random pedestrian access.
- During periods when parking activity is substantially less than the garage capacity (i.e., during night operations), there shall be a means of securing unused parking levels from use, including stairwells and elevators. If the garage is not operated on a 24-hour basis the entire facility shall be secured from access during hours when the facility is closed.
- For security reasons, at least one or two sides of the stair tower shall include glass running vertically the height of the tower. Elevators shall be provided with glass-back cabs and shafts. **See Figure 95.**
- Stairs and elevators shall be located adjacent to a street on the exterior of the structure where lobbies can be exposed to outside view.



Figure 95. Glass-back elevator cab and shaft.

- The use of security cameras is required.
- A minimum of five foot-candles shall be provided inside the structure and a minimum of three foot-candles for exterior parking areas. Higher levels are recommended for remote areas subject to security problems such as stairways, elevators, and other pedestrian access points.
- Lighting levels shall be equally distributed to provide uniform illumination over all parking areas.
- Light sources shall be shielded so that the source of the illumination is not seen from outside the structure.

### 5. Service Stations

#### Site Design

- The site shall be designed to accommodate anticipated circulation patterns and those patterns should be defined by paving and by well-placed landscaped areas.
- In areas developed with buildings adjacent to the sidewalk, service stations shall also be oriented to the sidewalk, placing any service bay door and car wash openings on the rear of the structure.
- Where commercial development abuts the service station, two-way vehicular access integrated with the adjacent commercial development shall be provided where feasible.
- The site design for projects located at street corners shall provide a strong design element at the corner to help frame the public right-of-way and anchor the corner. **See Figure 96.**
- Parking spaces for vehicles left for repair shall be located in the least visible areas of the site and screened from public view.



Figure 96. Corner landscaping element.



- Service or car wash bays shall not face toward a public street or toward residential zone if the building is within 200 feet of a residential zone.
- Work bays shall be oriented so that the interior of the bays are not visible or audible from a public street, adjacent residential zones, or designated open space. **See Figure 97.**
- Each pump island shall include a vehicle stacking area for at least two vehicles (38-feet), on at least one end of the pump island and shall not restrict vehicle circulation and parking areas.
- A gasoline tanker truck unloading zone shall be provided and shall not obstruct vehicle circulation and parking areas.

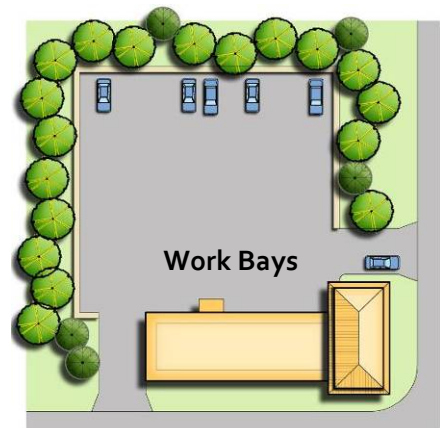


Figure 97. Work bays face interior.

### Building Design

- Service station buildings shall be designed to complement and be compatible with the predominant architectural theme and scale of the area. If located within a multi-use center, the architectural design shall be compatible with the design of the center.
- The design of the building should be clean and simple, and shall relate to surrounding buildings through use of similar scale, materials, colors, and/or detailing.
- Building elevations facing public streets and residential zones shall be architecturally detailed to provide interest and the appearance of quality development.
- The roof design of service stations, including pump island canopies, shall incorporate full, pitched roof treatments with a low to moderate slope. **See Figure 98.**



Figure 98. Sloped roof on pump island canopies.



- Building materials shall have the appearance of substance and permanency (e.g., masonry).

### Landscaping and Walls

- A three-foot high, landscaped berm, a dense hedge, or a low-profile wall shall be provided along all street frontages where parking is provided. **See Figure 99.**
- A minimum six-foot high decorative masonry wall shall be provided along side and rear property lines not abutting public streets. A minimum 5-foot wide landscaped planter shall be provided adjacent to the wall in areas accessible to the public.



Figure 99. Landscaped berm.

### Site Elements

- Gates, fencing, and walls shall remain free of signs or other advertisements.
- The use of chain-link fencing is prohibited.
- Where security is an issue, fencing shall consist of open grille work, and the use of surveillance cameras is encouraged.
- Electric fences, barbed wire, concertina wire, or other security wire is prohibited.

## 6. Truck Stops

### Site Design

- The site shall be designed to accommodate anticipated circulation patterns and those patterns should be defined through paving and well-placed landscaped areas.
- In truck stops that provide maintenance facilities, any service bay doors and car wash openings shall be oriented away from the public street or freeway or placed to the rear of the site.

- The site design for projects located at street corners shall provide a strong design element at the corner to help frame the public right-of-way and anchor the corner.
- Parking spaces for vehicles left for minor repair shall be located in the least visible areas of the site and screened from public view.
- Truck stops shall be located within an industrial area within close proximity to an I-10 freeway on/off ramp..
- Service or car wash bays shall not face toward a public street nor toward a residential zone if the building is within 200 feet of a residential zone.
- Work bays shall be oriented so that the interior of the bays are not visible or audible from a public street, adjacent residential zones, or designated open space.
- A gasoline tanker truck unloading zone shall be provided and shall not obstruct vehicle circulation and parking areas.

### **Building Design**

- Truck stop buildings shall be designed to complement and be compatible with the predominant architectural theme and scale of the area.
- The design of the building should be clean and simple, and shall relate to surrounding buildings through use of similar scale, materials, colors, and/or detailing.
- Building elevations facing public streets and residential zones shall be architecturally detailed to provide interest and the appearance of quality development.

- The roof design of fueling stations, including pump island canopies, shall incorporate full, pitched roof treatments with a low to moderate slope.
- Building materials shall have the appearance of substance and permanency (e.g., masonry).

### **Landscaping and Walls**

- A three-foot high, landscaped berm or a dense hedge shall be provided along all street frontages where parking is provided.
- A minimum six-foot high decorative masonry wall shall be provided along side and rear property lines not abutting public streets. A minimum five-foot wide landscaped planter shall be provided adjacent to the wall in areas accessible to the public.

### **Site Elements**

- Gates, fencing, and walls shall remain free of signs or other advertisements.
- The use of chain-link fencing is prohibited if visible from a public street or the I-10 freeway.
- Where security is an issue, fencing shall consist of open grille work, and the use of surveillance cameras is encouraged.
- Electric fences, barbed wire, concertina wire, or other security wire is prohibited.

## **7. Shopping Centers**

### **Site Design**

- Large commercial sites shall be separated from residentially-zoned properties by streets, landscaped buffers and/or decorative masonry walls.

- Portions of primary buildings and/or freestanding satellite buildings shall be located at the street setback lines to enclose the site and help frame the street. **See Figure 100.**
- Buildings within the center shall have a logical spatial and functional relationship to each other and shall provide for convenient pedestrian circulation throughout the center.
- Parking shall be provided within convenient walking distances of all tenants. Walking paths to buildings from the public street shall be provided. **See Figure 101.**
- To reduce the visual impact of large paved areas, parking lots shall be broken up into smaller areas separated by landscaping, pedestrian circulation areas and drive aisles.
- Storage areas and loading facilities shall be limited in number and shall be designed, located, and screened to minimize their visibility from outside public areas, surrounding streets, freeways, and freeway on/off ramps.

### Building Design

- Buildings, hardscape, landscape, site furnishings and signage should reflect a unified theme. **See Figure 102.**
- Where a shopping center is nearby residential zone, the scale of the shopping center shall be reduced to be compatible with the adjoining use by:
  - Keeping buildings as small as possible, particularly in height;
  - Reducing scale through building wall articulation, added detailing and avoiding large scale design elements;



Figure 100. Buildings placed at street setback lines.



Figure 101. Walking paths.



Figure 102. Unified theme.

- Developing the center as a complex of smaller buildings connected by pedestrian-oriented open spaces; and/or
  - Setting the buildings further away from the residential zone and providing dense landscape screening .
- Long, linear buildings shall be avoided. Where such buildings are unavoidable, their length shall be mitigated by changes in building height, wall plane, and spatial volumes and by varied use of window areas, arcades, roof elements, and building materials. **See Figure 103.**
- If the shopping center contains a large scale building, integration of smaller-scale shops along the exterior of the building with entrances from the exterior of the building are desirable in order to create a more human scale and pedestrian-oriented character.
- Side and rear elevations of commercial buildings that are visible from residential zones or public rights-of-way shall be architecturally consistent with the front elevations of the building.
- Blank walls adjacent to main pedestrian areas shall be avoided.
- Flat roofs, mansard roofs, and veneer parapets are strongly discouraged in favor of full, pitched roof treatments. In large centers, a combination of flat roofs with decorative cornices and full, pitched roofs may be acceptable if the design presents a balanced appearance. **See Figure 104.**
- All roof-top and ground-mounted equipment shall be screened from view.



Figure 103. Articulation along wall plane.



Figure 104. Appropriate roofing.

- Outdoor sales and storage areas shall be designed to blend with the architecture of the main building. The height of the screening elements shall be tall enough to screen all stored materials. **See Figure 105.**



Figure 105. Outdoor sales area.

## 6.10 Development Incentives

This Section offers development incentives to produce greater land use efficiencies and reduce incremental costs for new development.

### A. Applicability

The incentives in this Section shall apply to all new development that meet(s) the applicable eligibility criteria.

### B. Definitions

For the purposes of this Section, lot consolidation and lot integration shall have the following meanings:

1. Lot consolidation. A legal action in which a lot line is removed or abandoned; a lot line is adjusted; lots are merged; or other equivalent action is taken, for the purpose of allowing a structure or development to be built so that it extends over what were previously two or more separate lots. A lot consolidation cannot create additional lots and cannot make existing lots nonconforming. All lots must be identical in ownership.

### C. Lot Consolidation Incentives

1. Eligibility requirements. In order to be eligible for the by-right development incentives indicated in Subparagraph 1 and 2, the minimum consolidated lot size for a development shall be 97,500 square feet.
2. By-right incentives. Eligible projects shall receive one or more of the following incentives:
  - a. Expedited application processing. Applications for eligible projects shall receive expedited project processing (i.e., projects will move to front of line for assignment to a planner for review), irrespective of the number of lots involved.
  - b. Parking Reduction. Required parking standards may be reduced up to a maximum of 20 percent, provided that the adequacy of proposed parking can be demonstrated in a parking study prepared in compliance with Section 6.6 Parking and Loading Standards.
  - c. Allowable Bonuses. Allowable increases in intensity (i.e., floor area ratio [FAR]) and in maximum height shall be in the amounts listed in Table 6-10 – Allowable Bonuses for Lot Consolidation or Integration. The intensity and height bonus incentives shall apply to the total gross square footage of the consolidated lots or integrated lots.

| Table 6-10 – Allowable Bonuses for Lot Consolidation |                           |             |                        |
|------------------------------------------------------|---------------------------|-------------|------------------------|
| Base Intensity (FAR)                                 | Allowable Intensity Bonus | Base Height | Allowable Height Bonus |
| 1.0                                                  | 15%                       | 60 ft       | 15 ft                  |



**D. Green building incentives.**

1. Eligibility requirements. Projects that are seeking green building certification by a third-party entity (e.g., LEED, etc.) shall be eligible for the by-right development incentives indicated in Subparagraph 2.
2. By-right incentives.
  - a. Expedited application processing. Applications for eligible projects shall receive expedited project processing (i.e., projects will move to front of line for assignment to a planner for review).
  - b. Parking Reduction. Required parking standards may be reduced up to a maximum of 20 percent, provided that the adequacy of proposed parking can be demonstrated in a parking study prepared in compliance with Section 6.6 Parking and Loading Standards, as approved by the Director of Community Development.
  - c. Allowable Bonuses. Allowable increases in intensity (i.e., floor area ratio (FAR) and in maximum height shall be in the amounts listed in Table 6-11 – Allowable Bonuses for Green Building. The intensity and height bonus incentives shall apply to the total gross square footage of the project site.

| <b>Table 6-11 – Allowable Bonuses for Green Building</b> |                                  |                    |                               |
|----------------------------------------------------------|----------------------------------|--------------------|-------------------------------|
| <b>Base Intensity (FAR)</b>                              | <b>Allowable Intensity Bonus</b> | <b>Base Height</b> | <b>Allowable Height Bonus</b> |
| 1.0                                                      | 15%                              | 60 ft              | 15 ft                         |

**E. Application and review process for incentives.**

1. Written submittal. Interested parties shall submit a written request for approval of incentives to the Director of Community Development on forms provided by the Community Development Department.
2. Pre-application hearing. Before the approval of any incentives, the project applicant(s) shall attend a pre-application meeting with the Director of Community Development. Fees for pre-application meetings shall be waived.
3. Determination. The Director of Community Development shall determine whether the proposed new development meets the eligibility criteria in Paragraphs C.1 or D.1. Additional factors to be considered when reviewing applications for incentives shall include the following:
  - a. Detriment. The proposal will not detrimentally affect access, design, or other public safety and welfare concerns.
  - b. Covenants or conditions. The proposal will not violate recorded covenants.

- c. Right-of-way easements. The proposal will not invalidate any easement(s) unless the adjustment establishes replacement easement(s) that is properly filed with the city.
- 4. Conditions. Conditions may be imposed in connection with the granting of any incentive where the Director of Community Development deems that conditions are necessary to protect the public health, safety, and welfare.

## **6.11 Entitlement Procedures**

### **A. Purpose**

These administrative procedures have two major purposes:

1. Ensure that development conforms to the SWIP Specific Plan ("Plan").
2. Ensure that the City's review is as expedited as possible while remaining legal and proper.

### **B. Summary of Processing Procedures**

1. Conformity with the Plan. The Director of Community Development shall review each application for conformity with the development regulations in this Chapter. Conformity has two components:
  - a. Standards. Compliance with the Standards is mandatory and the City may not approve a project that fails to comply with the Standards.
  - b. Guidelines. The City may exercise discretion in evaluating the project's compliance with the Guidelines.
2. Project Review. Applications for development approvals shall be filed with the Department and may be returned for revision. Applicants must meet all items identified as "Standards". Applications must strive to meet the "Guidelines," but applicants may propose alternate ways to achieve the goals of the Guidelines.
3. Timing of Permits and Approvals. Required planning approvals shall be obtained before the issuance of any grading, building, or other construction permit, and before the proposed use is constructed, otherwise established, or put into operation.
4. Processing Requirements. Applications for planning permits shall be processed in compliance with Table 6-12 – Hearing Bodies.
5. Timing of Project Review. Project review shall be required before the issuance of a Building or Grading Permit, Business License, or Certificate of Occupancy for any new structure (not including fences or walls) and/or existing structures to be reconstructed or remodeled (including facade improvements).

## Southwest Industrial Park Specific Plan

Freeway Industrial/Commercial District

**Table 6-12 – Hearing Bodies**

| <i>Reviewing Bodies</i>                |               |           |           |           |           | <i>Appeal Bodies</i> |           |
|----------------------------------------|---------------|-----------|-----------|-----------|-----------|----------------------|-----------|
|                                        | <i>D.A.B.</i> | <i>CD</i> | <i>PC</i> | <i>CC</i> | <i>PR</i> | <i>PC</i>            | <i>CC</i> |
| Administrative site plan               | X*            | X         |           |           |           | X                    |           |
| Administrative site plan, amendment    | X*            | X         |           |           |           | X                    |           |
| Building relocation                    |               | X         |           |           |           |                      | X         |
| Certificate of appropriateness         |               |           |           |           |           |                      | X         |
| Code of the City of Fontana, Amendment | X             |           | Xf        | X         |           |                      |           |
| Conditional Use Permit                 | X             |           | X         |           |           |                      | X         |
| Density bonus                          | X             | X         | Xf        | X         |           |                      |           |
| Design review                          | X             |           | X         |           |           |                      | X         |
| Design review, amendment               | X             | X         | X         |           |           |                      | X         |
| Design review, signs                   |               | X         |           |           |           | X                    |           |
| Development agreements                 | X             | X         | Xf        | X         |           |                      |           |
| Development agreements, amendment      | X             | X         | Xf        | X         |           |                      |           |
| General plan amendments                | X             | X         | Xf        | X         |           |                      |           |
| Home occupation                        |               | X         |           |           |           | X                    |           |
| Interpretation                         | X*            |           | X         |           |           |                      | X         |
| Lot line adjustment                    |               | X***      |           |           |           |                      |           |
| Parcel maps, tentative                 | X             | X         | X         |           |           |                      | X         |
| Parcel maps, final                     |               | X***      |           |           |           |                      |           |
| Pre-Annexation Agreement               |               |           | Xf        | X         |           |                      |           |
| Specific Plan                          |               |           | Xf        | X         | X**       |                      |           |
| Specific plan, amendment               |               |           | Xf        | X         | X**       |                      |           |
| Tract maps, tentative                  | X             |           | X         |           |           |                      | X         |
| Tract maps, final                      |               |           |           | X         |           |                      |           |
| Variances                              | X             |           | X         |           |           |                      | X         |
| Zone changes                           | X             |           | Xf        | X         |           |                      |           |
| Administrative Variance                | X             | X         |           |           |           | X                    |           |
| Minor Use Permit                       | X             | X         |           |           |           | X                    |           |

**Notes:**

Decisions of any "Reviewing Body" may be appealed to the City Council, except where State law limits such appeal to the City Engineer. If the Planning Commission is listed above as the "Appeal Body", the Commission must first review an Appeal before it may be forwarded to the City Council for consideration.

DAB—Development Advisory Board

CD—Community Development Director

PC—Planning Commission

CC—City Council

PR—Parks and Recreation Commission

X\*—At the discretion of the Director of Community Development or his/her designee

X\*\*—If Public Park(s) are considered

X\*\*\*—City Engineer has final approval

f—Recommending body to the City Council

**C. Administration and Enforcement.**

The Director of Community Development shall enforce the provisions in this Specific Plan. All officers, employees, and officials of the City of Fontana, who are vested with the duty or authority to issue permits or licenses shall conform with this Specific Plan and shall not issue any permit or license, or approve any use or building, which would be in conflict with this Specific Plan. Any permit, license or approval issued that is in conflict with the requirements of this Specific Plan shall be considered null and void.

**D. Amendments to the Specific Plan.**

The SWIP Specific Plan may be amended utilizing the same procedures by which it was originally adopted. In addition, subsequent amendments to this Specific Plan shall demonstrate the amendment meets the intent of the Specific Plan's existing policy framework, or specific findings to demonstrate the amendment enhances the Plan or is necessary to more effectively implement the Specific Plan. All sections or portions of the Specific Plan proposed to be amended or that may be affected by the amendment must be identified during the amendment process. A concurrent amendment to the General Plan would not be required provided that the Director of Community Development determines that substantive changes would not influence the goals, objectives, policies, or programs of the General Plan.

Allowing flexibility in the administration of the Specific Plan enhances the effectiveness of the Specific Plan as a comprehensive, "living" planning document. The following minor modifications to the Specific Plan qualify for processing as an administrative amendment to the Specific Plan subject to the review and approval of the Director of Community Development:

- Changes in the location of infrastructure and public facilities (e.g., internal roads, drainage facilities, etc.).
- Minor change in roadway alignment.
- Adjustment of planning area boundaries provided the total acreage of the affected planning area does not increase or decrease by more than 20 percent of the total stated in the approved Specific Plan.
- Minor changes to the Design Guidelines, which are intended to be flexible in nature.
- Minor deviations (less than 10 percent) from the development standards in this Chapter.
- Other minor modifications similar to those listed above and deemed minor by the Director of Community Development, which are in keeping with the intent of the SWIP Specific Plan.

***E. Similar Use Determination***

1. **Applicability and Authority.** Unlisted uses in Table 6-2 are prohibited uses, unless the Director of Community Development finds a proposed use to be similar to an expressly allowed use in compliance with this Section. A Similar Use Determination is a process for determining when an unlisted use is similar in nature to a permitted or conditionally permitted use and may be permitted. As specified by Municipal Code Section 30-4 Other Uses to be determined by the Director of Community Development, the Director of Community Development shall have the responsibility and authority to make Similar Use Determinations.
2. **Ministerial Action.** A Similar Use Determination shall constitute a ministerial action.
3. **Application Contents and Filing.** An application for similar use shall be in writing on forms provided by the Director of Community Development.
4. **Determination Findings.** In determining “similarity,” the Director of Community Development shall make all of the following findings:
  - a. The characteristics of and activities associated with the proposed use are equivalent to one or more of the listed uses and will not involve a higher level of activity or environmental impacts than the uses listed in the land use district;
  - b. The proposed use will be consistent with the purposes of the applicable land use district; and
  - c. The proposed use will be consistent with the General Plan and this SWIP Specific Plan.
5. **Notice.** A Similar Use Determination shall be made in writing and shall contain the facts that support the determination. The Community Development Department shall maintain all determinations on record for review by the general public upon request. The notice shall include:
  - a. A brief statement explaining the criteria and standards considered relevant to the decision;
  - b. A statement of the standards and facts relied upon in rendering the decision; and
  - c. An explanation of appeal rights and appeal deadlines. The determination of similar use by the Director of Community Development shall be subject to appeal to the Planning Commission.

**F. Nonconforming Lots, Structures and Uses**

1. Nonconformance provisions are established to:
  - a. Bring all uses, structures, sites and signs into conformance with the developmental requirements and design guidelines in this Specific Plan;
  - b. Limit the occurrences and extent of nonconformance by prohibiting expansion, intensification, reinstatement, alteration, restoration after destruction, and reestablishment after abandonment; and
  - c. Gradually phase out nonconforming uses, structures, lots and signs.
2. Applicability
  - a. Nonconforming uses, structures, signs and lots may be maintained, expanded, altered and/or abated only in accordance with the provisions of this Specific Plan.
  - b. Any Designated Historic Landmark, or any property listed on the California Register of Historical Resources or National Register of Historic Places, shall be exempt from the provisions of this Section with respect to the restoration and maintenance of structures, provided that any construction plans are approved through a Certificate of Appropriateness by the Historic Preservation Commission/Planning Commission.
3. Nonconforming Uses. A use that lawfully occupied a building or land at the time this Specific Plan became effective, and that does not conform to the use regulations of the land use district in which it is located, is deemed a "legal nonconforming use." A legal nonconforming use may continue, subject to the following:
  - a. Discontinuation of Use
    - i. Loss of legal nonconforming status. If a legal nonconforming use is discontinued for a period of 90 or more days, regardless of the owner's intent, it shall lose its legal nonconforming status and the continued use of the property shall be required to conform to all provisions of this Specific Plan.
    - ii. Extension of legal nonconforming status. Wherein special circumstances exist, the Director of Community Development may extend the legal nonconforming status of a use, for up to an additional 90-day period. Furthermore, an additional extension may be granted by the Planning Commission, for up to an additional 90-day period. The total time period of all time extensions shall not exceed 180 days.
    - iii. Extension of legal nonconforming use.
      - (1) An application for a Minor Use Permit shall be filed with the Community Development Department on a City application form,



together with all required fees, plans, maps, reports, special studies, exhibits, and any other information deemed necessary by the Community Development Department to process the application. The application shall be filed prior to the expiration of the 90-day period.

- (2) The application shall be reviewed by the Director of Community Development within 30 days following application filing. The Director of Community Development shall notify the applicant, in writing, as to whether the application is complete. If the application is not complete, the Director of Community Development shall specify those parts of the application that are not complete and shall identify the manner by which it can be made complete. If written notification is not provided to the applicant within 30 days following application filing, the application shall be deemed complete.
- (3) The Director of Community Development shall investigate the facts bearing on the application and provide the information necessary for action on the application, consistent with this Specific Plan and the General Plan. The applicant shall have made a good faith effort through the submittal of documentation and has diligently pursued compliance with this Specific Plan.
- (4) The application shall be reviewed by the Director of Community Development at a duly noticed public hearing, whom shall then approve, modify or deny the application. The decision of the Director of Community Development shall be final and conclusive in the absence of a timely filed appeal to the Planning Commission. An appeal of the Director of Community Development's decision shall be filed within 10 days from the date of the decision. An appeal of the Director of Community Development's decision shall be reviewed by the Planning Commission. The decision of the Planning Commission shall be final and conclusive in the absence of a timely filed appeal to the City Council.
- (5) The applicant may appeal the decision of the Planning Commission to the final deciding body, the City Council. The City Council decision shall be final and conclusive. If the application to extend the legal nonconforming use is approved by the City Council, the extension shall be granted for 90 days from the date of approval.
- (6) If the Director of Community Development or appointed designee has determined that the applicant has failed to show a good faith effort towards continually processing the extension of legal nonconforming use application (i.e., revising plans, withdrawing the application, placing the project on hold, etc.), the legal nonconforming use shall cease within 60 days from the application submittal date.

- (7) In granting an extension of the legal nonconforming status, the Director of Community Development may attach reasonable conditions and restrictions to the request, in addition to those required by this Specific Plan, which will ensure that the use:
  - Will not endanger the public health, safety or general welfare;
  - Will not injure the value of adjoining or abutting property;
  - Will not result in any significant environmental impacts; and
  - Will be in harmony with the area in which it is located.
- (8) In approving an extension of the legal nonconforming status, the Director of Community Development or Planning Commission shall consider and clearly establish the following findings of fact:
  - The non-conforming use has been discontinued within the 90-day period.
  - A physical and/or economic hardship has prevented the nonconforming use from being in compliance prior to the expiration of the 90-day period;
  - Approving the extension will not adversely affect the health, safety or general welfare.
- b. Change in Ownership, Tenancy or Management. A change in ownership, tenancy, or management of a nonconforming use shall not affect its legal nonconforming status, provided that the use did not discontinue pursuant to Section 3.ai entitled " Loss of legal nonconforming status," or the type of use and/or intensity of use does not change.
- c. New Development. New development on any lot or parcel upon which a legal non conforming use exists shall require that all uses on the property conform to the provisions of this Specific Plan.
- d. Alterations and Expansion of Use
  - i. A nonconforming use shall not be enlarged or extended in such a way as to occupy any part of any structure or property that it did not occupy prior to the creation of the nonconformity.
  - ii. A structure fully or partially occupied by any nonconforming use shall not be moved, altered or enlarged, unless required by law, or unless the moving, alteration or enlargement will result in the elimination of the nonconforming use.
- e. Intensification of Use. A nonconforming use shall not be intensified in such a way as to increase the discrepancy between existing conditions and the standards set forth in this Specific Plan.

4. Nonconforming Structures. A structure lawfully existing at the time this Specific Plan became effective, any portion of which does not comply with the requirements of the land use district in which it is located, including setbacks, separations, height and design, is deemed a "legal nonconforming structure." A legal nonconforming structure may continue to exist, subject to the following:
- a. Damage or Destruction
    - i. A legal nonconforming structure that is damaged or partially destroyed by fire, flood, wind, earthquake or other calamity, or the public enemy, or other cause which is beyond the control of the property owner, and which could not otherwise have been prevented by reasonable care and maintenance of the structure, may be reconstructed up to the original size, placement and density, provided that total cost of such reconstruction does not exceed more than 50 percent of the structure's current fair market value. The structure may be restored and the nonconforming use may be resumed, provided that restoration is started within 6 months, unless extended by the Director of Community Development, and diligently pursued.
    - ii. In the event that the cost of repairing such damage exceeds 50 percent of the current fair market value of the structure prior to such damage occurring, the structure may be reconstructed up to the original size, placement and density, subject to all of the following:
      - The Planning Commission, at a duly noticed public hearing, must find that continuing the nonconforming structure will not result in an annoyance to and/or reduction of any surrounding property; and
      - The extent of damage or partial destruction shall be based upon a comparison of the estimated cost of restoring the structure to its condition prior to such damage or partial destruction with its value at the time the structure was damaged or partially destroyed. Estimates for such purpose shall be made by or reviewed by the Building Official; and
      - The restoration is commenced within six months and diligently pursued to completion;
      - An application for a Nonconforming Structure shall be filed with the Community Development Department on a City application form, together with all required fees, plans, maps, reports, special studies, exhibits, and any other information deemed necessary by the Planning Division to process the application. The application shall be filed prior to the expiration of the 90-day period.
      - A structure or development that has been damaged or destroyed by fire, flood, wind, earthquake, or other calamity, or by public enemy, or other cause which is beyond the control of the property owner, and which could not otherwise have been prevented may be reconstructed up to the original size, placement and density, except a multiple family dwelling or

development which has been abandoned for a period of 90 or more days prior to being involuntarily damaged or destroyed, or a multiple family dwelling or development constituting a public nuisance prior to being involuntarily damaged or destroyed may not be reconstructed unless the structure is made to comply to all provisions of this Specific Plan.

- b. Alterations and Expansion
  - i. A nonconforming structure shall not be moved, altered or enlarged so as to increase the discrepancy between existing conditions and the most current standard as prescribed by the land use district in which the structure is located, except alteration and/or enlargement to a single family dwelling conducted pursuant to section (e) "Nonconforming Single-Family Residential Structures".
  - ii. Within land use districts, reasonable repairs and alterations may be made to legal nonconforming structures, provided that no structural alterations shall be made which would prolong the life of supporting members of a structure, such as bearing walls, columns, beams or girders. Structural elements may be modified only if such modification or repair is immediately necessary to protect the public health and safety, occupants of the legal nonconforming structure, or adjacent property, as determined by the Building Official. The total cost of such repairs or alterations may not exceed 50 percent of the replacement cost of the nonconforming structure.
- c. New Structures. Any new structure constructed on a lot or parcel with an existing legal nonconforming structure shall be constructed in conformance with all applicable provisions of this Specific Plan. However, in no case may a new nonresidential structure be constructed on the same lot as an existing legal nonconforming residential structure.
- d. Abatement of Nonconforming Structures Posing a Threat to the Public Health, Safety, and General Welfare. A structure which is nonconforming because of a violation or deficiency that poses a threat to the public health, safety or general welfare, as determined by the Building Official, and which fails to resolve, repair or improve such, or to fully mitigate the hazard involved, shall be abated, condemned or demolished upon the issuance by the City of a nuisance abatement, condemnations, or demolition order.
- e. Nonconforming Single-Family Residential Structures. In addition to the requirements of subsections a and d above, a nonconforming single family residential lot and/or structure that was lawfully established and maintained before the adoption of this Specific Plan, but which under the provisions of this Specific Plan does not conform with the regulations of the land use district in which it is located with respect to use, design and/or development standards, and which is continuously used and maintained for single family residential purposes, shall be subject to the following:
- f. Alterations and expansions to structures within nonresidential zones.

- i. Necessary repairs and desirable alterations, as deemed appropriate by the Director of Community Development, may be made to a legal nonconforming single family residential structure that is nonconforming as to use.
  - ii. A single family dwelling that is nonconforming as to its location within a land use district that does not permit single family dwellings, and in which the residential use was lawfully established and continuously maintained, shall be subject to the development regulations of the Municipal Code Chapter 30 Zoning and Development Code that pertain to the R1 zoning district and off-street parking and loading regulations..
- 5. Nonconforming Signs. A sign lawfully existing at the time this Specific Plan became effective, any portion of which does not comply with the requirements of Section 6.7 Sign Standards, is deemed a "legal nonconforming sign." A sign that presents a hazard to public safety, as determined by the City, shall be removed upon the issuance of a notice by the City. A legal nonconforming sign may continue to exist, subject to the following:
  - a. A nonconforming sign may not be altered, enlarged, extended, or moved, except in conformity with the requirements of Section 6.7 Sign Standards, or as otherwise required by law;
  - b. Where a use or a structure associated with a nonconforming sign is abandoned or discontinued, any sign associated with a new use of the site shall be in full conformity with the requirements of Section 6.7 Sign Standards.
- 6. Nonconforming to Development Standards. The development that is not in compliance with the site development standards prescribed by the regulations of the zoning district in which the lot or parcel is located, including area, coverage, configuration, dimensions, parking, landscaping, screen walls, fences and enclosure trash receptacles, is deemed "legal nonconforming," provided such development was lawfully created and existing at the time this Specific Plan, which created the nonconformity, became effective.
  - a. A development that is nonconforming as to landscaping, screen walls, fences and enclosure of trash receptacles, shall be altered to comply with the district regulations covering the following standards, or as a condition of any subsequent Development Plan or Conditional Use Permit approval.
- 7. Nonconforming Lots. A lot or parcel that is not in compliance with the site development standards prescribed by the regulations of the land use district in which the lot or parcel is located, including area and configuration is deemed a "legal nonconforming lot," provided such lot or parcel was lawfully created and existing at the time this Specific Plan, which created the nonconformity, became effective.

- a. A lot or parcel that is nonconforming as to minimum area or dimension shall be granted all development rights and uses of the land use district within which it is located.
  - i. The landscaping of setback areas insofar as a setback exists;
  - ii. The landscaping of parking areas, provided fulfilling the requirement does not reduce off-street parking or loading spaces to fewer than prescribed in this Specific Plan;
  - iii. The screening of storage areas; and
  - iv. The enclosure of trash receptacles.
- 8. Elimination of Nonconforming Adult Business Uses. Nonconforming adult business uses shall be eliminated in compliance with Municipal Code Chapter 30 Zoning and Development Code.
- 9. Abatement of Nonconforming Uses, Structures, Lots and Signs. Whenever a use, structure, site or sign becomes nonconforming because of a change of land use district boundaries or a change of the regulations prescribed for the district in which the site is located, the period of time prescribed in this Specific Plan for the abatement period for the elimination of the use, the removal of the structure or sign, or the improvement of the lot or parcel shall begin on the effective date of the change of district boundaries or regulations.

## Chapter 7.0 – Jurupa North Research and Development District





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## Southwest Industrial Park Specific Plan

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*Jurupa North Research and Development District*

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### **7.1 Purpose**

The Jurupa North Research and Development District (JND) is intended to encourage small business development by allowing a mixture of development types and uses including light industrial, warehousing, logistics-based distribution, office, flex tech, research and development, and service commercial. In addition to industrial uses, this area will promote the development of community serving commercial uses, such as grocery stores, restaurants, dry cleaners, and gas stations. Adjacent existing residential and public facilities uses are buffered from potential adverse impacts of these higher intensity uses. General features of this District include:

- Landscape/Streetscape Enhancement
- Promotion of lot consolidation
- Promotion of the development of office, low intensity industrial, and flex tech uses
- Establishment of uses that capitalize on regional market potential
- Development that is compatible with surrounding residential development
- Encouragement of green technology and research and development-oriented uses
- Emphasize mixed use developments

## **7.2 Applicability**

### **A. Projects Subject to Development Regulations**

This Chapter contains the development regulations that govern all future private development actions in the JND, including new construction, additions or renovations to existing structures and/or new land uses proposed for existing facilities.

### **B. Right of Continued Use**

This Chapter shall not require any change in any existing building or structure for which a building permit has been previously issued, or for approved plans on file in the Community Development Department before the effective date of this Specific Plan. Changes in the property's ownership or tenants of legal existing uses shall likewise require no change in any existing building or structure. Nonconforming standards and provisions shall be governed by Section 7.11 Entitlement Procedures.

### **C. Other Requirements**

This Chapter does not eliminate the need for obtaining any other permits required by the City, or any permit, approval or entitlement required by any other applicable special district or agency, and/or the regulations of any State or Federal agency.

### **D. Types of Development Regulations**

The development regulations are of two types – Standards and Guidelines – as follows:

1. Standards address those aspects of development that are essential to achieve the goals of the Specific Plan. They include specifications for allowable land uses and site development (e.g., building height, setbacks, etc.). Conformance with Standards is mandatory. Standards are indicated by use of the words "shall," "must," or "is / is not permitted."
2. Guidelines provide guidance for new development in terms of aesthetics and design details. They are intended to direct building and site design in a way that results in the desired character for the JND. Whereas conformance with the Standards is mandatory, conformance with the Guidelines is preferred and/or recommended. Provisions that fall into this category are indicated by the use of the words "should," "may" or "are encouraged to." In various cases, the Guidelines provide a choice of treatments that will achieve the desired effect. Developers are permitted to propose alternative design details if they are able to show that such details implement the Specific Plan objectives with respect to the desired character of the JND.

### **E. Minimum Requirements**

The provisions in this Chapter shall be minimum requirements. When this Chapter provides for discretionary authority on the part of the Director of Community Development, Planning Commission, or City Council, that discretion may be exercised to impose more stringent requirements if deemed necessary to accomplish the overall objectives of the JND.

### **F. Overview of Development Regulations**

1. Relationship of Land Use Districts. The development regulations in this Chapter apply to those properties that are within the JND. Exhibit 7-1 – Land Use Plan indicates the location of the JND and its relationship to the other land use districts in the Specific Plan area.
2. Standards, Guidelines, and Procedures. The development regulations are divided into the following sections: 7.3 Allowable Land Uses and Permit Requirements; 7.4 Development Standards; 7.5 Landscape Standards; 7.6 Parking and Loading Standards; 7.7 Sign Standards; 7.8 Public Right-of-Way Streetscape; 7.9 Design Guidelines; 7.10 Development Incentives; and 7.11 Entitlement Procedures. Projects must meet all development standards in order to achieve approval in the development review process. Projects are encouraged to adhere to the guidelines contained in 7.9 Design Guidelines.
3. Steps for Using Chapter. Table 7-1 – Process Procedures describes the steps for using this Chapter.

| <b>Table 7-1 – Process Procedures</b>                                                                                       |                                                          |                                      |
|-----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|--------------------------------------|
| <i>Instructions</i>                                                                                                         | <i>Information Source</i>                                | <i>Where to Find in this Chapter</i> |
| Locate property and its street frontage                                                                                     | Land Use Plan                                            | Exhibit 7-1                          |
| Identify the allowable uses and refer to the definitions of the uses                                                        | Allowable Land Uses & Permit Requirements Definitions    | Table 7-2<br>Appendix A              |
| Comply with the requirements for intensity, lot dimensions, height limits, and setbacks                                     | Intensity and Dimensional Standards                      | Table 7-3                            |
| Comply with fence, wall, and screening standards                                                                            | Fence, Wall, and Screening Standards                     | Table 7-4                            |
| Comply with landscaping requirements                                                                                        | Landscaping Standards<br>Public Right-of-Way Streetscape | Section 7.5<br>Section 7.8           |
| Comply with parking requirements                                                                                            | Parking and Loading Standards                            | Section 7.6                          |
| Comply with sign requirements                                                                                               | Sign Standards                                           | Section 7.7                          |
| Review the design guidelines for preferred site layout, building orientation and architectural detail, fencing, and parking | Design Guidelines                                        | Section 7.9                          |
| Determine if development is eligible for incentives                                                                         | Development Incentives                                   | Section 7.10                         |
| Submit project application and proceed through project approval process                                                     | Entitlement Procedures                                   | Section 7.11                         |

# Southwest Industrial Park Specific Plan

Jurupa North Research and Development District

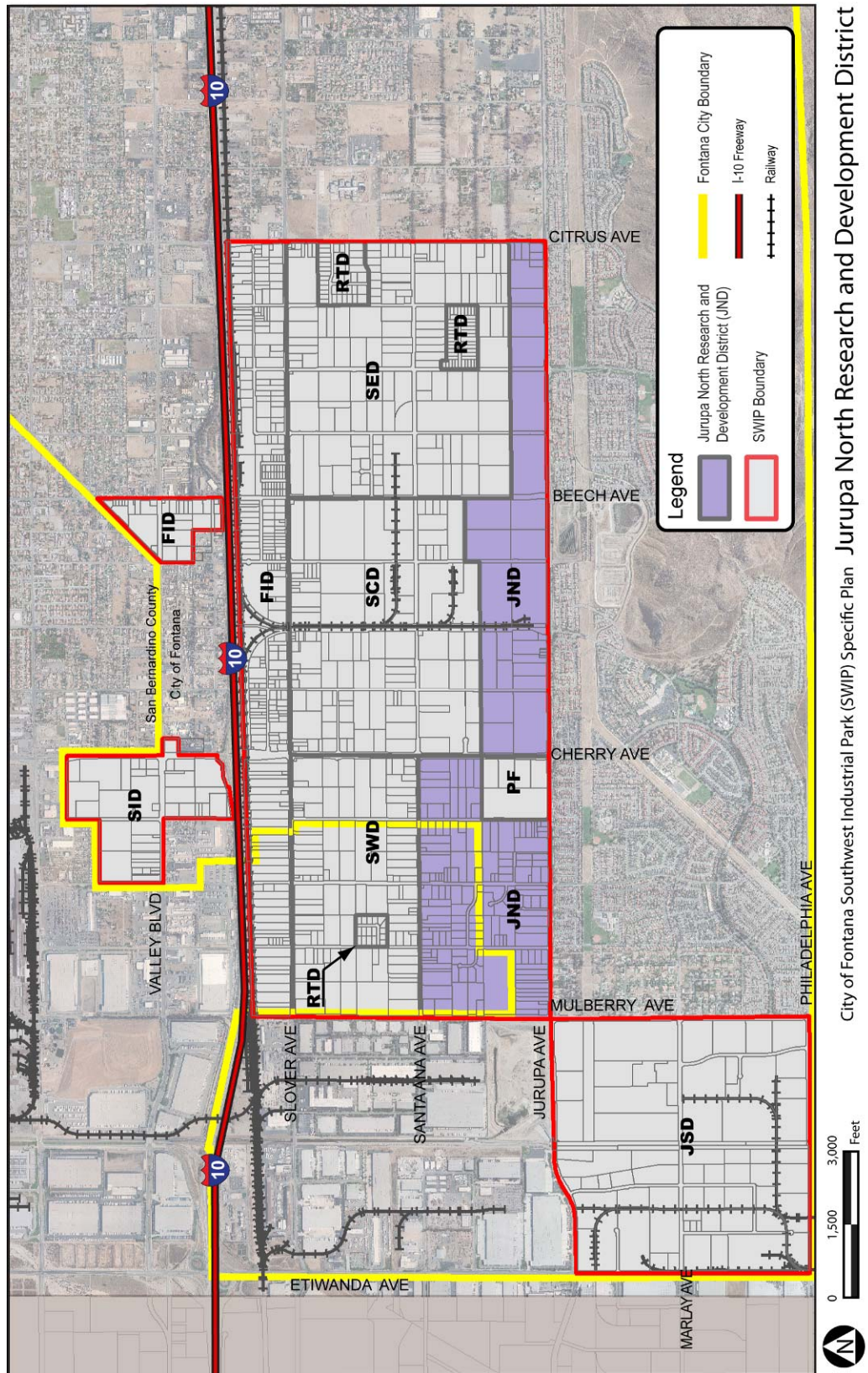


Exhibit 7-1 – Land Use Plan



### **7.3 Allowable Land Uses and Permit Requirements**

This Section identifies allowable land uses and their permit requirements.

#### **A. Allowed Uses**

Table 7-2 – Allowable Land Uses and Permit Requirements identifies the types of land uses allowed in the JND and the permit required to establish each use.

#### **B. Uses Not Listed**

Uses not listed in Table 7-2 are prohibited land uses, until and unless the Director of Community Development makes a similar use determination in compliance with Subsection 7.11.C Entitlement Procedures - Similar Use Determination.

#### **C. Other Applicable Regulations**

The provisions contained in this SWIP Specific Plan constitute the primary land use and development standards for the Specific Plan area. These regulations are in addition to the provisions in the City of Fontana Municipal Code.

This Specific Plan provides all development standards and guidelines necessary to approve subsequent project applications, unless otherwise noted. Permit processing procedures (e.g., noticing, hearing, appeals, and expiration procedures) and enforcement procedures are provided in Municipal Code Chapter 30 (Zoning and Development Code) shall apply, unless otherwise noted. Where there is a conflict between the provisions in this Specific Plan and those in the Zoning and Development Code, the Specific Plan provisions shall prevail to the extent allowable under Federal or State law. Where there is no conflict, both shall be applied concurrently.

#### **D. Definitions**

Definitions for land uses are provided in Appendix A Definitions. If a definition is not provided, the definitions in the Municipal Code shall apply. The Director of Community Development shall interpret the definitions; make a similar use determination in compliance with Subsection 7.11.C Entitlement Procedures – Similar Use Determination; and/or refer any questions to the Planning Commission for its determination. For the purposes of this Specific Plan, the following definitions shall apply:

1. Commercial Use: Activity involving the sale of goods or services carried out for profit.
2. Industrial Use: Those fields of economic activity including construction; manufacturing; transportation, communication, electric, gas, and sanitary services; and wholesale trade.

| Table 7-2 – Allowable Land Uses and Permit Requirements   |                                                                                                          |
|-----------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| Land Use                                                  | Permit Requirement                                                                                       |
|                                                           | "P" = Use Permitted by Right<br>"C" = Conditional Use Permit Required<br>"M" = Minor Use Permit Required |
|                                                           | Jurupa North Research and Development District (JND)                                                     |
| <b>Entertainment, Recreation and Public Assembly Uses</b> |                                                                                                          |
| Adult Businesses                                          | Refer to Municipal Code §30-11 & Municipal Code Chapter 15, Article XVIII                                |
| Open Space / Park                                         | P                                                                                                        |
| Public Assembly Facilities                                | C                                                                                                        |
| Recreational Facilities                                   | C                                                                                                        |
| <b>Industry, Manufacturing, and Processing Uses</b>       |                                                                                                          |
| Flex-Tech Multi-Use Facilities (1)                        | P                                                                                                        |
| Handcraft Industry/<br>Small-Scale Manufacturing          | P                                                                                                        |
| Manufacturing, Light                                      |                                                                                                          |
| • Appliance Manufacturing                                 | M                                                                                                        |
| • Electronics & Equipment                                 | P                                                                                                        |
| • Furniture and Fixture Manufacturing                     | M                                                                                                        |
| • Glass Product Fabrication                               | P                                                                                                        |
| • Product Assembly and Distribution                       | P                                                                                                        |
| Research and Development                                  | P                                                                                                        |
| <b>Residential Uses</b>                                   |                                                                                                          |
| Caretaker Housing (2)                                     | C                                                                                                        |
| <b>Retail Uses</b>                                        |                                                                                                          |
| Alcohol Sales,<br>Off-Site/On-Site                        | C                                                                                                        |
| Factory/Warehouse Outlet Store                            | P                                                                                                        |
| Retail Sales, General (3)                                 | P                                                                                                        |
| <b>Service Uses</b>                                       |                                                                                                          |
| Business Support Services                                 | P                                                                                                        |
| Financial Facilities                                      | P                                                                                                        |
| Catering Services                                         | P                                                                                                        |
| Food Service                                              |                                                                                                          |
| • Outdoor Dining                                          | P                                                                                                        |
| • Restaurants                                             | P                                                                                                        |
| Hotel                                                     | P                                                                                                        |
| Industrial Repair                                         | C                                                                                                        |
| Mini Storage Facility (3)                                 | P                                                                                                        |

**Table 7-2 – Allowable Land Uses and Permit Requirements (continued)**

| Land Use                                                              | Permit Requirement                                      |   |
|-----------------------------------------------------------------------|---------------------------------------------------------|---|
|                                                                       | "P" = Use Permitted by Right                            |   |
|                                                                       | "C" = Conditional Use Permit Required                   |   |
|                                                                       | "M" = Minor Use Permit Required                         |   |
| Jurupa North Research and Development District (JND)                  |                                                         |   |
| Motor Vehicle                                                         |                                                         |   |
| • Car Wash / Detailing                                                |                                                         | M |
| • Motor Vehicle Rental, Sales, and Leases                             |                                                         | C |
| • Service Stations (3)                                                |                                                         | C |
| Offices                                                               |                                                         | P |
| Personal Services                                                     |                                                         | P |
| School, Commercial                                                    |                                                         | M |
| Distribution, Wholesaling and Warehousing Uses                        |                                                         |   |
| Logistics and Distribution Facilities (not fronting on Jurupa Avenue) |                                                         | P |
| Warehousing Facilities                                                |                                                         | P |
| Transportation, Communications and Infrastructure Uses                |                                                         |   |
| Antennas                                                              |                                                         | M |
| Broadcasting Offices or Studios                                       |                                                         | P |
| Parking Facilities (3)                                                |                                                         | P |
| Other Uses                                                            |                                                         |   |
| Drive-Through Uses (3)                                                |                                                         | M |
| Outdoor Display & Sales                                               |                                                         | M |
| Public Facilities                                                     |                                                         | P |
| Temporary Uses                                                        | Municipal Code Chapter 30, Division 14 (Temporary Use). |   |

(1) See Section 7.9E

(2) See Section 7.4D

(3) See Section 7.9F

## 7.4 Development Standards

New land uses and structures and alterations to existing land uses and structures in the JND shall be designed, constructed, and established in compliance with the requirements in this Section.

### A. Intensity and Dimensional Standards

Table 7-3 – Intensity and Dimensional Standards provides the required intensity and dimensional standards for proposed development. The Director of Community Development is authorized to approve modifications of 10 percent or less of any land use district setback, lot width, lot depth, building coverage, building height, or wall height standard in compliance with the administrative variance procedures in Municipal Code Section 30-51.6 (Findings necessary for granting a variance). See Exhibit 7-2 – Dimensional Standards.

The Director of Community Development may grant an administrative variance from the requirements of this chapter where practical difficulties, unnecessary hardships, or results contrary to the intent of this chapter would occur from the strict and literal interpretation and enforcement of the Code. An administrative variance may be granted upon conditions which will ensure the protection of the public safety, health and welfare. To grant an administrative variance, the Director of Community Development must find from the facts presented that the following conditions exist.

- (1) That because of circumstances applicable to the property including size, shape, topography, location or surroundings, the strict application of this chapter will deprive the property of privileges enjoyed by other property in the vicinity and under identical zoning classification;
- (2) That the granting of such an administrative variance will be subject to conditions assuring that the variance shall not constitute a grant of special privileges inconsistent with the limitations upon other properties in the vicinity and zoning district in which the property is located;
- (3) That the administrative variance does not authorize a use or activity which is not a specifically allowed use in the zoning district in which the property is located; and
- (4) That the granting of one administrative variance will not be contrary to the general plan.

Table 7-3 – Intensity and Dimensional Standards

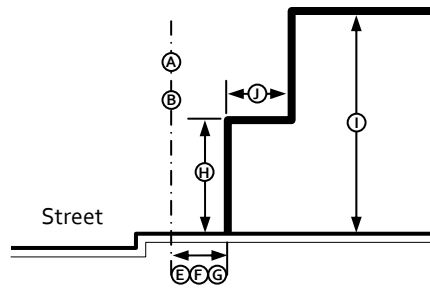
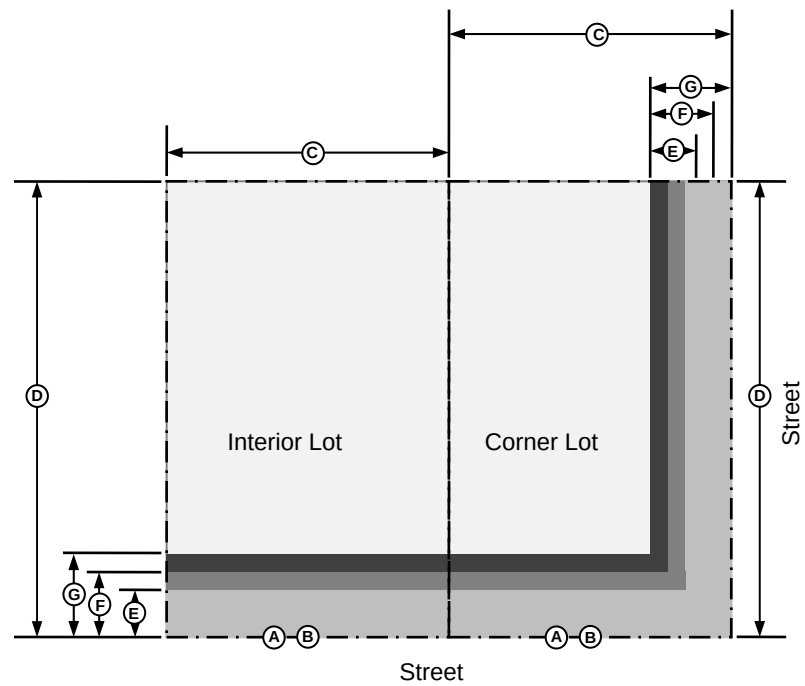
| Lot Size and Building Placement                                                                                                                                           |                                                     |                                                                                                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                           | Industrial Use                                      | Commercial Use                                                                                            |
| <b>INTENSITY</b>                                                                                                                                                          |                                                     |                                                                                                           |
| Floor Area Ratio (3)                                                                                                                                                      | 1.0 max. FAR                                        | 1.0 max. FAR                                                                                              |
| <b>LOT DIMENSIONS</b>                                                                                                                                                     |                                                     |                                                                                                           |
| Lot Size                                                                                                                                                                  | 45,000 sq ft min.                                   | 35,000 sq ft min (4)                                                                                      |
| Lot Width (C)                                                                                                                                                             | 200 ft min.                                         | 150 ft min.                                                                                               |
| Lot Depth (D)                                                                                                                                                             | 200 ft min.                                         | 200 ft min.                                                                                               |
| <b>BUILDING SETBACKS</b>                                                                                                                                                  |                                                     |                                                                                                           |
| Front Setback (1)                                                                                                                                                         |                                                     |                                                                                                           |
| Major Highway (Cherry and Jurupa) (G)                                                                                                                                     |                                                     |                                                                                                           |
| without building setback                                                                                                                                                  | 30 ft min. (5)                                      | 20 ft min. (5)                                                                                            |
| with 15 ft min building setback                                                                                                                                           | 30 ft min. (5)                                      | 15 ft min. (5)                                                                                            |
| Primary Highway (Beech and Mulberry) (F)                                                                                                                                  |                                                     |                                                                                                           |
| without building setback                                                                                                                                                  | 25 ft min. (5)                                      | 20 ft min(5)                                                                                              |
| with 15 ft min building setback                                                                                                                                           | 25 ft min. (5)                                      | 25 ft min. (5)                                                                                            |
| Secondary Highway/Collector Street (Citrus and Poplar/Almond, Banana, Calabash, Catawba, Elm, Hemlock, Live Oak, Redwood) (E)                                             |                                                     |                                                                                                           |
| without building setback                                                                                                                                                  | 20 ft min. (5)                                      | 15 ft min.(5)                                                                                             |
| with 15 ft min building setback                                                                                                                                           | 20 ft min. (5)                                      | 20 ft min. (5)                                                                                            |
| Side (Street) Setback (1)                                                                                                                                                 |                                                     |                                                                                                           |
| Major Highway (Cherry and Jurupa) (G)                                                                                                                                     | 20 ft min. (5)                                      | 20 ft min. (5)                                                                                            |
| Primary Highway (Beech and Mulberry) (F)                                                                                                                                  | 25 ft min. (5)                                      | 20 ft min. (5)                                                                                            |
| Secondary Highway/Collector Street (Citrus and Poplar/Almond, Banana, Calabash, Catawba, Elm, Hemlock, Live Oak, Redwood) (E)                                             | 20 ft min. (5)                                      | 15 ft min. (5)                                                                                            |
| Side (Interior) Setback (2)                                                                                                                                               | None                                                | None                                                                                                      |
| Rear Setback (2)                                                                                                                                                          | None                                                | None                                                                                                      |
| Adjacent to Public Facilities District (2)                                                                                                                                | 50 ft min.                                          | 50 ft min.                                                                                                |
| Railroad Setback (1)                                                                                                                                                      | Comply with Public Utilities Commission Regulations | Comply with Public Utilities Commission Regulations                                                       |
| Accessory Buildings (H)                                                                                                                                                   | Rear 50% of lot depth                               | Rear 50% of lot depth                                                                                     |
| Building Height and Mass                                                                                                                                                  |                                                     |                                                                                                           |
|                                                                                                                                                                           | Industrial                                          | Commercial                                                                                                |
| <b>HEIGHT</b>                                                                                                                                                             |                                                     |                                                                                                           |
| Primary Building                                                                                                                                                          | 60 ft max (I)                                       | 60 ft max (I)                                                                                             |
| Accessory Building                                                                                                                                                        | 1-story or 14 ft max. to eave/parapet line          | 1-story or 14 ft max. to eave/parapet line                                                                |
| Interior (Floor-to-Floor, excluding parking levels)                                                                                                                       | Ground floor – 12 ft min                            | Ground floor – 12 ft min                                                                                  |
| <b>UPPER STORY STEPBACKS</b>                                                                                                                                              |                                                     |                                                                                                           |
| All buildings regardless of street frontage                                                                                                                               | Allowed.                                            | Allowed.                                                                                                  |
| Adjacent to Major Highways (Cherry and Jurupa) and residential zones for buildings that have a front setback of between 15 and 30 feet from the public right-of-way line. |                                                     | Required: 15-foot upper-story setback for part of buildings above 30 feet from finished grade (H) (I) (J) |

Notes:

- (1) Setback is measured from public right-of-way line.
- (2) Setback is measured from property line.
- (3) See Section 7-10 Development Incentives
- (4) Lots in commercial center may have a minimum lot size less than 40,000 square feet.
- (5) Corner cut off setbacks per Specific Plan.

## Southwest Industrial Park Specific Plan

Jurupa North Research and Development District



- Ⓐ = Public Right-of-Way Line
- Ⓑ = Property Line
- Ⓒ = Lot Width
- Ⓓ = Lot Depth
- Ⓔ = Front/Side Setbacks – Secondary Highway/Collector Street
- Ⓕ = Front/Side Setback – Primary Highway
- Ⓖ = Front/Side Setback – Major Highway
- Ⓗ = 30 foot Height
- Ⓘ = 60 foot Height
- Ⓙ = 15 foot Stepback above 30 foot Building Height

Exhibit 7-2 – Dimensional Standards.

**B. Fences, Walls, and Screening**

1. Standards and Guidelines. Table 7-4 – Standards for Fences, Walls, and Screening contains standards for fences, walls, and screening. Refer to Section 7.9 Design Guidelines for guidelines about the design, materials, and construction of fences, walls, and screening.

**Table 7-4 – Standards for Fences, Walls, and Screening**

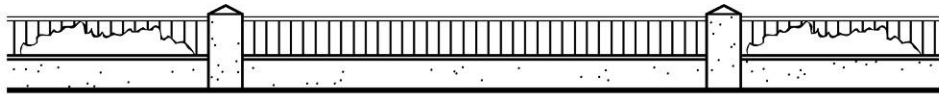
| <i>Location</i>                                                                             | <i>Materials<br/>See Section 7.9 Design Guidelines</i>                                                                                                         | <i>Maximum Height (1)</i>                                                                                 |
|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| Within front setback area                                                                   | Solid fencing/wall                                                                                                                                             | 36 inches                                                                                                 |
|                                                                                             | Open fencing/wall                                                                                                                                              | 6 ft                                                                                                      |
| Within street side setback area                                                             | Tubular steel construction allowed in required setback area if set back at least 15 ft from lot line. Solid masonry wall not allowed in required setback area. | 8 ft if necessary for security purposes, with 18-inch maximum width pilasters a minimum of 8 ft on center |
| Within interior side setback area                                                           | Any type of fence, hedge, or wall allowed, except that if abutting Public Facility District or railroad right-of-way, solid masonry wall only                  | 8 ft                                                                                                      |
| Within rear setback area                                                                    | Any type of fence, hedge, or wall allowed, except that if abutting Public Facility District or railroad right-of-way, solid masonry wall only                  | 8 ft                                                                                                      |
| Outside of a required setback area                                                          | Solid or open fencing/wall                                                                                                                                     | No height limit                                                                                           |
| Screening of outside storage materials and equipment from view from the public right-of-way | Solid fencing/wall                                                                                                                                             | 8 ft                                                                                                      |
| At intersections of alleys, streets, and driveways                                          | All materials, including solid/open fencing and walls                                                                                                          | 30 inches                                                                                                 |

Note: (1) All fences and walls shall meet the City's line of sight regulations, as determined by the City Engineer.

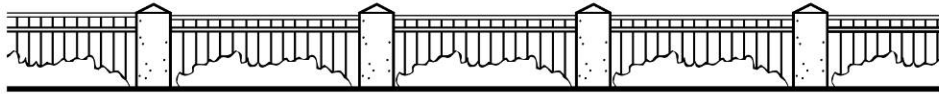
2. Materials

- a. Open fencing shall mean fencing with over 50 percent of the surface area open for free passage of light and air and through which the area behind the fence is visible to public view. See Exhibit 7-3 – Open and Solid Fencing.
- b. Solid fencing shall mean fencing with 50 percent or less of the surface area open for free passage of light and air and designed to conceal the area behind the fence from public view. See Exhibit 7-3 – Open and Solid Fencing.
- c. Barbed wire fence, electric fences, or similar fencing material is prohibited.
- d. Chain link fencing is allowed on interior property lines that are not visible from public rights-of-way.



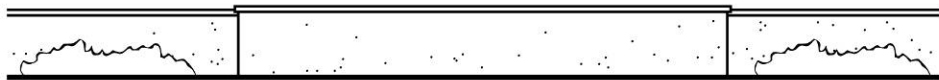


Elevation of Wall / Wrought Iron Combination

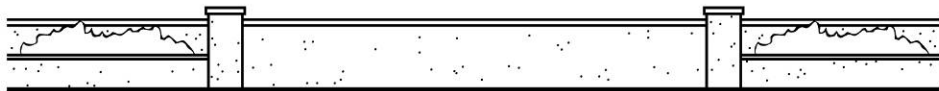


Elevation of Wrought Iron with Pilasters

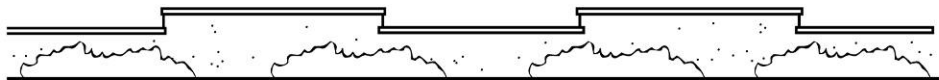
*Examples of Open Fencing*



Elevation of Staggered Wall



Elevation of Planters / Wall



Elevation of Wall with Breaks

*Examples of Solid Fencing*

Exhibit 7-3 – Open and Solid Fencing.

3. Screening and buffering

- a. Roof-mounted and ground-mounted mechanical equipment, utilities, storage, and solid waste storage areas shall be screened from adjoining properties and public right-of-ways by a visual barrier (e.g., wall, fence, landscape material, etc.) to the satisfaction of the Director of Community Development. Where only landscaping is used for screening, it shall be planted with five-gallon (minimum size) shrubs spaced to provide a continuous dense screen.
- b. Parking lot perimeters shall be screened and planted in compliance with Section 7.6 Parking and Loading Standards.

**C. Outdoor Activities and Storage**

1. Storage in Setback Areas. Material or equipment shall not be stored anywhere in the front yard. Temporary storage of construction materials during construction on the same site is permitted. Boats, campers, motor vehicles, trailers, equipment, materials, or antenna may be stored in side and rear yards, provided that they are outside the required side and rear setback areas identified in Table 7-3 – Intensity and Dimensional Standards.
2. Limitations on Outdoor Uses.
  - a. All uses shall be conducted entirely within a completely enclosed building that is attached to a permanent foundation, except approved outdoor dining areas, vehicle sales and rental businesses, parking areas, nursery growing areas, industrial activities, and other approved uses that require outdoor activities.
  - b. Areas used for the approved outdoor storage of vehicles, equipment and/or building materials (raw or finished) may use compacted slag, gravel, or other similar material deemed suitable by the Director of Community Development.
3. Outdoor Wholesaling. Outdoor wholesaling of goods and materials shall comply with the following:
  - a. A building shall be provided on the same parcel or on an adjacent parcel associated with the same business.
  - b. All display materials, including vehicles, shall be set back five feet from any landscaped area and shall not be located on required parking areas.
  - c. The entire area used for display purposes shall be surfaced with asphalt or an equally serviceable hard pavement surface. The surface shall be maintained in good condition.

- d. Storage of equipment or materials, with the exception of the display of vehicles for sale or rent, shall be screened by a visually solid masonry wall of minimum height six feet. The approving authority may determine through the design review process that the subject use requires a solid masonry wall higher than six feet.
- e. Outdoor display areas shall be maintained in a neat and orderly condition.

***D. Caretaker Housing***

Caretaker housing shall be:

- 1. Accessory to a principal use;
- 2. A maximum of 1,500 square feet total floor area unless otherwise approved by the Planning Commission;
- 3. Limited to one unit per lot; and
- 4. Subject to the setback requirements applicable to the principal structure with which it is associated.

***E. Solar Access***

A structure, fence, or wall shall not be constructed or modified, and vegetation shall not be placed or allowed to grow so as to obstruct more than 10 percent of the absorption area of a solar energy system on an abutting or adjacent lot at any time.

***F. Undergrounding of Utilities***

- 1. Utility service laterals to new development shall be installed underground.
- 2. Temporary overhead power and telephone facilities are permitted only during construction.
- 3. Placement, location and screening of utilities of any kind, which cannot be installed underground and must be placed above ground for function and safety reasons, require written approval by the Director of Community Development or the Planning Commission prior to any administrative or discretionary approval.
- 4. Transformer enclosures shall be designed of durable materials with finishes and colors used that are compatible and harmonious with the overall architectural theme.
- 5. All utilities including, but not limited to drainage systems, sewers, gas lines, water lines, and electrical, telephone, and communications wires and equipment shall be installed and maintained underground. Placement, location, and screening of utilities of any kind, which cannot be installed underground and must be placed above ground for function and safety reasons, require written approval by the Director of Community Development or the Planning Commission prior to any administrative or discretionary approval.

## 7.5 Landscape Standards

### A. Required Landscaping

This section provides the required minimum standards for all landscaped areas within any new and rehabilitated development.

1. Landscaped area means the entire parcel less the building footprint, driveways, nonirrigated portions of parking lots, and hardscapes (driveways, approaches, sidewalks, etc.). Decorative hardscapes used to enhance the landscape will be considered as part of the landscape area; this would include such things as cobble rock, decomposed granite, brickwork, stamped concrete, gravel, pavers, and water features.
2. Landscape setbacks along public right-of-ways shall incorporate landscape buffers with undulating and variable height earth-mounding (berms), and/or low walls, and required plant materials as shown in Table 7-5 – Landscape Standards.
3. Block wall and wrought iron fencing shall be located behind landscape setback area(s).
4. The developer shall submit to the City's Department of Engineering, a Landscape Documentation Package that conforms to the Water Efficient Landscape Ordinance, specified in the Municipal Code, Chapter 28 Vegetation.
5. All new development landscaping shall comply with the standards shown in Table 7-5 – Landscape Standards. Additional guidelines that should be considered are addressed in Section 7.10 Design Guidelines.
6. The Recommended Plant Materials Palette, Table 7-6 can be found immediately after this section. The plant materials palette is provided to ensure the installation of drought-tolerant, water efficient landscaping that will provide wind breaks and thrive in the local climate conditions. In an effort to provide visual elements that distinguish this district from others, please note that turf (grass) does not appear in the Plant Materials Palette, and shall be prohibited, in lieu of drought-tolerant ground covers.
7. Public right-of-way improvements, including street improvements, streetscape/landscape (parkway) improvements, and street tree requirements, are in Section 7.8 – Public Right-of-Way Streetscape.

## Southwest Industrial Park Specific Plan

Jurupa North Research and Development District

**Table 7-5 – Landscape Standards (1)**

|                                                                                                      |                                                                                                                                                                                                                                                                                                                        |
|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Minimum Landscaped Area<br>Mixture of ground cover, shrubs, trees, and decorative hardscape features | 15% of total site area, not including areas covered by buildings, structures, or areas used for approved outside storage, loading, or other activities.<br><br>25% of total site area, for hotels, not including areas covered by buildings, or areas used for approved outside storage, loading, or other activities. |
| Decorative hardscape features<br>Brick, stone, art, fountains, ponds, etc.                           | Maximum 15 % of the total required landscaping of site area                                                                                                                                                                                                                                                            |
| Minimum plant sizes in landscaped areas                                                              | Minimum Ratio of 1 tree/500 SF of landscape area                                                                                                                                                                                                                                                                       |
| Trees                                                                                                | 50% - 15-gallon<br>40% - 24-inch box<br>10% - 30-inch box or greater                                                                                                                                                                                                                                                   |
| Shrubs                                                                                               | 50% - 5-gallon<br>50% - 1-gallon                                                                                                                                                                                                                                                                                       |
| Groundcover                                                                                          | 12-inch maximum on center spacing that will cover area within one year of initial planting                                                                                                                                                                                                                             |
| Street trees in parkways per Master Plan of Parkway Trees                                            | 1 tree of not less than 24-inch box size for each 30 linear feet of street frontage<br><br>In parkways of inadequate width, street trees shall be planted in abutting setback/yard, in addition to the required buffer landscaping in setback area                                                                     |
| Landscape buffer in front setback area                                                               | 1 tree for each 20 linear feet minimum of street frontage and three 5-gallon shrubs for each tree<br><br>Undulating earth berms with informal tree and shrub massing and/or low decorative walls may be utilized.<br><br>Maximum slope: 3:1 for berms                                                                  |
| Additional landscape requirements                                                                    | 1 tree for each 800 square feet minimum of other required landscaped area and 8 shrubs for each tree.                                                                                                                                                                                                                  |
| Landscape Buffer<br>Front setback area and street-side setback area                                  | Major Highway: 30 ft minimum width<br>Primary Highway: 25 ft minimum width<br>Collector/Local Streets: 20 ft minimum width                                                                                                                                                                                             |
|                                                                                                      |                                                                                                                                                                                                                                                                                                                        |

Notes: (1) The Director of Community Development may require additional setbacks.

**B. Recommended Plant Materials Palette**

The Recommended Plant Materials Palette in Table 7-6 provides a listing of primarily drought-tolerant trees, shrubs, and ground covers to provide water-efficient landscaping in new projects. The limited selection of landscape material in the palette is envisioned to assist the user in incorporating sustainable landscaping into the project, while including enough variety of size, form, and density, to meet the requirements within buffer setbacks and screening techniques. Final selection shall be approved the City. The Director of Community Development shall approve artificial turf.

**Table 7-6 (a) – Recommended Plant Materials Palette  
Recommended Trees**



**Aleppo Pine**  
*Pinus halepensis*



**Floss Silk Tree**  
*Chorisia speciosa*



**Bottle Tree**  
*Brachychiton populneus*



**Holly Oak**  
*Quercus ilex*



**Canary Island Date Palm**  
*Phoenix canariensis*



**Mexican Fan Palm**  
*Washingtonia robusta*

**Table 7-6 (a) – Recommended Plant Materials Palette**  
**Recommended Trees (continued)**



**Canyon Live Oak**  
*Quercus chrysolepis*



**Sonoran Palo Verde**  
*Cercidium praecox*



**Date Palm**  
*Phoenix dactylifera*



**Stone Pine**  
*Pinus pinea*



**Agave**  
*Agave species*



**Coyote Brush**  
*Baccharis pilularis*



**Aloe**  
*Aloe species*



**India Hawthorne**  
*Rhaphiophis indica*

**Table 7-6 (b) – Recommended Plant Materials Palette**  
**Recommended Shrubs (continued)**





**Blue Hibiscus**  
*Alyogyne huegelii*



**Kangaroo Paw**  
*Anigozanthus hybrids*



**Bush Morning Glory**  
*Convolvulus cneorum*



**Lavender**  
*Lavandula species*



**Coffeeberry**  
*Rhamnus californicus*



**Natal Plum**  
*Garissa grandiflora*



**Purple Fountain Grass**  
*Pennisetum setaceum*  
'Cupreum'



**Silverberry**  
*Elaeagnus pungens*



Table 7-6 (b) – Recommended Plant Materials Palette  
Recommended Shrubs (continued)



teus



**Toyon**  
*Heteromeles*  
*arbutifolia*



**Red Hot Poker**  
*Kniphofia uvaria*



**Yaupon**  
*Ilex vomitoria*

(c) – Recommended Plant Materials Palette  
Recommended Groundcover



**Bearberry**  
*Arctostaphylos uva-*  
*ursi*



**Snow-in-Summer**  
*Cerastium*  
*tomentosum*



**Dymondia**  
*Dymondia margaretae*



**Trailing Lantana**  
*Lantana*  
*montevidensis*

Table 7-6 (c) – Recommended Plant Materials Palette  
Recommended Groundcover (continued)



**Peruvian Verbena**  
*Verbena peruviana*



**Wholly Thyme**  
*Thymus species*



**Rosea Ice Plant**  
*Drosanthemum  
floribundum*

## 7.6 *Parking and Loading Standards*

### **A. *Applicability***

This section contains regulations for off-street parking and loading. Regulations identify required number of parking and loading spaces for all new development projects and those proposing substantial modification to existing buildings. Please refer to Municipal Code Chapter 30 Zoning and Development Code for all parking and loading-related information or regulations not specifically addressed in this section.

### **B. *General Parking and Loading Regulations***

1. Methods of Calculation.
  - a. Multiple Uses. If more than one use is located on a site, the total number of required off-street parking and loading spaces shall be the sum of the requirements for the various uses computed separately. If individual uses on the same site have a floor area less than that for which loading spaces would be required, then the total gross floor area of all uses on the site or lot shall be used in determining the required number of loading spaces.
  - b. Fractional Number. Whenever the computation of the required number of off-street parking or loading spaces results in a fractional number, one additional space shall be required for a fraction of more than one-half, but shall not be required for a fraction of one-half or less.
2. Off-Site Location. Required off-street parking spaces shall be located on the same property as the use that they are intended to serve. Where the required parking spaces cannot be accommodated on the same property, they may be located in a separate off-site parking facility that is not more than 300 feet from the use(s) they serve.
3. Shared Use. Required off-street parking and loading spaces shall not be considered as providing parking or loading spaces for any other use, except where shared use facilities are approved in compliance with Subparagraph 5 Adjustments to Parking Requirements, below.
4. Uses Not Specified. For uses not specified, the Director of Community Development shall determine parking requirements based upon the requirements of the most similar use. See Subsection 7.11.C Entitlement Procedures - Similar Use Determination.
5. Adjustments to Parking Requirements.
  - a. Administrative Variance. The Director of Community Development is authorized to approve alternate parking plans involving a modification of 10 percent or less of any of the off-street parking and loading standards in compliance with Section 30-51.5 of Municipal Code Chapter 30.
  - b. Parking Study Option. An applicant may submit a separate parking and loading study for new development to the Director of Community Development for review

and approval. A parking and loading study shall provide sufficient data and information to justify the need for adjustments to the parking and loading requirements and shall analyze whether:

- i. Adequate off-street parking will be provided for the project;
  - ii. The project demonstrates the use of creative design concepts, including but not limited to shared parking facilities, transit accessibility, pedestrian amenities, and bicycle amenities;
  - iii. Environmental impacts associated with the project will not be increased by the modification of standards; and
  - iv. Traffic safety and pedestrian safety will be enhanced by the modifications.
- c. Shared Use Facility. Required off-street parking and loading spaces may be considered as providing parking or loading spaces for another use where joint facilities serving more than one use contain no less than the total number of spaces deemed necessary for each individual use added together with other uses. Where adjoining uses on the same site have different hours of operation with minimal conflict, the Director of Community Development may determine that some or all of the same spaces may be counted as satisfying the requirements for both uses, provided that the number of spaces shall not be less than the prescribed for the use requiring the greater number.

### ***C. Required Number of Parking Spaces***

Each land use shall provide the number of off-street parking spaces indicated in Table 7-7 – Parking Requirements by Land Use, except where adjustment has been granted in compliance with Subparagraph 7.6.B.5 Adjustments to Parking Requirements, above. For the purposes of this Section, the following definitions shall apply:

- 1. Commercial Use: Activity involving the sale of goods or services carried out for profit.
- 2. Industrial Use: Those fields of economic activity including construction; manufacturing; transportation, communication, electric, gas, and sanitary services; and wholesale trade.

## Southwest Industrial Park Specific Plan

Jurupa North Research and Development District

**Table 7-7 – Parking Requirements by Land Use**

| <b>Land Use</b>                                                                  | <b>Motor Vehicle Spaces (Minimum #)<br/>GFA—Gross Floor Area</b>                                                                                                                                                                                                                                                        | <b>Bicycle Spaces<br/>(Minimum #)</b>                                  |
|----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|
| <b>Entertainment, Recreation and Public Assembly Uses</b>                        |                                                                                                                                                                                                                                                                                                                         |                                                                        |
| Adult Businesses                                                                 | Subject to Parking Plan required by Municipal Code §15-918                                                                                                                                                                                                                                                              |                                                                        |
| Open Space / Park                                                                | Public - Determined by Parks and Recreation Department<br>Private - .25 spaces/1,000 sq ft of total park area                                                                                                                                                                                                           | 1 space/ 33 vehicle parking spaces                                     |
| Public Assembly Facilities                                                       | With fixed seats – 1 space/3 fixed seats;<br>Without fixed seats – 25 spaces/1,000 sq ft of seating area;<br>and<br>4 spaces/1,000 sq ft GFA outside assembly area                                                                                                                                                      | 1 space/33 vehicle parking spaces                                      |
| Recreational Facilities – Indoor, except for the following:                      | 1 space/each 4 persons of the facility's allowed maximum capacity, unless otherwise modified in compliance with Section 7.6.B.5 – Adjustments to Parking Requirements                                                                                                                                                   |                                                                        |
| Amusement Arcade                                                                 | 1 space/each 4 persons of the facility's allowed maximum capacity                                                                                                                                                                                                                                                       | 1 space/ 3 games up to 20 games; and 1 space/5 games for over 20 games |
| Athletic Club/Gym                                                                | 4 spaces/1,000 sq ft GFA;<br>20 spaces/1,000 sq ft of exercise floor area;<br>3 spaces/outdoor ball court                                                                                                                                                                                                               | .4 spaces/1,000 sq ft GFA                                              |
| Bowling Alley                                                                    | 4 spaces/lane, and<br>additional spaces required for restaurant and other accessory uses                                                                                                                                                                                                                                | 1 space/33 vehicle parking spaces                                      |
| Dancing                                                                          | 14 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                               |                                                                        |
| Pool/Billiard Hall                                                               | 2 spaces/table                                                                                                                                                                                                                                                                                                          | 1 space/5 tables                                                       |
| Skating Rink                                                                     | 14 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                               | 1 space/33 vehicle parking spaces                                      |
| Recreational Facilities – Outdoor, except for the following:                     | 1 space/each 4 persons of the facility's allowed maximum capacity, unless otherwise modified in compliance with Section 7.7.b.5 – Adjustments to Parking Requirements                                                                                                                                                   |                                                                        |
| • Golf driving range, batting cage                                               | 1 space/tee, cage, or similar; and<br>1 space/employee at maximum shift                                                                                                                                                                                                                                                 | 1 space/33 vehicle parking spaces                                      |
| • Swimming pools                                                                 | 14 spaces/1,000 sq ft of water surface area                                                                                                                                                                                                                                                                             | 1 space/33 vehicle parking spaces                                      |
| <b>Industry, Manufacturing, and Processing Uses</b>                              |                                                                                                                                                                                                                                                                                                                         |                                                                        |
| Flex-Tech Multi-Use Facilities                                                   | 3.5 spaces per 1,000 sq ft GFA                                                                                                                                                                                                                                                                                          | 1 space/33 vehicle parking spaces                                      |
| Handcraft Industry/ Small-Scale Manufacturing                                    | 2 spaces per 1,000 sq ft GFA                                                                                                                                                                                                                                                                                            | None                                                                   |
| Light Manufacturing<br>All uses listed under “Manufacturing, Light” in Table 7-2 | 1.85 spaces/1,000 sq ft GFA;<br>4 spaces/1,000 sq ft GFA of office space, sales, or similar use where those uses exceed 10% GFA; and<br>1 space/1 facility vehicle<br>Where multiple tenants and or uses occupy the same building, the parking shall be calculated based upon the floor area used by each tenant or use | 1 space/33 vehicle parking spaces                                      |
| Research and Development                                                         | 2 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                                | 1 space/33 vehicle parking spaces                                      |

Table 7-7 – Parking Requirements by Land Use (continued)

| <b>Land Use</b>                                                                                         | <b>Motor Vehicle Spaces (Minimum #)<br/>GFA—Gross Floor Area</b>                                                                                                                                                                                                                                                           | <b>Bicycle Spaces<br/>(Minimum #)</b> |
|---------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| <b>Residential Uses</b>                                                                                 |                                                                                                                                                                                                                                                                                                                            |                                       |
| Caretaker Housing                                                                                       | 2 spaces in an enclosed garage                                                                                                                                                                                                                                                                                             | None                                  |
| <b>Retail Uses</b>                                                                                      |                                                                                                                                                                                                                                                                                                                            |                                       |
| Alcohol Sales,<br>Off-Site/On-Site                                                                      | Same as required spaces for the underlying use (e.g., restaurant, public assembly facility, retail store, etc.), unless otherwise modified in compliance with Section 7.7.b.5 –Adjustments to Parking Requirements                                                                                                         |                                       |
| Factory/Warehouse<br>Outlet Store                                                                       | 5 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                                   | None                                  |
| Retail Sales, General<br>Not in shopping<br>center or<br>factory/warehouse<br>outlet mall)              | 4 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                                   | 1 space/33 vehicle<br>parking spaces  |
| Shopping Center                                                                                         | 5 spaces/1,000 sq ft GFA for the initial 10,000 sq ft; and<br>4 spaces/1,000 sq ft GFA for over 10,000 sq ft                                                                                                                                                                                                               | 1 space/33 vehicle<br>parking spaces  |
| <b>Service Uses</b>                                                                                     |                                                                                                                                                                                                                                                                                                                            |                                       |
| Business Support<br>Services                                                                            | 4 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                                   | None                                  |
| Catering Services                                                                                       | 2.5 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                                 | None                                  |
| Financial Facilities                                                                                    | 4 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                                   | 2 spaces                              |
| Food Service:                                                                                           |                                                                                                                                                                                                                                                                                                                            |                                       |
| <ul style="list-style-type: none"> <li>Fast food restaurant with drive through, walk-in area</li> </ul> | Indoor Seating: 13 spaces/1,000 sq ft GFA*<br><i>*GFA shall not include play areas without seating.</i><br>Outdoor Seating (patio area):<br>Less than 50% of indoor area: 6.5 spaces/1,000 sq ft<br>50% or more of indoor area: 13 spaces/1,000 sq ft                                                                      | 4 spaces                              |
| <ul style="list-style-type: none"> <li>Other restaurant</li> </ul>                                      | Indoor Seating: 10 spaces per 1,000 sq ft GFA<br>Outdoor Seating (patio area):<br>Less than 50% of indoor area: 5 spaces/1,000 sq ft<br>50% or more of indoor area: 10 spaces/1,000 sq ft                                                                                                                                  | 2 spaces                              |
| Hotel                                                                                                   | 1.25 spaces per guest room;<br>10 spaces/1,000 sq ft GFA for lounge/restaurant;<br>Spaces at following rates for conference/banquet facilities:<br>Less than 20 sq ft per room – 0 spaces<br>20 sq ft per room – 30 spaces/1,000 sq ft GFA<br>1 space per employee on maximum shift                                        | 1 space/33 vehicle<br>parking spaces  |
| Industrial Repair                                                                                       | 2 spaces/1,000 sq ft GFA for the initial 40,000 sq ft<br>1.3 spaces/1,000 sq ft additional GFA greater than 40,000 sq ft<br>4 spaces/1,000 sq ft GFA of office space, where those uses exceed 10% of GFA<br><b>OR</b><br>1 space for each employee on the maximum shift as determined by Director of Community Development | None                                  |

## Southwest Industrial Park Specific Plan

Jurupa North Research and Development District

**Table 7-7 – Parking Requirements by Land Use (continued)**

| <b>Land Use</b>                                         | <b>Motor Vehicle Spaces (Minimum #)<br/>GFA—Gross Floor Area</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>Bicycle Spaces<br/>(Minimum #)</b>                                                                        |
|---------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| Mini-Storage Facility                                   | 1.75 spaces/100 units; and<br>1 space/employee                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | None                                                                                                         |
| Offices                                                 | 4 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Under 50,000 sq ft<br>– 2 spaces<br>50,001 – 100,000<br>sq ft – 3 spaces<br>Over 100,000 sq ft<br>– 5 spaces |
| Personal Services                                       | 4.4 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | None                                                                                                         |
| School, Commercial                                      | 1 space/teaching and non-teaching position on maximum<br>shift; and<br>1 space/2 students on maximum enrollment                                                                                                                                                                                                                                                                                                                                                                                                  | 1 space/33 vehicle<br>parking spaces                                                                         |
| <b>Motor Vehicle</b>                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                              |
| • Car Wash<br>Full-Service                              | 1 space/employee;<br>Stacking for 5 vehicles for car wash lane<br>Reserve spaces equal to 3 times the wash lane capacity                                                                                                                                                                                                                                                                                                                                                                                         | None                                                                                                         |
| • Car Wash<br>Self-Service                              | 2 spaces/bay                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | None                                                                                                         |
| • Motor Vehicle<br>Rental, Sales,<br>and Leases         | Indoor display/sale/service = 3.3 spaces/1,000 sq ft GFA;<br>Outdoor display/sale = .40 spaces/1,000 sq ft GFA; and<br>1 space/employee                                                                                                                                                                                                                                                                                                                                                                          | None                                                                                                         |
| • Service Stations                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                              |
| With<br>convenience<br>market                           | 5 spaces/1,000 sq ft GFA; and 5 spaces/service bay                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1 space/10 vehicle<br>parking spaces                                                                         |
| Without<br>convenience<br>market                        | 3.3 spaces/1,000 sq ft or 5 spaces/service bay, whichever is<br>more; minimum of 4 spaces                                                                                                                                                                                                                                                                                                                                                                                                                        | None                                                                                                         |
| • Vehicle Auctions                                      | <b>Automobile or boat sales (new/used/auctions)</b><br>1 space/300 sq ft of indoor display, sales, or service area;<br>1 space/2,500 sq ft of outdoor sales or display area; and<br>1 space/employee<br><b>Truck sales/services (new/used/auction)</b><br>1 space/250 sq ft of sales area;<br>1 space/3,000 sq ft of outdoor sales or display area; and<br>1 space/employee                                                                                                                                      | None                                                                                                         |
| <b>Distribution, Wholesaling and Warehousing Uses</b>   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                              |
| Logistics and<br>Distribution Facilities<br>(High Cube) | <b>Vehicle Parking:</b><br>1 space/1,000 sq ft GFA for the first 20,000 sq ft;<br>1 space/2,000 sq ft for the second 20,000 sq ft;<br>1 space/5,000 sq ft for that portion over 40,000 sq ft.<br>No add'l spaces if office area less than 10% of total<br>building square footage.<br>Office space rate if office area over 10% of total building<br>square footage.<br><b>Truck and Trailer Parking:</b><br>1 oversized truck space/5,000 sq ft GFA*<br>*Truck docks shall not be included in this calculation. | None                                                                                                         |
| Warehousing<br>Facilities                               | 1 space/1,000 sq ft GFA for the initial 40,000 sq ft;<br>1 space/4,000 sq ft of additional GFA greater than 40,000 sq<br>ft; 4 spaces/1,000 sq ft GFA of office space. Where multiple<br>tenants and or uses occupy the same building, the parking<br>shall be calculated based upon the floor area used by each<br>tenant or use                                                                                                                                                                                | None                                                                                                         |

**Table 7-6 Parking Requirements by Land Use (continued)**

| <b>Land Use</b>                                               | <b>Motor Vehicle Spaces (Minimum #)<br/>GFA—Gross Floor Area</b>                   | <b>Bicycle Spaces<br/>(Minimum #)</b> |
|---------------------------------------------------------------|------------------------------------------------------------------------------------|---------------------------------------|
| <b>Transportation, Communications and Infrastructure Uses</b> |                                                                                    |                                       |
| Antennas                                                      | 1 space                                                                            | None                                  |
| Broadcasting Offices<br>or Studios                            | 5 spaces/1,000 sq ft GFA                                                           | None                                  |
| <b>Other Uses</b>                                             |                                                                                    |                                       |
| Drive-Through                                                 | Stacking for 7 vehicles at each bay, window, lane, ordering<br>station, or machine | None                                  |
| Outdoor Display &<br>Sales                                    | 1 space/1,000 sq ft of outdoor merchandise areas                                   | None                                  |
| Public Facilities                                             | Per Public Agency                                                                  |                                       |
| Temporary Uses                                                | Per Temporary Use Permit                                                           |                                       |

*Note: Sources consulted to compile the table entries include the Municipal Code; The Dimensions of Parking, ULI and National Parking Association, 5th Edition, 2010; Recommended Zoning Ordinance Provisions, National Parking Association, December 2006; and Parking Standards, APA Planning Advisory Service Report 510/511; November 2002.*

#### **D. Required Number of Loading Spaces**

Each land use shall provide the number of off-street loading spaces indicated in Table 7-8 – Loading Space Requirements by Land Use. Requirements for uses not specifically listed shall be determined by the Director of Community Development based upon the requirements for comparable uses and upon the particular characteristics of the proposed use. For other standards (e.g., size of loading spaces, location, turning radius, etc.), refer to Article XI Off-Street Parking and Loading Standards, Division 4 Loading Area Regulations, in Municipal Code Chapter 30 Zoning and Development Code



## Southwest Industrial Park Specific Plan

Jurupa North Research and Development District

| Table 7-8 – Loading Space Requirements by Land Use                           |                                                                                                                                                                                         |                     |
|------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| Land Use                                                                     | Loading Spaces (Minimum #)                                                                                                                                                              | Type                |
| Entertainment, Recreation and Public Assembly Uses                           |                                                                                                                                                                                         |                     |
| Public Assembly Facilities                                                   | 1 space; and<br>Additional spaces as required by design review                                                                                                                          | Van (1)             |
| Recreational Facilities                                                      | 0 - 29,999 sq ft: 1 space<br>30,000 - 99,999 sq ft: 2 spaces<br>Over 100,000 sq ft: 3 spaces                                                                                            | Truck (2)           |
| Industry, Manufacturing, and Processing Uses                                 |                                                                                                                                                                                         |                     |
| Flex-Tech Multi-Use Facilities                                               | 5,000 - 30,000 sq ft: 1 space; and<br>1 additional space for each additional 30,000 sq ft                                                                                               | Truck (2)           |
| Handcraft Industry/ Small-Scale Manufacturing                                |                                                                                                                                                                                         |                     |
| All uses listed under “Manufacturing, Light” in Table 7-2                    |                                                                                                                                                                                         |                     |
| Research and Development                                                     |                                                                                                                                                                                         |                     |
| Retail Uses                                                                  |                                                                                                                                                                                         |                     |
| Retail Sales, General and Factory/Warehouse Outlet Store                     | Up to 10,000 sq ft: 1 space                                                                                                                                                             | Truck (2)           |
|                                                                              | 10,001 - 30,000 sq ft: 1 space<br>30,001 - 90,000 sq ft: 2 spaces<br>Over 90,000 sq ft: 2 spaces; and 1 additional space for each additional 50,000 sq ft over the initial 90,000 sq ft | Tractor Trailer (3) |
| Service Uses                                                                 |                                                                                                                                                                                         |                     |
| All uses listed under “Service Uses” in Table 7-2; except for the following: | Up to 10,000 sq ft: 1 space                                                                                                                                                             | Truck (2)           |
|                                                                              | 10,001 - 30,000 sq ft: 1 space<br>30,001 - 90,000 sq ft: 2 spaces<br>Over 90,000 sq ft: 2 spaces; and 1 additional space for each additional 50,000 sq ft over the initial 90,000 sq ft | Tractor Trailer (3) |
| Hotel                                                                        | 10,000 - 50,000 sq ft: 1 space                                                                                                                                                          | Van (1)             |
|                                                                              | Over 50,000 sq ft: 1 space                                                                                                                                                              | Truck (2)           |
| Industrial Repair                                                            | 5,000 - 30,000 sq ft: 1 space; and<br>1 additional space for each additional 30,000 sq ft                                                                                               | Truck (2)           |
| Motor Vehicle                                                                |                                                                                                                                                                                         |                     |
| • Motor Vehicle Rental, Sales, and Leases                                    | 1 space                                                                                                                                                                                 | Tractor Trailer (3) |
| • Service Stations                                                           | 1 space                                                                                                                                                                                 | Tractor Trailer (3) |
| Offices                                                                      | 5,000 – 50,000 sq ft: 1 space                                                                                                                                                           | Van (1)             |
|                                                                              | Over 50,000 sq ft: 1 space                                                                                                                                                              | Truck (2)           |
| Personal Services                                                            | Up to 10,000 sq ft: 1 space                                                                                                                                                             | Van (1)             |
|                                                                              | 10,001 - 30,000 sq ft: 1 space<br>30,001 - 90,000 sq ft: 2 spaces<br>Over 90,000 sq ft: 2 spaces; and 1 additional space for each additional 50,000 sq ft over the initial 90,000 sq ft | Truck (2)           |

**Table 7-8 – Loading Space Requirements by Land Use (continued)**

| <b>Land Use</b>                                       |                                                                                           |                        |
|-------------------------------------------------------|-------------------------------------------------------------------------------------------|------------------------|
|                                                       | <i>Loading Spaces (Minimum #)</i>                                                         | <i>Type</i>            |
| School, Commercial                                    | 1 space; and additional spaces required by design review                                  | Van (1)                |
| <b>Distribution, Wholesaling and Warehousing Uses</b> |                                                                                           |                        |
| Warehousing Facilities                                | 5,000 - 30,000 sq ft: 1 space; and<br>1 additional space for each additional 30,000 sq ft | Tractor Trailer<br>(3) |

**Notes:**

- (1) A van loading space shall be a minimum of 12 ft wide by 19 ft long with a minimum 10 ft overhead clearance.
- (2) A truck loading space shall be a minimum of 12 ft wide by 45 ft long with a minimum 14 ft overhead clearance.
- (3) A tractor trailer loading space shall be a minimum of 12 ft wide by 70 ft long with a minimum 14 ft overhead clearance.

**E. Landscaping Standards for Parking Areas**

Within any parking area, one tree shall be planted for every five single-row parking stalls or 10 double-row parking stalls. Eighty percent of these shall be 15 gallons in size and the remaining 20 percent shall be 24-inch box or larger in size. If for some reason the contractor is unable to distribute trees in the interior of the parking area in compliance with these standards, the Director of Community Development may approve the placement of no more than 40 percent of the trees within the perimeter of the parking area. Planters shall not have a dimension less than four feet, excluding the thickness of the curbing. These requirements may be reduced for industrial parking areas that are screened from public view.

1. Parking areas shall contain a minimum landscape area equivalent to 30 percent of the total required 15 percent landscaping for the total site area.
2. Parking area perimeter landscaping.
  - a. Parking areas for nonresidential uses abutting or adjacent to residentially zoned property shall provide a landscape strip that is a minimum of 10 feet in width, excluding overhang, curb, and walkways, between the parking area and the common property line bordering the residentially zoned property. Parking areas shall be screened from the residentially zoned property by a solid decorative masonry wall that is a minimum of six feet in height.
  - b. Parking areas for nonresidential uses abutting or adjacent to non-residentially zoned property or a street shall install a landscape strip that is a minimum of five feet in width, excluding overhang, curb, and walkways, between the parking area and the common property line or the parking area and the street right-of-way. This requirement may be reduced or modified if a joint access agreement exists that is satisfactory to the Director of Community Development. Parking areas shall be screened from streets through combinations of plant materials, earth berms, raised planters, grade separations, or low walls. Slopes shall not exceed three to one or exceed 36 inches in height measured from the parking lot surface.
  - c. Plant materials, walls, or structures within a traffic sight area shall not block sight lines from driveways to streets and shall not exceed 36 inches in height.

- d. The minimum width of a landscape finger shall be five (5) feet.
  - e. End of aisle spaces adjacent to landscape finger shall be two feet wider for step out area.
3. Parking area interior landscaping.
- a. Tree number and location. One tree shall be provided for each four parking spaces and shall be evenly spaced throughout the interior parking area at a rate of one tree for every eight parking spaces. See Exhibit 7-4 – Parking Lot Landscaping. The required number of trees in the interior area shall not include trees required around the parking area perimeter. Trees are not required for tractor-trailer parking. A minimum of one cluster of trees shall be provided for each 100 feet of a row or double row of parking spaces. Trees shall be located in planters that are bounded on at least two sides by parking area paving. Planters shall have a minimum exterior dimension of five feet.

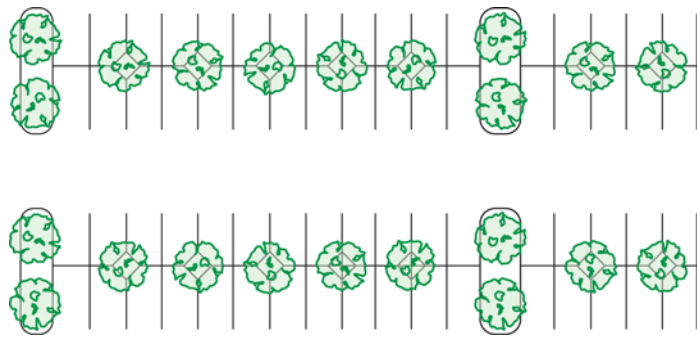


Exhibit 7-4 – Parking Lot Landscaping

- b. Tree size. All trees within the parking area shall be a minimum 24-inch box container at time of planting.
- c. Landscape protection. Landscaping shall be protected by concrete curbs of at least six inches in height. An end-of-aisle planter shall be provided at the ends of all parking aisles. Finger aisle planters shall be a minimum of nine feet wide and end-of-aisle planters shall be a minimum of seven feet wide, as measured from the inside of the curb. The parking space side of finger and end-of-aisle planters shall have a 24-inch wide concrete surface measured from the face of the curb. Planters shall be landscaped with a mixture of trees, shrubs, and ground cover. Planting areas shall have round corners instead of 90 degree corners and shall be shaped to allow vehicle movements. The Director of Community Development may approve alternative barriers designed to protect landscaped areas from vehicle damage. Wheel stops may be placed to allow for two feet of vehicle overhang area within the dimension of the parking space. To increase the parking lot landscaped area, a maximum of two feet of the parking stall depth may be landscaped with low-growth, hardy materials in-lieu of paving, allowing a bumper overhang while maintaining the required parking dimensions. However, the overhang area shall not be counted as part of the minimum landscape area required by paragraph (1) above, and when adjacent to a required landscaping strip shall be in addition to the

- minimum required width. Fixtures (e.g., lights, sprinklers) that are higher than the curb are prohibited within a bumper overhang area. Curbing that creates a bumper overhang barrier shall not exceed a height of five inches.
- d. Parking areas with more than 100 spaces shall provide an appropriate entry feature consisting of a concentration of landscape elements, including trees, flowering plants, enhanced paving, and project identification.
4. Parking structures. A landscaping strip 10 feet wide shall be provided on all sides of a parking structure. One tree shall be provided for each 20 to 40 feet of perimeter of the structure, based on species selected. These trees shall be distributed evenly throughout the subject landscape area.

## 7.7 Sign Standards

### A. Applicability

This section contains standards and guidelines for signage to ensure that signs are consistent with the overall quality and character of anticipated new development. Regulations identify permitted sign types; provide standards for number of signs, size, and location; and provide design guidelines for color, materials, and illumination. Please refer to the Fontana Municipal Code for all sign-related information or regulations not specifically addressed in this section.

### B. Standards and Guidelines

1. Standards. The following standards shall apply to all signs, regardless of type:
  - a. Sign types not listed in this Section are not permitted.
  - b. Linear Frontage Ratio. For each establishment, one and one-half (1 ½) square feet of total sign area shall be allowed for each linear foot of building frontage ("Linear Frontage Ratio"). Unless otherwise noted, all signs (including temporary signs) shall count toward the total sign area permitted based on the Linear Frontage Ratio. For multi-tenant buildings, each establishment shall be calculated individually. For corner establishments, each facade shall be calculated individually. Permitted sign area based on the linear frontage of one establishment or facade shall not be placed on another establishment or facade.
  - c. Signs shall not be animated.
  - d. Commercial messages that identify, advertise, or attract attention to a business, product, service, or event or activity sold, existing, or offered elsewhere than upon the same property where the sign is displayed are expressly prohibited.
  - e. In the event of a conflict between this Section and any other City regulation, the provisions of this Section shall apply.
  - f. All issues not specifically addressed herein (e.g., signage in the public right-of-way, exempt signs, permit processing, etc.) shall be addressed pursuant to the Fontana Municipal Code.
2. Guidelines. The following guidelines shall apply to all signs, regardless of type.
  - a. Design Compatibility
    - Provide signage that is compatible with the building architecture and coordinate sign materials and colors with the building facade/storefront design.
    - Place signs in accordance with facade rhythm, scale, and proportion.
    - Ensure that signs associated with multi-tenant buildings are complementary to one another. A consistent location for tenant identification signs is recommended.

b. Location

- Signs shall be placed at or near the public entrance to a building or main parking area to indicate the most direct access to the business.
- Signs shall not be located so that they cover or interrupt the architectural details or ornamentation of a building's facade.
- Signs shall not project above the edge of the rooflines and shall not obstruct windows and/or doorways.

c. Sign Legibility

- Avoid hard-to-read, intricate typefaces. Typefaces that are difficult to read reduce the sign's ability to communicate.
- Avoid spacing letters and words too close together. Lettering shall not occupy more than 75 percent of the sign face.
- Limit the number of lettering styles in order to increase legibility. Signs shall be limited to no more than two styles for small signs (generally up to 10 square feet) and three styles for larger signs.
- Use significant contrast through incorporating light colored letters and a darker, contrasting background to provide the most visible and best-looking image.
- Incorporate business identity symbols and logos.
- Logo means any symbol or any combination thereof adopted and used by an individual or corporation to identify goods made or sold or services rendered by an individual or corporation and to distinguish them from goods made or sold or services rendered by others and that is nationally or State of California registered.

d. Color and Materials

- Bright day-glo (fluorescent) colors shall be avoided as they are distracting and do not blend well with other background colors.
- Sign colors shall relate to and complement the materials or color scheme of the buildings, including accent and trim colors.
- Sign materials shall be selected with consideration for the architectural design of the building's façade and also contribute to the legibility of the sign.
- Construct signs of durable, high-quality materials.
- Wood, paper and cloth signs, and painted wall signs are prohibited.

e. Illumination

- Individually illuminated letters, either internally illuminated or back-lighted solid letters (reverse channel), are a preferred alternative to internally illuminated plastic-faced cabinet signs.
- Signs shall be comprised of individual letters.
- The use of backlit, individually cut letter signs is strongly encouraged for all types of business and signs, including monument-type signs.
- Whenever indirect lighting fixtures are used, care shall be taken to properly shield the light source.

## f. Electrical Raceways and Conduits

- Electrical transformer boxes and raceways shall be concealed from public view.
- All exposed conduit and junction boxes shall be appropriately concealed from public view.

**C. Sign Types**

For the purposes of this plan, Table 7-9 – Sign Types indicates the signs that are allowed in the Jurupa North Research and Development District.

| Table 7-9 – Sign Types |                                                                                                               |
|------------------------|---------------------------------------------------------------------------------------------------------------|
| 1                      | <b>Grand Projecting Sign</b><br>Hotels, movie theaters, live performance theaters                             |
| 2                      | <b>Marquee Sign</b><br>Movie theaters and live performance theaters with a capacity of 500 persons or greater |
| 3                      | <b>Grand Wall Sign</b><br>Non-residential uses with unfenestrated wall areas of 2,000 square feet or greater  |
| 4                      | <b>Wall Sign</b><br>Non-residential uses with a dedicated ground floor entrance                               |
| 5                      | <b>Projecting Sign</b><br>Non-residential uses with a dedicated ground floor entrance                         |
| 6                      | <b>Awning Valance Sign</b><br>Non-residential uses with a dedicated ground floor entrance                     |
| 7                      | <b>Awning Side Sign</b><br>Non-residential uses with a dedicated ground floor entrance                        |
| 8                      | <b>Canopy Fascia Sign</b><br>Non-residential uses with a dedicated ground floor entrance                      |
| 9                      | <b>Under-Awning or Under-Canopy Sign</b><br>Non-residential uses with a dedicated ground floor entrance       |
| 10                     | <b>Recessed Entry Sign</b><br>Non-residential uses with a dedicated ground floor entrance                     |
| 11                     | <b>Window Sign</b><br>Non-residential uses with a dedicated ground floor entrance                             |
| 12                     | <b>Temporary Window Sign</b><br>Non-residential uses with a dedicated ground floor entrance                   |
| 13                     | <b>Temporary Wall Sign</b><br>Non-residential uses with a dedicated ground floor entrance                     |
| 14                     | <b>Monument Sign</b><br>Any building with continuous linear street frontage of 200 feet or greater            |
| 15                     | <b>Directional Sign</b><br>Each vehicle entrance                                                              |
| 16                     | <b>Accessory Sign</b><br>Identified specific uses                                                             |

## **D. Sign Type Standards and Guidelines**

This section provides Standards and Guidelines for each Sign Type.

### **1. Grand Projecting Sign**

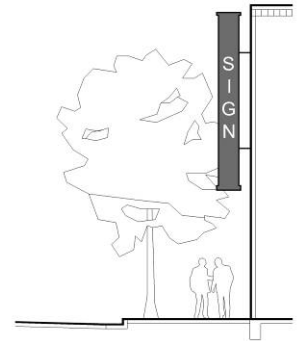
Grand Projecting Signs are tall, large, vertically-oriented signs that project from the building perpendicular to the façade and that are structurally integrated into the building.

#### **a. Standards**

- i. Only one (1) Grand Projecting Sign shall be permitted per establishment.
- ii. The Grand Projecting Sign areas shall not count towards the total sign area permitted based on the Linear Frontage Ratio.
- iii. Grand Projecting Signs shall be no taller than 30 feet from the bottom-most part of the sign to the tallest part of the sign.
- iv. Grand Projecting Signs shall project no more than six feet from the façade of the building.
- v. No portion of a Grand Projecting Sign shall be lower than 12 feet above the level of the walkway over which it projects.
- vi. Letter width shall not exceed two-thirds (2/3) of the sign width.
- vii. No portion of a Grand Projecting Sign shall extend more than 10 feet above the roofline.

#### **b. Commercial Guidelines**

- i. Materials used in Grand Projecting Signs shall be metal and paint only.
- ii. Grand Projecting Signs may be illuminated.
- iii. Letters shall be oriented right-side-up and stacked in a single upright row with the first letter being at the top of the sign and the last letter being at the bottom.



1) Grand Projecting Sign.

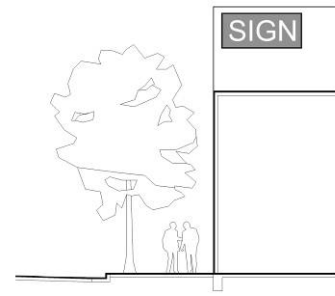


## 2. **Grand Wall Sign**

Grand Wall Signs are large signs located on, and parallel to, large unfenestrated building wall areas.

### a. Standards

- i. A Grand Wall Sign shall only be located on unfenestrated wall areas of 2,000 square feet in size or greater.
- ii. Only one (1) Grand Wall Sign shall be permitted per establishment.
- iii. The Grand Wall Sign area shall not count towards the total sign area permitted based on the Linear Frontage Ratio.
- iv. A Grand Wall Sign shall not exceed 1,000 square feet or 25 percent of the total wall area, whichever is less.
- v. Grand Wall Signs shall project no more than one (1) foot from the façade of the building.



2) Grand Wall Sign.

### b. Commercial Guidelines

- i. Materials used in Grand Wall Signs shall be wood, ceramic, or metal.
- ii. Grand Wall Signs shall be illuminated by external illumination only.

### c. Industrial Guidelines

- i. Materials used in Grand Wall Signs shall be ceramic or metal.
- ii. Grand Wall Signs shall be illuminated by external illumination only.

## 3. **Wall Sign**

Wall Signs are signs that are located on, and parallel to, a building wall. Business Identification Wall Signs are signs that announce the name of a business within a building and Building Identification Wall Signs are signs that announce the name of a building. Both are located on, and parallel to, a building wall.

### a. Standards

- i. Wall Signs shall be located below the second floor and within the middle 50 percent of the building or tenant frontage measured from lease line to lease line. Building Identification Wall Signs shall be located only on the



3) Building Identification Wall Sign.

- frieze, cornice, or fascia area of storefront level; frieze, cornice, fascia, parapet of the uppermost floor; or above the entrance to main building lobby.
- ii. No Wall Sign shall exceed 150 square feet in size. Building Identification Wall Signs shall be no taller than 24 inches in height.
- iii. Wall Signs shall count towards the total sign area permitted based on the Linear Frontage Ratio, except that the area of Building Identification Wall Signs shall not count towards the total sign area permitted based on the Linear Frontage Ratio.
- iv. Wall Signs shall project no more than one (1) foot from the façade of the building.



3) Business Identification Wall Sign.

b. Commercial Guidelines

- i. Materials used in wall signs shall be wood, ceramic, and/or metal. Wall signs may also be inscribed into the façade of the building. Building Identification Wall Signs shall be inscribed into the façade or constructed of individual metal letters.
- ii. Wall Signs shall be illuminated by external illumination or halo illumination only.
- iii. Where individual letters are used, letters shall be three-dimensional, created by raised letter forms mounted to the building façade or sign panel, or by incised openings cut out from the sign panel.
- iv. New wall signs for individual businesses in a shopping center shall be placed consistent with the location of signs for other businesses in the center. This will establish visual continuity among storefronts and create a unified appearance for the center.
- v. When signs that are attached to a wall are removed, holes and other disfigurements of the wall's surface shall be patched and painted to match surrounding areas.

c. Industrial Guidelines

- i. Materials used in wall signs should be ceramic, and/or metal. Wall signs may also be inscribed into the façade of the building. Building Identification Wall Signs should be inscribed into the façade or constructed of individual metal letters.
- ii. Wall signs shall be illuminated by external illumination, exposed neon tube illumination, exposed incandescent bulb illumination, or halo illumination only. Building

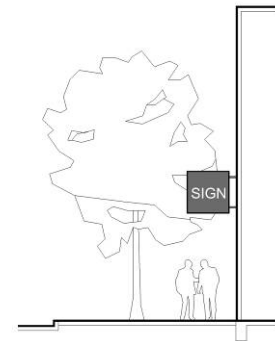
Identification Wall Signs shall be illuminated by external illumination or halo illumination only.

- iii. Where individual letters are used, letters shall be three-dimensional, created by raised letter forms mounted to the building façade or sign panel, or by incised openings cut out from the sign panel.
- iv. When signs that are attached to a wall are removed, holes and other disfigurements of the wall's surface shall be patched and painted to match surrounding areas.

### 4. **Projecting Sign**

Projecting Signs are signs that are oriented perpendicularly to the building façade and are either (1) suspended under a bracket, armature, or other mounting device or (2) are cantilevered (i.e., structurally affixed to the building).

- a. Standards
  - i. Projecting Signs shall only be mounted on the wall area below the second floor.
  - ii. No Projecting Sign shall exceed 16 square feet in size.
  - iii. Projecting Signs shall project no more than four feet from the façade of the building.
  - iv. No portion of a Projecting Sign shall be lower than eight feet above the level of the walkway over which it projects.
- b. Commercial and Industrial Guidelines
  - i. Projecting Signs that are suspended under a bracket, armature, or other mounting device shall be metal and paint materials only and shall be illuminated by external illumination only.
  - ii. Projecting Signs that are cantilevered signs shall be metal and paint only and shall be illuminated by external illumination or halo illumination only.
  - iii. Sign supports and brackets shall be compatible with the design and scale of the sign and the architectural design of the building.



4) Cantilevered Projecting Sign.



4) Suspended Projecting Sign.

### 5. **Awning Valance Sign**

Awning Valance Signs are signs applied to the awning valance and are contained completely within the valance.

- a. Standards
  - i. Lettering for Awning Valance Signs shall include one (1) line of lettering not to exceed two-thirds (2/3) the height of the valance or 12 inches, whichever is less.
  - ii. Awning Valance Signs shall project no farther from the building than its associated awning.
  - iii. No portion of an Awning Valance Sign shall be less than eight feet above the level of the walkway over which it projects.
- b. Commercial and Industrial Guidelines
  - i. Awning Valance Signs shall consist of metal, or vinyl or paint applied directly to the awning.
  - ii. Awning Valance Signs shall be illuminated by external illumination only.
  - iii. The shape, design, and color of awnings shall be carefully designed to coordinate with, and not dominate, the architectural style of the building. Where multiple awnings are used on the building, the design and color of the sign awnings shall be consistent with all other awnings.
  - iv. The use of temporary signs/letters on awnings is not allowed. Only permanent signs that are an integral part of the awning or canopy shall be used.
  - v. The use of adhesive/press on lettering is not allowed. Awning signs shall be painted directly on the canvas awning.
  - vi. To avoid having to replace awnings or paint out previous tenant signs when a new tenant moves in to a building, the use of replaceable valances shall be considered.

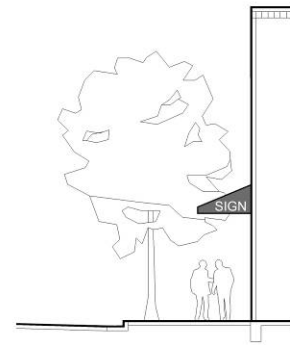


5) Awning Valance Sign.

## **6. Awning Side Sign**

Awning Side Signs are signs applied to the side panel of an awning.

- a. Standards
  - i. The area of Awning Side Signs shall not count towards the total sign area permitted based on the Linear Frontage Ratio.
  - ii. Lettering for Awning Side Signs shall not exceed 12 inches in height with total sign area not to exceed 20 percent of the area of the awning side area.
  - iii. Awning Side Signs shall project no farther from the building than its associated awning.
  - iv. No portion of an Awning Side Sign shall be less than eight feet above the level of the walkway over which it projects.



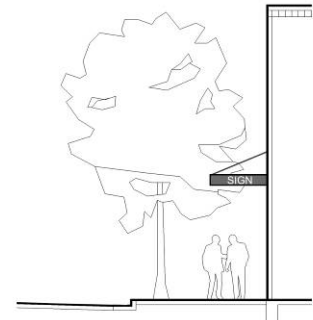
6) Awning Side Sign.

- b. Commercial and Industrial Guidelines
  - i. Awning Side Signs shall consist of vinyl or paint applied directly to the awning.
  - ii. Awning Side Signs shall be illuminated by external illumination only.
  - iii. The shape, design, and color of awnings shall be carefully designed to coordinate with, and not dominate, the architectural style of the building. Where multiple awnings are used on the building, the design and color of the sign awnings shall be consistent with all other awnings.
  - iv. The use of temporary signs/letters on awnings is not allowed. Only permanent signs that are an integral part of the awning or canopy shall be used.
  - v. The use of adhesive/press on lettering is not allowed. Awning signs shall be painted directly on the canvas awning.
  - vi. To avoid having to replace awnings or paint out previous tenant signs when a new tenant moves in to a building, the use of replaceable valances shall be considered.

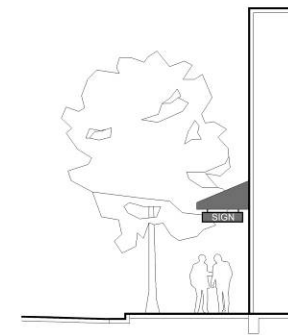
## 7. *Canopy Fascia Sign*

Canopy Fascia Signs are signs that are mounted to the front or side fascia of a canopy and contained completely within that fascia.

- a. Standards
  - i. The height of Canopy Fascia Signs shall not exceed two-thirds ( $\frac{2}{3}$ ) the height of the fascia or 12 inches, whichever is less.
  - ii. The width of Canopy Fascia Signs shall not exceed two-thirds ( $\frac{2}{3}$ ) of the canopy width.
  - iii. Canopy Fascia Signs shall project no farther from the building than its associated canopy.
  - iv. No portion of a Canopy Fascia Sign shall be less than eight feet above the level of the walkway over which it projects.
  - v. Canopy Fascia Signs shall consist of only one (1) line of lettering articulated as individual letters mounted directly to the canopy.
- b. Commercial and Industrial Guidelines
  - i. Materials used in Canopy Fascia Signs shall be metal and paint only.
  - ii. Canopy Fascia Signs shall be illuminated by external illumination only.



7) Canopy Fascia Sign.

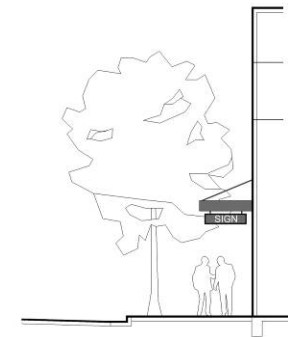


8) Under-Awning Sign.

## 8. *Under-Awning or Under-Canopy Sign*

Under-Awning or Under-Canopy Signs are signs that are suspended under an awning or canopy, perpendicular to the building facade.

- a. Standards
  - i. Under-Awning or Under-Canopy Signs shall be located adjacent to a public entrance.
  - ii. No more than one (1) Under-Awning or Under-Canopy Sign shall be permitted per establishment per façade.
  - iii. The area of Under-Awning or Under-Canopy Signs shall not count towards the total sign area permitted based on the Linear Frontage Ratio.
  - iv. Under-Awning or Under-Canopy Signs shall not exceed three (3) square feet in area.



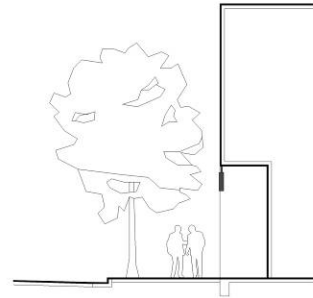
8) Under-Canopy Sign.

- v. Under-Awning or Under-Canopy Signs shall project no farther from the building than its associated awning or canopy.
  - vi. No portion of an Under-Awning or Under-Canopy Sign shall be less than eight feet above the level of the walkway over which it projects.
- b. Commercial Guidelines
- i. Materials used in Under-Awning or Under-Canopy Signs shall be wood, metal, and paint only.
  - ii. Under-Awning or Under-Canopy Signs shall be illuminated by external illumination only.
- c. Industrial Guidelines
- i. Materials used in Under-Awning or Under-Canopy Signs shall be metal and paint only.
  - ii. Under-Awning or Under-Canopy Signs shall be illuminated by external illumination only.

### 9. ***Recessed Entry Sign***

Recessed Entry Signs are signs that are oriented parallel to the building façade and that are suspended over a recessed entry.

- a. Standards
- i. No Recessed Entry Sign shall exceed twenty (20) square feet in size.
  - ii. Recessed Entry Signs shall not project beyond the façade of the building.
  - iii. No portion of a Recessed Entry Sign shall be lower than eight feet above the level of the walkway.
- b. Commercial Guidelines
- i. Materials used in Recessed Entry Signs shall be wood, metal, and paint only.
  - ii. Recessed Entry Signs shall be illuminated by external illumination only.



9) Recessed Entry Sign- Section View.



9) Recessed Entry Sign- Elevation View.

c. Industrial Guidelines

- i. Materials used in Recessed Entry Signs shall be metal and paint only.
- ii. Recessed Entry Signs shall be illuminated by external illumination only.

**10. Window Sign**

Window Signs are signs that are applied directly to a window or mounted or suspended directly behind a window.

a. Standards

- i. Window Signs shall be permitted on windows below the second floor level only. A Window Sign that only identifies a building shall be located on a transom window above a primary entrance, or the glazed area of primary door.
- ii. Window signs shall count towards total sign area permitted based on the Linear Frontage Ratio, except that the area of a Window Sign that only identifies a building shall not count towards the total sign area permitted based on the Linear Frontage Ratio. One (1) Window Sign that only identifies a building shall be permitted per building per street-facing façade.
- iii. No more than 25 percent of any individual window area shall be covered or otherwise occupied by signage.
- iv. The letter height of each Window Sign shall not exceed 12 inches and shall be taller than four inches.



10) Window Sign.



10) Building Identification Window Sign.

b. Commercial and Industrial Guidelines

- i. Ground-floor Window Signs shall consist of vinyl or paint applied to the glass, neon mounted or suspended behind the glass, or framed and mounted paper signs. Window Signs that only identify a building shall consist of vinyl or paint applied to the glass only.
- ii. Ground floor Window Signs shall not be illuminated.



**11. Temporary Window Sign**

Temporary Window Signs are signs that are applied directly to a window or mounted or suspended directly behind a window and are designed, constructed, and intended for display on private property for a period of not more than 90 consecutive days per year. Examples include “grand opening”, “special sale,” and seasonal signage.

a. Standards

- i. Temporary Window Signs shall be located only on ground floor windows on building facades that face a public street or a parking lot.
- ii. Temporary Window Signs shall not exceed six square feet in size.
- iii. Temporary Window Signs shall not cause the total amount of the window area covered with signage to exceed 25 percent.
- iv. Temporary Window Signs that satisfy the above standards and General Standards do not require a permit.



11) Temporary Window Sign.

b. Commercial and Industrial Guidelines

- i. Temporary Window Signs shall be constructed of paint applied directly to the glass or framed paper signs placed behind the glass.
- ii. Temporary Window Signs shall not be illuminated.
- iii. Temporary Window Signs that satisfy the above guidelines and General Guidelines do not require a permit.

## 12. Temporary Wall Sign

Temporary Wall Signs are signs that are located on, and parallel to, a building wall and are designed, constructed, and intended for display on private property for a period of not more than ninety (90) consecutive days per year. Examples include “grand opening”, “special sale,” and seasonal temporary banner signage.

### a. Standards

- i. Temporary Wall Signs shall only be mounted on a wall area below the second floor level that faces a public street or a parking lot.
- ii. A maximum of one (1) Temporary Wall Sign is allowed per establishment.
- iii. No Temporary Wall Signs shall exceed 32 square feet in area.
- iv. Temporary Wall Signs shall project no more than one (1) foot from the façade of the building.



12) Temporary Wall Sign.

### b. Commercial and Industrial Guidelines

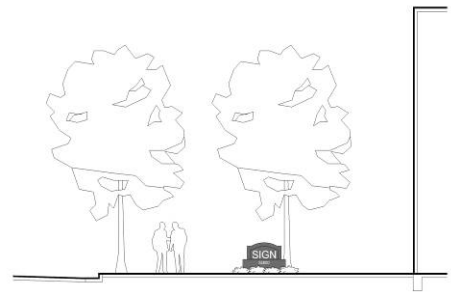
- i. Materials used in Temporary Wall Signs shall consist of a flexible vinyl material with grommet holes installed around the edges to accommodate attachment to a building.
- ii. Temporary Wall Signs shall not be illuminated.

### 13. Monument Sign

A Monument Sign is a freestanding sign supported by a solid architectural element at its base.

a. Standards

- i. A maximum of one Monument Sign is allowed per street frontage for single-purpose buildings, multi-tenant buildings or complexes and shopping centers on a -parcel with one or more street frontages of at least 100 feet.
- ii. A Monument Sign shall not exceed eight feet in length or six feet in height.
- iii. Monument Signs shall be placed perpendicular or parallel to the street. The base of a Monument Sign shall be set back a minimum of five feet from any public right-of-way or interior property line; a minimum of 10 feet from the edge of a driveway; and a minimum of 50 feet from any Monument Signs or Pylon Signs on adjoining sites. Monument Signs shall not block sight lines at entry driveways and circulation aisles.
- iv. The sign copy for a Monument Sign shall only identify the name of the center, complex, or building and the address; however, the name of the primary tenant, if any, may be included in the copy. The minimum letter size allowed shall be six inches. Sign copy shall not be located closer than one half-letter height to the sign edge or other line of copy. Between 5 to 10 percent of the sign area should be dedicated to identification of the street address.
- v. The area of Monument Signs shall not count towards the total sign area permitted based upon Linear Frontage.
- vi. Monument Signs shall not project over any on-site driveway or vehicle circulation area.
- vii. Landscaping with automatic irrigation shall be provided at the base of the supporting structure equal to twice the area of one face of the sign or 75 square feet, whichever is greater. For example, 40 sq. ft. of sign area = 80 sq. ft. of landscaped area.



13) Monument Sign.

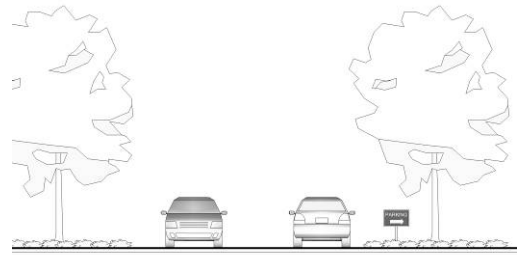
- b. Commercial and Industrial Guidelines
  - i. Monument Signs may be illuminated, however the sign copy should be the only portion of the sign face that is illuminated. The sign background or field shall be opaque with a nonglossy, nonreflective finish.
  - ii. The sign area and height of the sign shall be in proportion to the site and surrounding buildings. Signs shall not be overly large so as to be a dominant feature of the site.
  - iii. Monument Signs shall incorporate architectural elements, details, and articulation as follows:
    - Provide a solid architectural base that supports the sign. The base shall be a minimum of one-foot in height.
    - Provide architectural elements on the sides and top to frame the sign pane(s). Use columns, pilasters, cornices, and similar details to provide design interest.
    - Incorporate materials and colors into the sign support structures to match or be compatible with materials and colors of the development the sign serves so it does not appear out of scale with its adjacent building(s).
    - Keep the overall size of the sign in proportion with the development it serves so it does not appear out of scale with its adjacent building(s).

#### 14. Directional Sign

A Directional Sign is an on-premise sign giving directions, instructions, or facility information of an establishment (e.g., parking signs, exit and entrance signs, etc.).

a. Standards

- i. One (1) directional sign for each vehicle entry to a site with a maximum area of three square feet per sign. Maximum sign height shall be four feet. Additional directional signs may be allowed with approval of a Comprehensive Sign Program.



b. Commercial and Industrial Guidelines

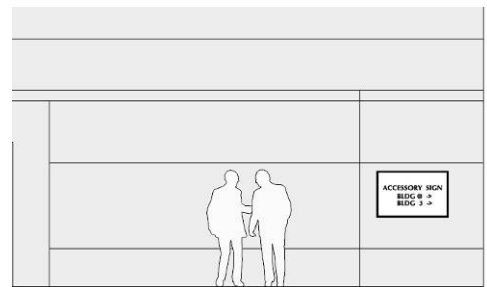
- i. Directional signs and their supports shall use the same color palette of the proposed building.
- ii. Directional signs shall be located to maintain sight lines along major circulation routes and shall be illuminated for visual clarity and safety.
- iii. Directional signs shall be designed with easy-to-read fonts, contrasting colors from the surrounding support panels, and durable materials.
- iv. Double-sided parking directional signs shall incorporate messaging and direction arrows on both sides of sign.
- v. Parking directional signage shall be used consistently throughout each individual development.

14) Directional Sign.

#### 15. Accessory Signs

Accessory Signs are signs that provide incidental information about a project site or a business and its goods or services. For the purposes of this plan, Accessory Signs include:

- Directory Sign. A sign listing the tenants or occupants of a building or building complex.
- Nameplate Sign. A sign indicating the name and/or address of a building or occupant.
- Restaurant Menu Sign. Menus displayed on the exterior premises of a restaurant.



15) Accessory Sign.

a. Standards

- i. The area of Accessory Signs shall not count towards the total sign area permitted based upon Linear Frontage.
  - ii. Directory Signs: Limited to a total sign area of 10 square feet.
  - iii. Nameplate Sign: One non-illuminated sign not to exceed one square foot in area.
- b. Commercial and Industrial Guidelines
- i. Materials used in Accessory Signs shall be wood and metal.
  - ii. Accessory Signs shall be illuminated by internal or external illumination as appropriate.

## **7.8 Public Right-of-Way Streetscape**

This section establishes standards for streetscape landscaping improvements within the public rights-of-way along the major highways, primary highways, and secondary highways as identified in the General Plan, Circulation Master Plan, as well as district gateway/intersection enhancements. The intent of these streetscape improvement concepts, and gateway enhancements is to provide a “sense of place” or identity within each district, while interweaving the standards and tree palettes that may be provided by any overriding City Master Street Tree Plan.

### **A. Street Classifications**

Streets within the JND are classified as follows:

1. Major highways:
  - a. Six-lane major highway – Cherry Avenue
  - b. Modified six-lane residential adjacent major highway – Jurupa Avenue.
  - c. Modified six-lane no median major highways – none within JND.
  - d. Eight-lane major highways – none within JND.
2. Primary highways – Beech Avenue and Mulberry Avenue.
3. Secondary highways – Citrus Avenue, Poplar Avenue, and Santa Ana Avenue.
4. Collector streets – Almond Avenue, Banana Avenue, Calabash Avenue, Catawba Avenue, Elm Avenue, Hemlock Avenue, Live Oak Avenue, and Redwood Avenue.

### **B. General Design Criteria**

The following general design criteria are intended to articulate consistent landscape treatments on similar classifications of corridors and provide a hierarchy of conceptual treatments for district gateway/intersection enhancements.

1. Landscaping should be used to accentuate and frame important view corridors.
2. Landscaping shall employ a common three-tiered approach to design:
  - a. Trees
  - b. Shrubs, vines and tall grass-like materials
  - c. Groundcovers (does not include turf)
3. Landscaping should be consistent and accentuated along arterial corridors and gateway intersections to emphasize district areas.
4. Street trees on major highways and primary highways shall consist of on-center planting of deciduous trees in medians (whenever medians are required) and evergreen trees in parkways to provide seasonal variations of views during fall and winter months (clearer air and snow-capped peaks).

5. Secondary highways shall provide single species of evergreen trees planted in parkways.
6. Gateway intersection enhancements should incorporate the adjacent property tree species (used in buffer setback) in order to provide background and screening, and be enhanced with accent trees selected for their character and shape.
7. Primary and secondary gateways will include thematic monumentation for district identification and reflect elements of local identity (i.e. river rock, concrete, City logo, etc.).
8. All gateway intersection enhancement shall incorporate decorative paving at corner areas and plant materials that promote the best of water-efficient landscaping.

**C. Streetscape Concept**

The Streetscape Concept Plan for the project area is shown on Exhibit 7-5. The plan identifies major, primary, and secondary highways, as well as collector streets and the gateway intersections within the Specific Plan area. Roadway classifications are consistent with the General Plan, Circulation Master Plan.

1. **Major Highway Streetscape.** Major highway streetscapes define the image of the City and its districts, while providing arterial linkages within and beyond the City. There are four streetscape concepts for major highways: Six-Lane Major Highway, Modified Six Lane No Median Major Highway, Modified Six Lane Residential Adjacent Major Highway, and Eight-Lane Major Highway. These major highway streetscapes are designed in response to special design needs, right-of-way, and adjacencies. Major highways within the JND are Cherry Avenue (six-lane) and Jurupa Avenue (modified six-lane residential adjacency). Streetscape cross-sections are in Exhibits 7-6, 7-7, and 7-8.
2. **Primary/Secondary Highway Streetscape.** Primary/Secondary highway streetscapes define areas within the Specific Plan and its districts, and connect to the major thoroughfares throughout the City. Primary highways within the JND are Beech Avenue and Mulberry Avenue. Secondary highways within the JND are Citrus Avenue and Poplar Avenue. Streetscape cross-sections is shown in Exhibit 7-9.



# Southwest Industrial Park Specific Plan

Jurupa North Research and Development District

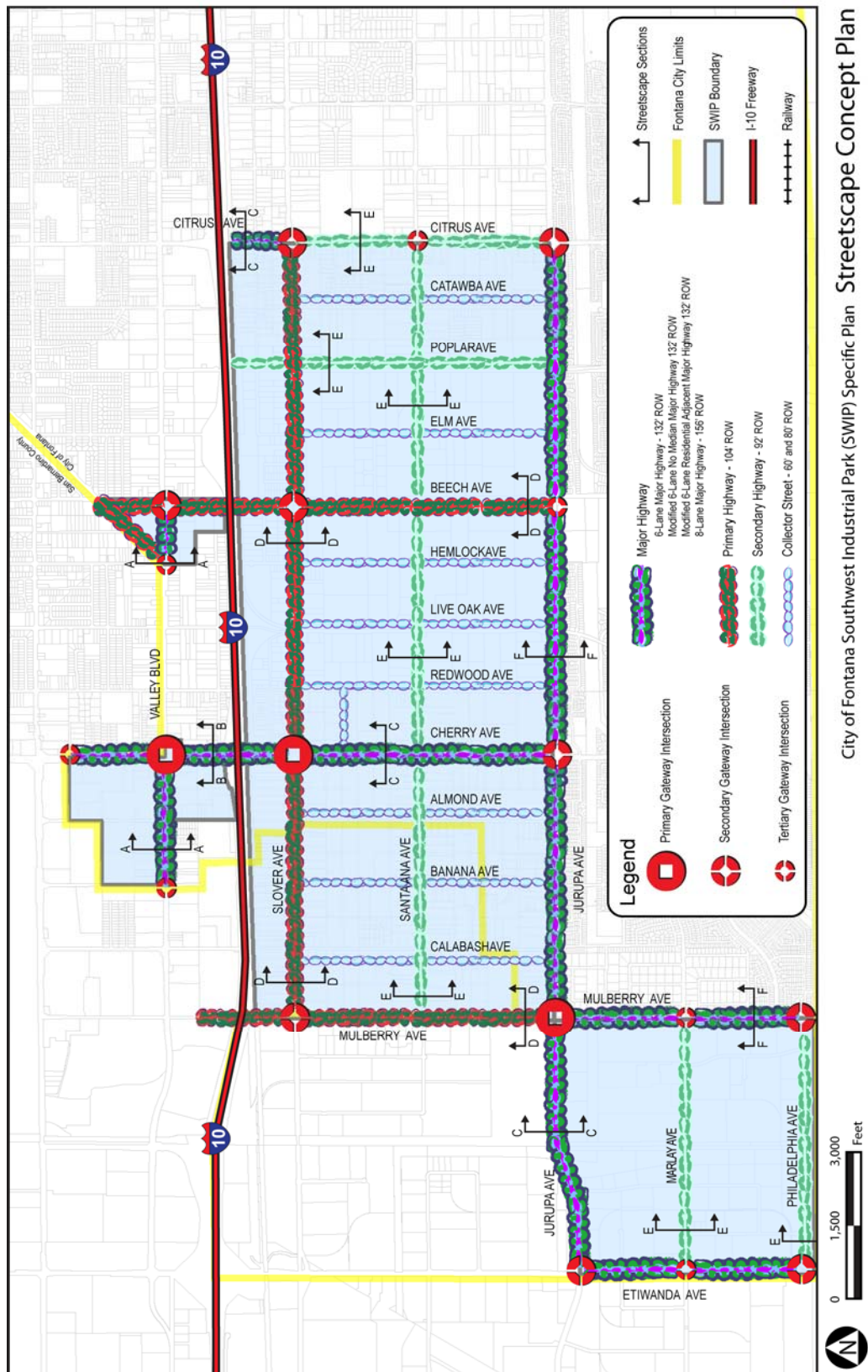


Exhibit 7-5 – Streetscape Concept Plan

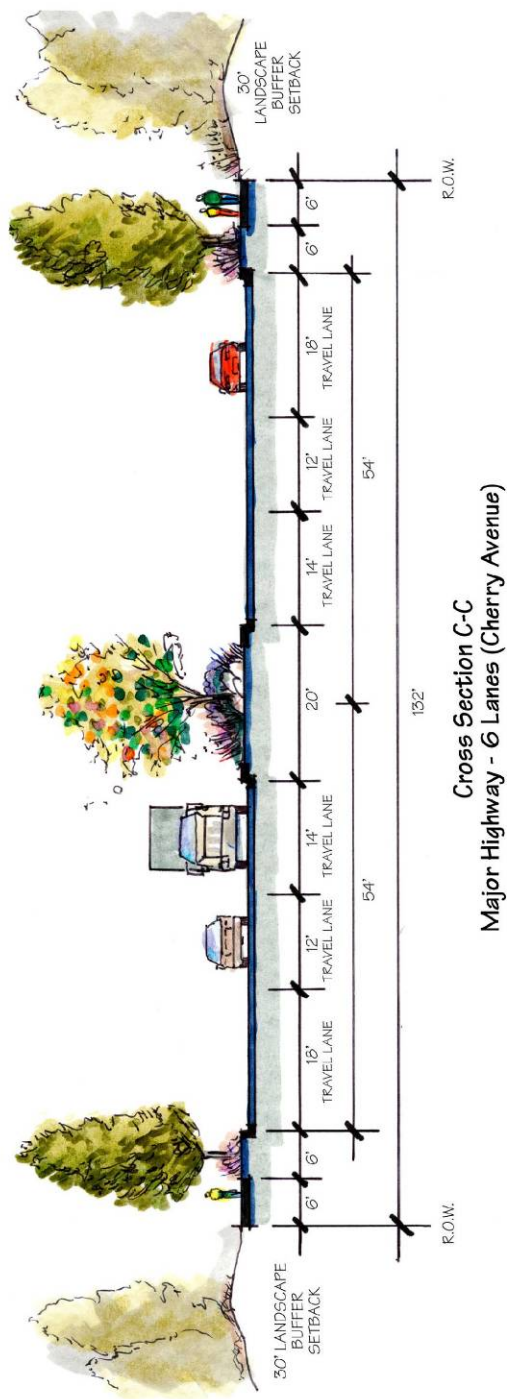


Exhibit 7-6 – Major Highway – 6 Lanes – Cross-Section C-C (Cherry Avenue)

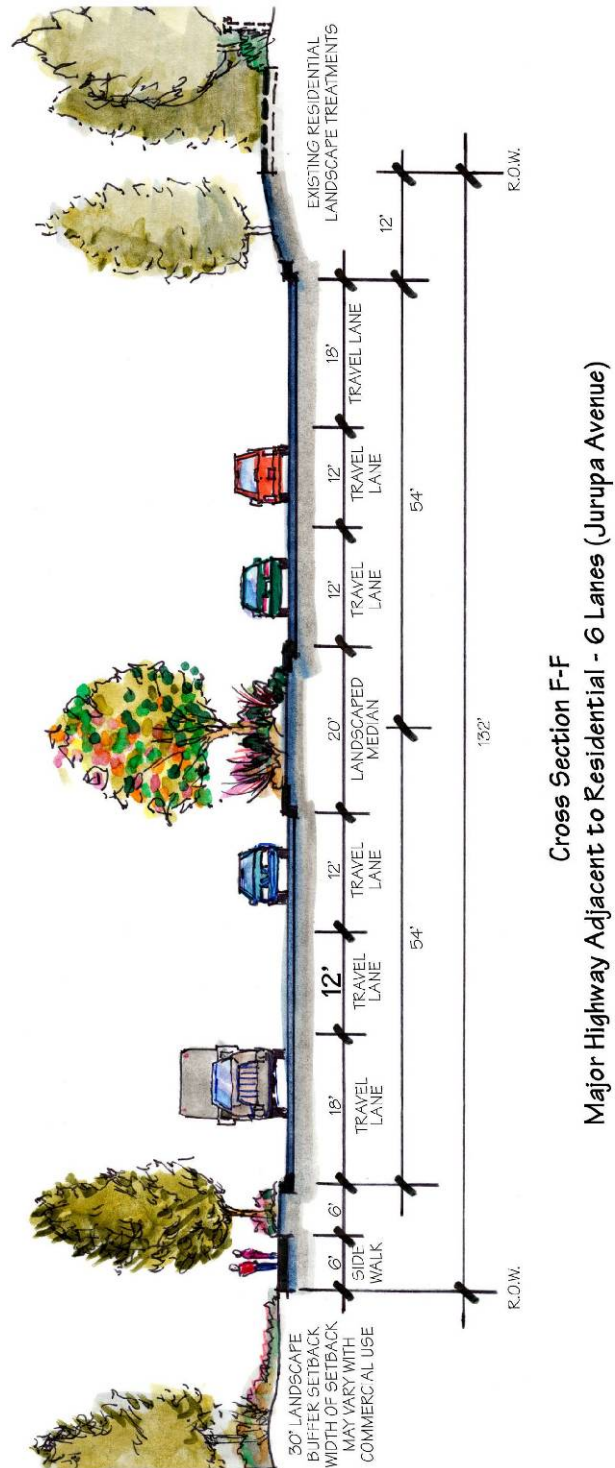


Exhibit 7-7 – Major Highway Adjacent to Residential – 6 Lanes –  
Cross-Section F-F (Jurupa Avenue)

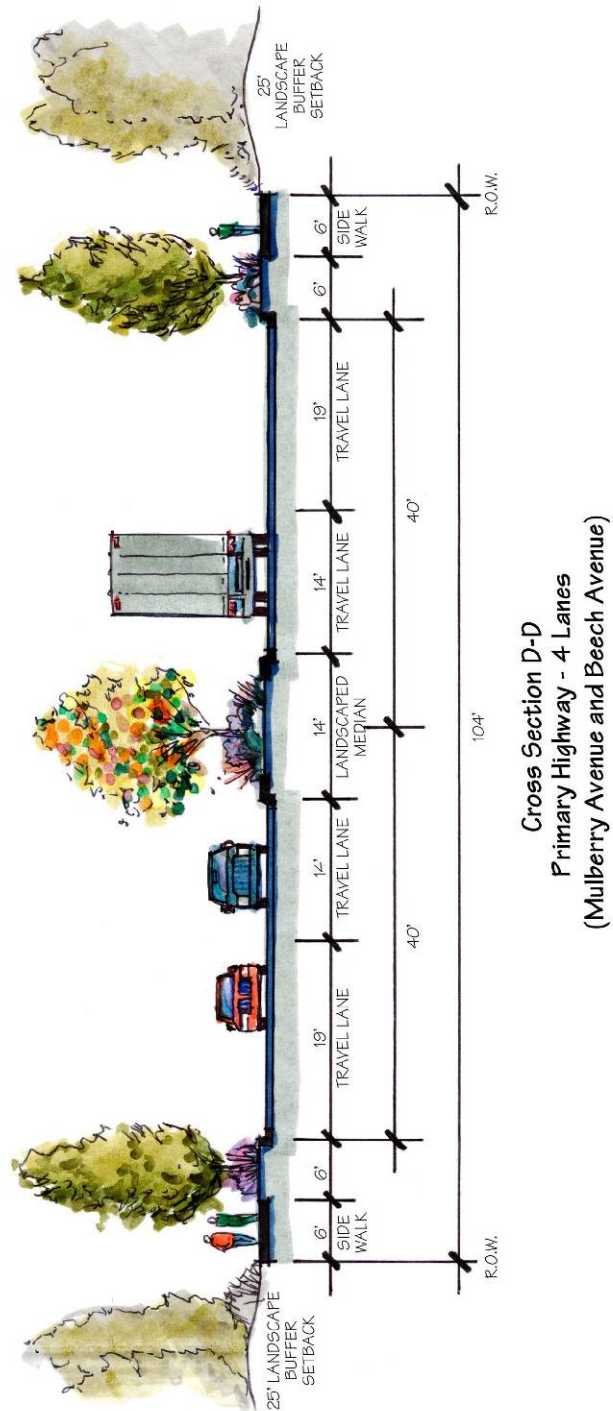
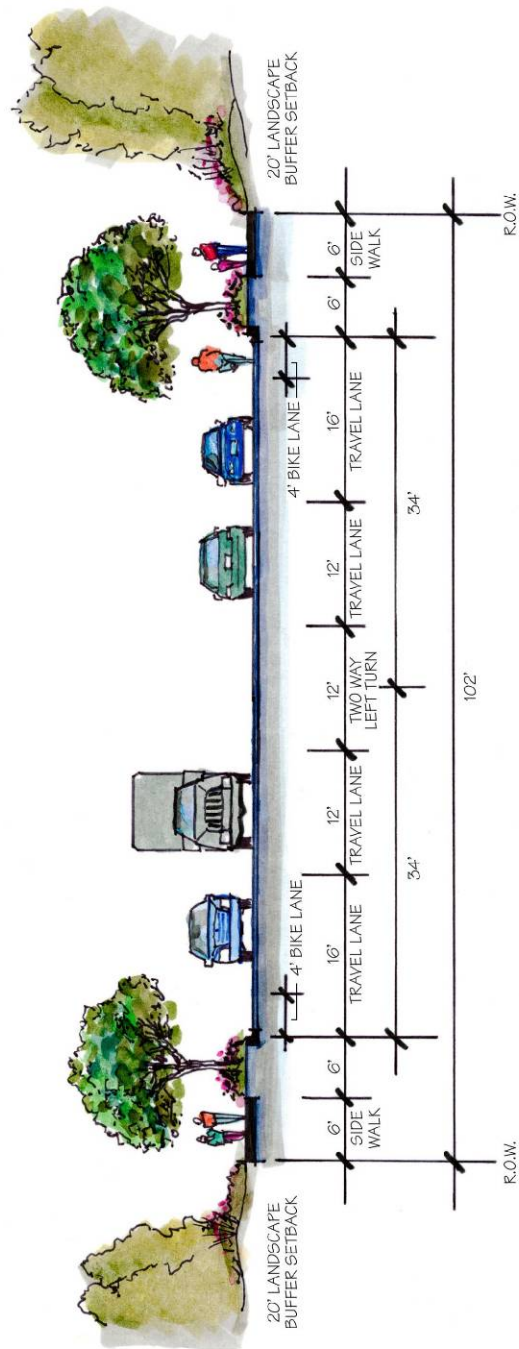


Exhibit 7-8 – Primary Highway – 4 Lanes – Cross Section D-D  
 (Beech Avenue and Mulberry Avenue)



Cross Section E-E  
Secondary Highway - 4 Lanes (Poplar, Santa Ana and Citrus Avenues)  
\*Poplar and Santa Ana Avenues will have bike lanes.

Exhibit 7-9 – Secondary Highway – 4 Lanes – Cross Section E-E  
(Citrus Avenue, Poplar Avenue, and Santa Ana Avenue)



### 3. **Gateways**

#### **A. Concept Plan**

The Streetscape Concept Plan – Exhibit 7-10 identifies a hierarchy of primary, secondary, and tertiary gateways. The intent of the gateway intersection enhancements is to provide a visual statement that you are within the Specific Plan area.

The gateway intersection enhancements should all incorporate uniform treatments (to varying degrees) within expanded corner setback areas (45 degree diagonal right-of-way). Depending on the hierarchy level, each gateway shall include special corner/sidewalk paving, planting schemes that highlight drought tolerant species, and monumentation signage. Monument signs are optional on tertiary gateway intersections.

Each corner planting scheme shall incorporate the three-tiered planting concept, consisting of accent trees, shrubs, or tall grass-like plant material, and a ground cover. Dense planting of evergreen tree species consistent with adjacent buffer setback plantings shall provide a background/screen for each corner setback area.

Gateway conceptual designs with typical dimensions (plan views) are illustrated in Exhibits 7-10, 7-11, and 7-12. The monument sign concept as it would appear in front of the planting treatment is illustrated in Exhibit 7-13.

Gateway enhancements and monument sign enhancements shall meet the City's line of sight regulations, as determined by the City Engineer. Dimensions of monument signs shall comply with Section 7.7.D.13 Monument Sign.

#### **B. Dedication and Maintenance of Gateway Intersection Enhancements**

1. When dedication and maintenance is required.
  - a. Whenever a development project is proposed on land that is designated as a location for district gateway improvements in Section 7.8 Public Right-of-Way Streetscape, the developer shall:
    - i. Dedicate any necessary right-of-way area to the City or provide an easement in favor of the City for the installation of gateway intersection enhancements;
    - ii. Construct the Gateway Intersection Enhancements to the standards indicated in Section 7.8 Public Right-of-Way Streetscape; and
    - iii. Enter into an agreement with the City that specifies perpetual maintenance.
  - b. The applicable review authority shall impose the dedication (or easement) requirement as a condition of project approval.
  - c. The City Attorney and the Director of Community Development shall approve the form and content of any dedication or easement instrument used to ensure the

installation and perpetual maintenance of the Gateway Intersection Enhancements.

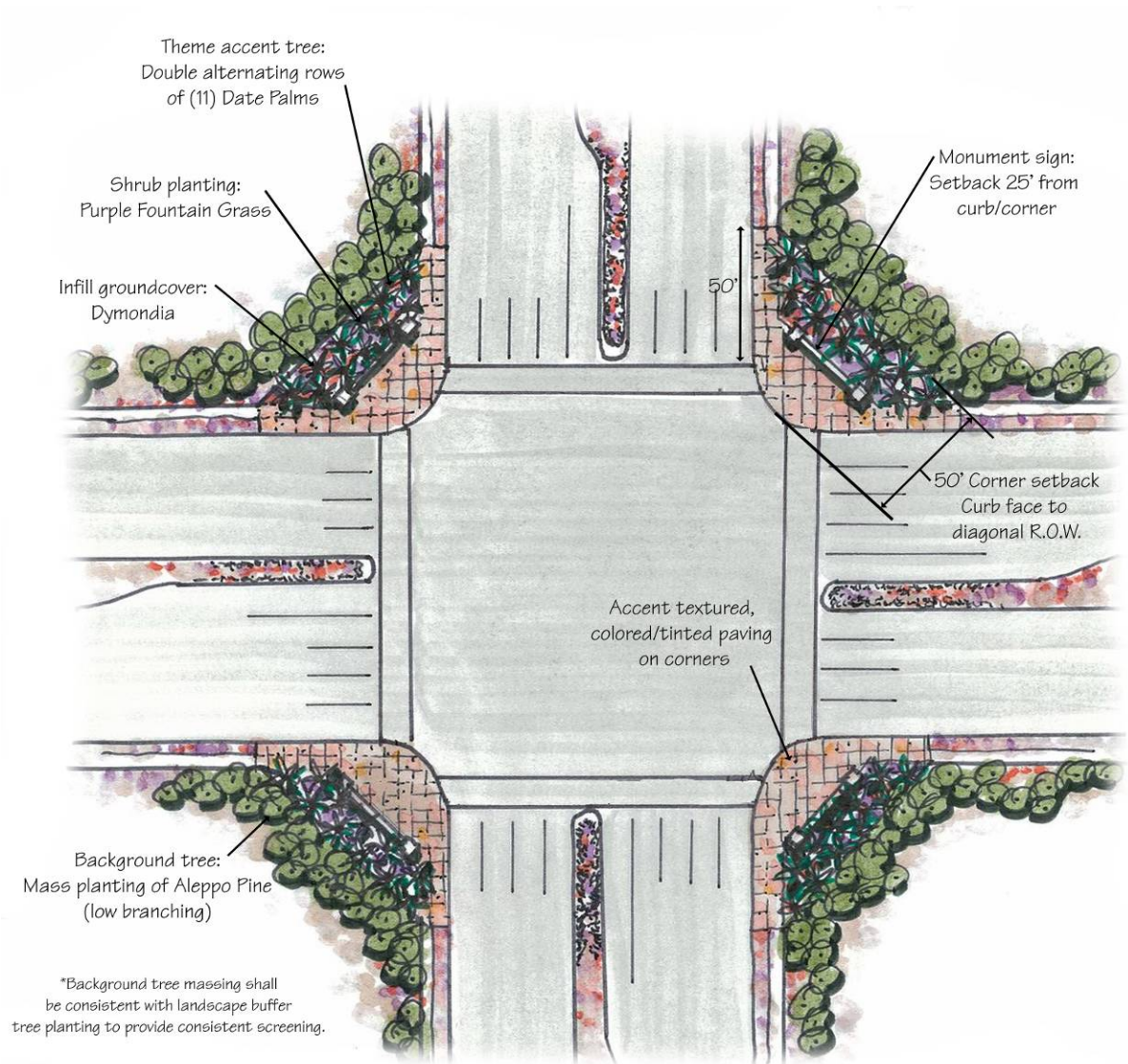


Exhibit 7-10 – Primary Gateway Intersection Enhancement Concept



## Southwest Industrial Park Specific Plan

Jurupa North Research and Development District

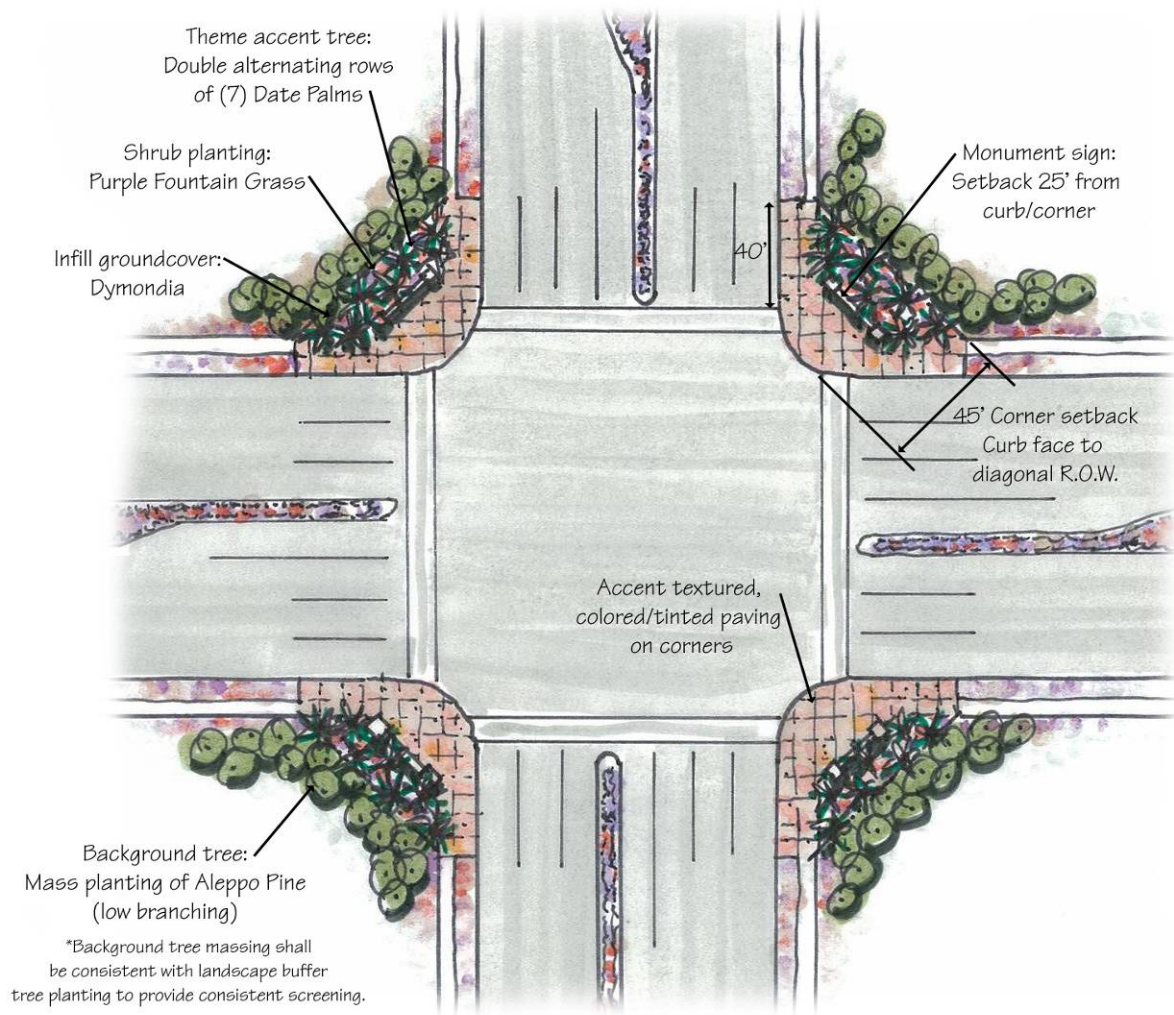


Exhibit 7-11 – Secondary Gateway Intersection Enhancement Concept

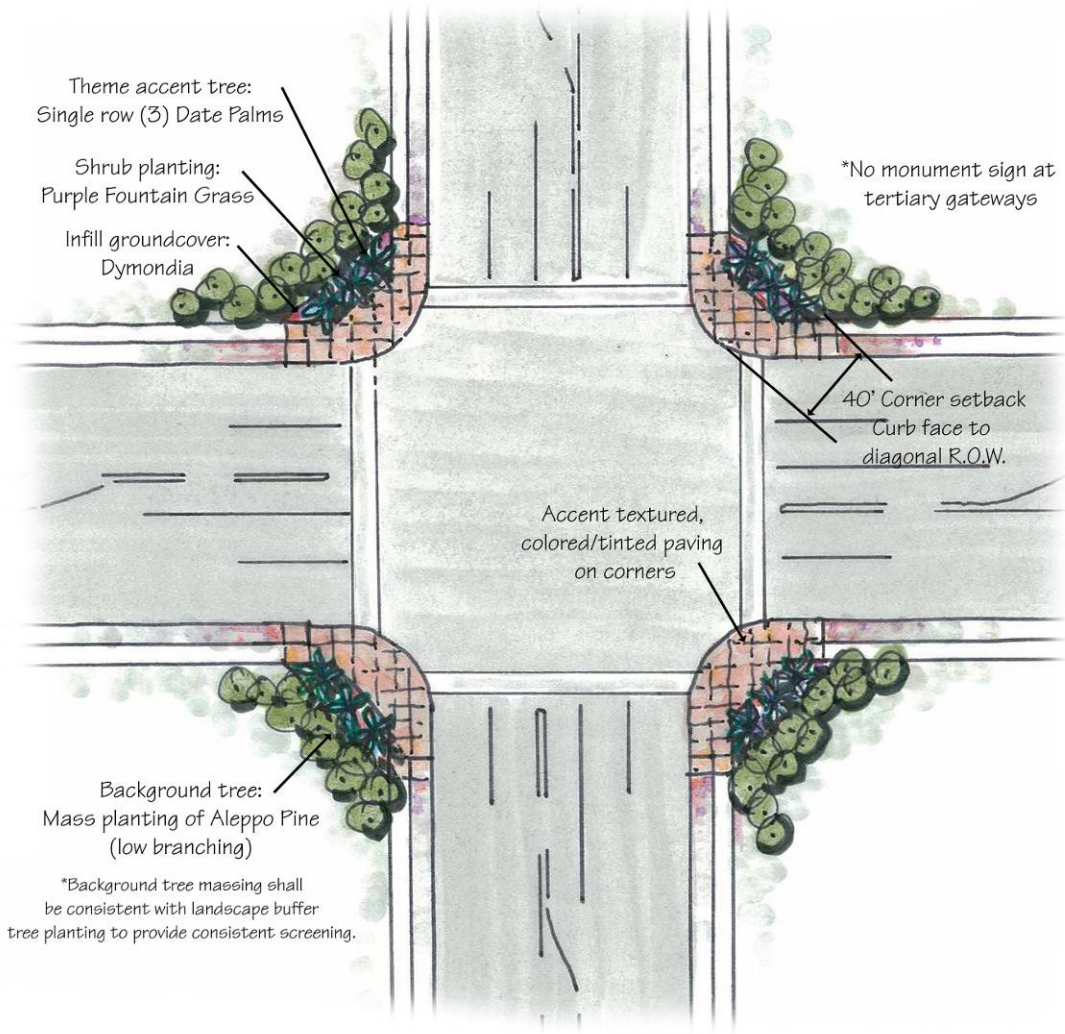


Exhibit 7-12 – Tertiary Gateway Intersection Enhancement Concept

## Southwest Industrial Park Specific Plan

Jurupa North Research and Development District



Exhibit 7-13 Monument Sign Concept



4. Street Furniture

Exhibit 7-14 – Street Furniture Palette identifies recommended street furniture components, including lighting, trash receptacles, and benches, for the district. The palette is intended to ensure a unified visual identity for the district, which is distinct from the other districts within the Specific Plan area.



Wall/building lighting  
**Domus Series Lighting**  
by Phillips Lumec  
**DMS 55 - SG**



Pole/pedestrian and parking lot lighting



Trash receptacle TEF31P  
and Bench DE1113C  
by Urbanscape



Exhibit 7-14 – Street Furniture Palette.

## **7.9 Design Guidelines**

### **A. Design Objectives**

The Design Guidelines will promote and reinforce the City's commitment to high quality development. In general, the guidelines are intended to ensure that development preserves or improves the positive characteristics of the City's image. The objectives of these guidelines are to:

- Promote orderly development by implementing the SWIP Specific Plan objectives, policies, and principles found in Chapter 2 Policy Framework..
- Protect and enhance property values by ensuring that development fits properly within the context of its surroundings and does not negatively impact adjacent uses.
- Encourage individual creativity and innovative solutions by allowing flexibility in how a particular guideline is met as long as the intent of the guideline is achieved.
- Ensure functional pedestrian and motor vehicle circulation within a project and convenient pedestrian linkages to and from adjacent residential, commercial, industrial, and school areas.

### **B. Design Intent**

The design intent of the JND is to provide for high-quality, large scale industrial development that transitions to interface with the surrounding neighborhoods through smaller scale commercial uses.

### **C. Industrial, Distribution, and Business Park Uses**

The design guidelines in this Subsection shall apply to all industrial, distribution, and business park projects within this land use district.

## 1. Site Design

### Site Layout

- The arrangement of multiple buildings and associated circulation, and parking areas should reflect a well-organized site plan that emphasizes pedestrian connectivity and landscaped areas responsive to the public.
- Site development may utilize variations on building placement and landscaping adjacent to the public street. Appropriate configurations may include, but are not limited to the following:
  - Fully landscaped setback between building and street.
  - Parking in front of building with a landscape buffer between parking and street. **See Figure 1.**



Figure 1. Appropriate building and landscape placement adjacent to public street

- Visitor parking may be located at the front of the building adjacent to the main entry while employee parking and service areas are located at the sides and rear of the building. **See Figure 2.**

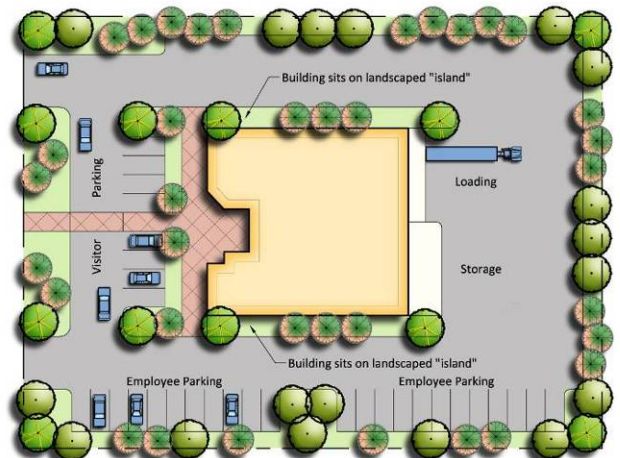


Figure 2. Parking layout.

- Service and loading should not be located on building side(s) adjacent to a public street.
- The design and location of accessory buildings (e.g., security kiosks, maintenance buildings, and outdoor equipment enclosures) shall be incorporated into and be compatible with the overall design of the project and the main buildings on the site.
- With the exception of security kiosks, accessory buildings shall be located as far back from the front and street side setback area as possible.
- Sea/train-type metal containers are prohibited.
- Outdoor storage, work, and loading areas shall be incorporated within the building design and located to the rear or side of buildings and screened from view from adjacent public streets. **See Figure 3.**

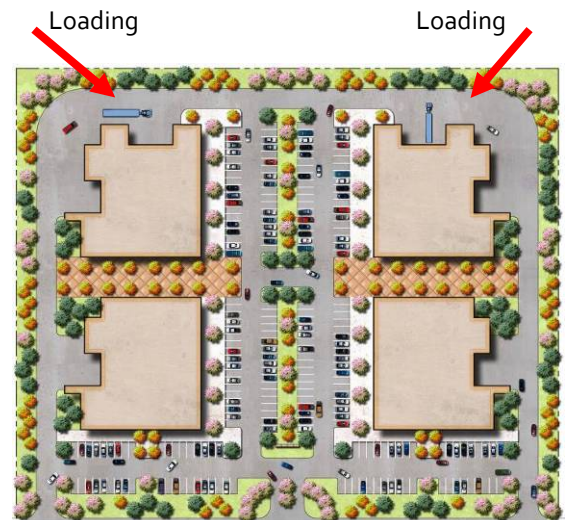


Figure 3. Appropriate location of loading areas.

### Courtyards and Plazas

- Buildings should be arranged to create opportunities for open space amenities (e.g., plazas, courtyards, outdoor eating areas, recreation areas, etc.). **See Figure 4.**
- Business park development should provide recreational facilities (e.g., bicycle paths, tennis courts, volleyball courts, gymnasiums, etc.).



Figure 4. Open space amenities.

## 2. Building Orientation

- Multiple building developments should be oriented in a manner that will form gateways through facade enhancement, maximize public view, and capture public interest along adjacent major streets. **See Figure 5.**
- The organization of buildings, parking areas, and landscaping shall recognize the existing characteristics of the site and shall relate to the surrounding development in scale and character.
- Buildings should generally be placed at or near setback lines with development oriented in a manner that will provide visual interest. **See Figure 6.**
- Buildings should be oriented in a manner that takes advantage of passive solar design.
- Buildings shall be oriented to provide a buffer between sensitive uses (i.e. schools, parks, and medical facilities) and outdoor work areas, loading, and storage.



Figure 5. Buildings are oriented to create gateway into development.



Figure 6. Buildings are oriented to provide architectural features visible from public rights-of-way.

## 3. Site Elements

### Fences and Walls

- Walls and fencing materials shall consist of wrought iron, tubular steel, stone, stucco, or brick, and shall be compatible with the overall design character/style of the development. The use of chain-link fence material is not allowed if visible from the public right-of-way. **See Figure 7.**
- Walls and fences shall be integrated with landscaping along the base of the wall or fence.



Figure 7. Tubular steel and stone pillars are appropriate fencing materials .



- Wall heights and surfaces shall be articulated with varying facade depths or pilasters to promote architectural interest, and shall include a cap along the top of the wall.
- Landscaping shall be used in combination with walls and fences to visually soften blank surfaces and to deter graffiti. **See Figure 8.**



Figure 8. Wall is articulated with pillars and incorporates landscaping at the base and vines to deter graffiti .

### Screening

- Loading bays and service areas shall be screened by building placement, decorative walls or landscaping to the fullest extent feasible so that views of loading areas are minimized from adjacent public streets. **See Figure 9.**
- Trash storage enclosures and outdoor mechanical equipment shall be screened from public view.
- Roof-mounted equipment shall be screened from public view through use of parapet walls or other screening devices. Special consideration shall be given to the screening of roof-mounted equipment on building rooftops that are visible from public view. **See Figure 10.**

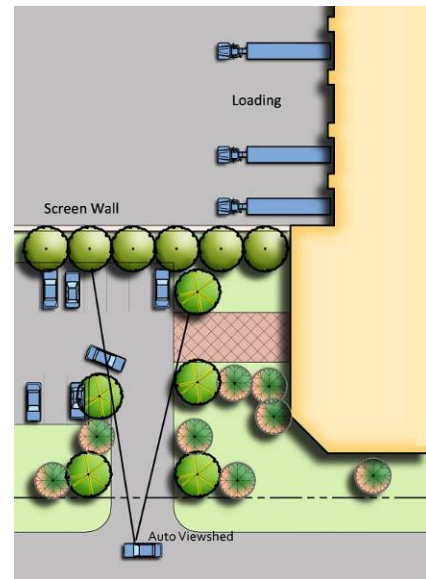


Figure 9. Appropriate placement, orientation and screening of service areas.

### Trash Enclosures

- Trash enclosures shall be incorporated as part of the building design.
- If trash enclosures cannot be located out of public view, the design of trash storage areas shall incorporate architectural screening elements and landscaping compatible with the design of buildings and landscaping on the site. **See Figure 11.**

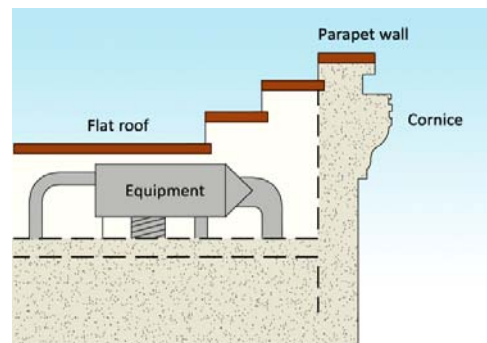


Figure 10. Screening of roof mounted equipment.

- Trash enclosures shall integrate horizontal screening such as trellises. **See Figure 11.**

## Lighting

- Outdoor lighting plans shall take into consideration the location and potential growth pattern of nearby trees (existing and planned) so that appropriate lighting levels are maintained over time.
- Energy efficiency shall be considered through use of proper light location and placement, as well as use of energy-efficient bulbs or fixtures.
- Lighting fixtures shall include hoods or other design techniques to reduce glare and light pollution, especially along major streets, and to prevent light spillover onto adjacent properties. **See Figure 12.**
- Lighting shall be provided in project entryways, walkways, parking lots, and plazas or courtyards to promote safety. **See Figure 13.**
- Lighting may be mounted on poles or bollards, affixed to building walls, or placed within paved or landscaped areas. Appropriate materials and construction methods shall be used to ensure proper function of project lighting fixtures.
- Decorative light fixtures shall be consistent with the architectural design of the building. **See Figure 14.**
- Truck and truck trailer storage areas shall incorporate lighting to increase real and perceived security.



Figure 11. Trash enclosures with architectural screening elements.



Figure 12. Hooded light fixture directs light downward.



Figure 13. Bollard lighting along pedestrian walkway.



Figure 14. Decorative light fixtures.

## 4. Parking and Access

### Parking

- Parking lots shall not be the dominant visual element on the site.
- Parking lots adjacent to and visible from public streets shall be appropriately screened to minimize undesirable visual impacts. **See Figure 15.**
- Surface parking areas shall integrate trees and landscape improvements to reduce the heat island effect. **See Figure 15.**
- Large parking lots (usually over 100 spaces) shall be divided into multiple, smaller areas and provided with canopy trees located throughout the parking area to reduce the effects of heat and the visual impacts of large parking areas.
- Employee parking areas should be located behind the building or alongside of the building so as not to be visible from adjacent streets.
- Internal vehicular and pedestrian circulation within a development involving multiple buildings or lots shall interconnect in an obvious and consistent manner. **See Figure 16.**
- Parking shall be provided within walking distance of all tenants and public sidewalks.
- Parking lot design shall include water quality storm water facilities consistent with City standards. **See Figure 17.**

### Access

- The use of common (shared) access points and driveways is encouraged; placement of vehicle access points close to building entries shall be avoided to minimize pedestrian and vehicular conflicts. **See Figure 18 (following page).**

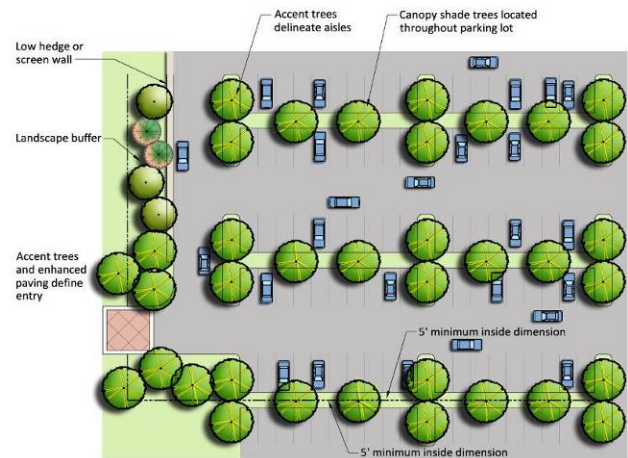


Figure 15. Parking lot landscaping.

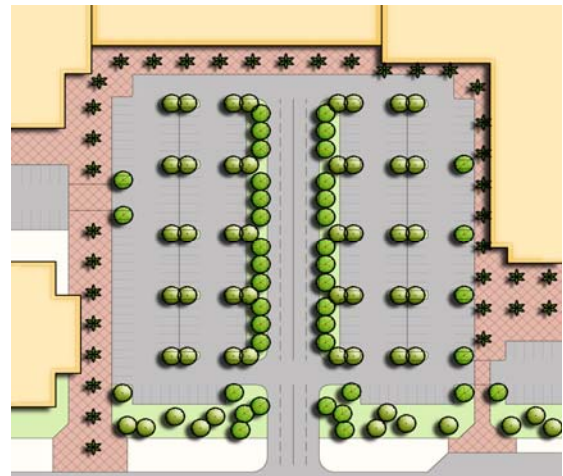


Figure 16. Pedestrian circulation is consistent along perimeter of parking lot.



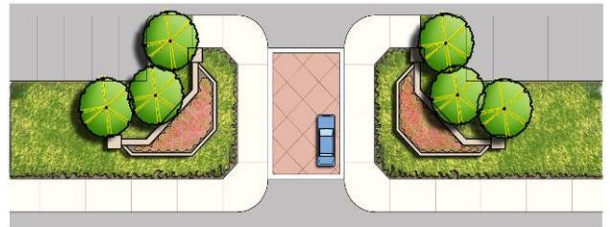
Figure 17. On-site storm water capture system.





Figure 18. Shared parking access.

- Entry drives shall be clearly marked by special features, (e.g., enhanced paving, prominent landscape features, low-level decorative walls, and well-designed monument-type signs). **See Figure 19.**
- Access to each development site shall be clearly visible to pedestrians and motorists.
- Service and loading areas should take access from shared access points to reduce curb cuts along streets.



Enhance project entries with landscaping and special paving for visual impact.

Figure 19. Entry drive.

## 5. Architecture

### Mass and Scale

- The mass and scale of the buildings shall respect the visual and physical relationship to the adjacent buildings and surrounding sensitive uses. Taller building elements should be placed towards the center of the site, with lower elements adjacent to surrounding properties.
- Buildings should be stepped back when adjacent to or in close proximity to sensitive uses (e.g. schools, etc.).
- Vertical and horizontal offsets shall be provided to reduce the visual bulk of the building. **See Figure 20.**



Figure 20. Incorporation of vertical offsets and material changes.

### Building Facades

- Building facades shall incorporate architectural elements such as windows, pillars, wall plane breaks to minimize blank walls and to create visual interest. **See Figure 21.**
- All building elevations, whether front, side, or rear shall be architecturally detailed.
- Architectural accents (e.g., cornices, tiles, trim around windows, grooves in building faces, accent band details, bulkheads, etc.) shall be used to create variation along building facades. **See Figure 22.**
- Higher facades and rooftops should be incorporated at corners and intersections, and appropriate massing and scale shall be considered for the remainder of the building spanning public street frontage. **See Figure 23.**
- Primary building entries shall be easily identified through the use of prominent architectural elements, signage, landscaping, lighting, canopies, roof form, hardscape, architectural projections, columns, vertical elements, or other design features that help emphasize a building's entry. **See Figure 24.**



Figure 21. Façade articulation.



Figure 22. Use of cornices, window trim and grooves.



Figure 23. Enhanced corner elements.



Figure 24. Articulated Entries.

- Roofs shall be designed as an integral component of building form, mass, and facade. Building form should be enhanced by sloped or offset roof planes, eave heights, and rooflines. **See Figure 25.**
- Locate and/or screen rooftop equipment so that it is not visible from the street. Rooftop screening shall be integral to the building's form.



Figure 25. Offset roof planes.

### Color and Materials

- Colors and materials for all structures on-site should consist of earth tones. Use of at least two to three different colors, materials or textures is encouraged.
- Building materials shall be durable and able to withstand long-term exposure to the elements.
- Large expanses of smooth material (e.g., concrete) shall be broken up with expansion joints, reveals, or changes in texture and color. **See Figure 26.**
- To the fullest extent feasible, buildings should use large windows along walls and skylights in rooftop designs to capture natural light during working hours.



Figure 26. Use of expansion joints.

### 6. Landscaping

- Landscaping shall be in scale with adjacent structures, streets, and public spaces, and be sized appropriately when fully grown.
- Landscaped areas should incorporate a three-tiered planting system:
  - 1) ground cover and flowering plants;
  - 2) shrubs and vines; and
  - 3) trees.

**See Figure 27.** See Recommended Plant Palette in Section 7.8.

- Special landscape features, such as specimen trees, shall be provided at major



Figure 27. Three-tiered planting system: trees, shrubs, and ground covers.



focal points (e.g., project entries, building entries, and pedestrian gathering areas).

- Entry and exit points shall be highlighted through a combination of distinctive landscape and hardscape features. Incorporation of public art is highly encouraged.
- Development on corner lots shall be enhanced with a combination of specimen trees, accent plantings, upgraded perimeter wall surfaces, hardscape treatments and landscape lighting adjacent to the street intersection.
- Drought-tolerant and low-maintenance trees, vines, and groundcovers shall be used on-site. Drip irrigation systems shall be installed where feasible to ensure the highest possible level of water conservation.
- Planting materials shall be used in plaza areas to provide shade and soften the appearance of hard walls. Water features and public art are also encouraged. **See Figure 28.**
- The use of vines is encouraged on walls to soften the appearance of buildings and screen walls, and to help deter graffiti. **See Figure 29.**



Figure 28. Plaza area.



Figure 29. Wall incorporates landscaping to soften appearance and deter graffiti.

- Planting materials shall be installed to provide a buffer against noise and should be integrated with walls or fences to achieve desired sound reduction. **See Figure 30.**

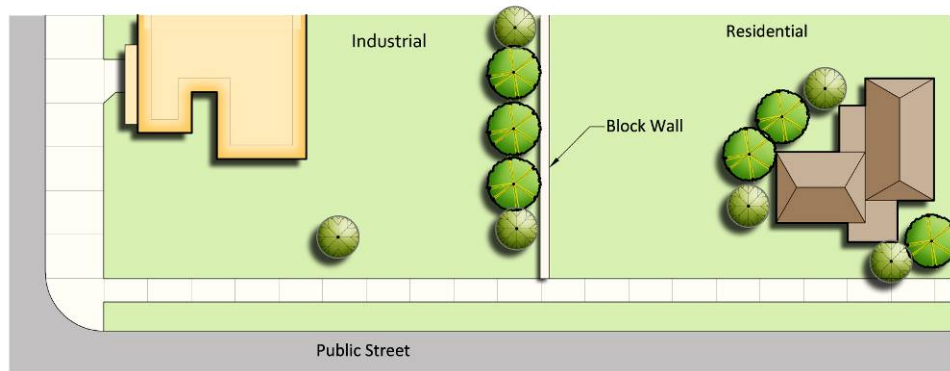


Figure 30. Plant material along buffer wall.

- Landscaping and trellises with vines are encouraged be used for screening trash storage areas, service areas and mechanical equipment.
- Setbacks adjacent to sensitive uses shall include dense landscaping to provide visual screening and noise abatement.
- Landscaped berms along site edges may be used to screen parking, loading and service areas and to serve as a sound reduction measure. **See Figure 31.**

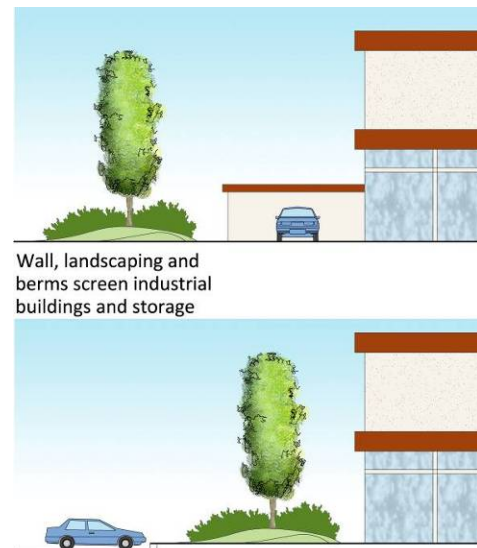


Figure 31. Landscaped berms.



- Surface parking lots shall be well-landscaped to reduce heat island effect and visually reduce the expanse of paved area. **See Figure 32.**
- Pervious paving materials are strongly encouraged for sidewalks, pathways, parking lots, plazas or gathering areas or other paved surfaces on-site.
- An automatic irrigation system using current equipment and technology shall be provided for planted areas.
- Run-off retention and on-site water filtration/stormwater treatment features and bioswales should be a part of the overall landscape design, and can also serve as buffering methods for adjacent businesses. **See Figure 33.**
- Trees shall be selected and placed to provide canopy and shade for walkways, pedestrian open spaces, and parking areas.
- Landscape material in the setback and visible from the public right-of-way shall blend with and seem a part of the public right-of-way landscaping.
- Tree and shrub planting shall be in large masses.
- Plant material selected shall be suited to the specific soil and micro climatic conditions.
- Trees shall be healthy and have a uniform branching pattern.
- All ground cover shall be healthy and densely foliated and comprised of well rooted cuttings or container plants.
- Availability and specific site conditions should be considered in final selection. Ground cover shall achieve 100% coverage in one year.
- Informal tree masses should be planted in a mix of sizes.



Figure 32. Landscaped parking lot.



Figure 33. One site water filtration.

## D. Commercial Uses

### 1. Site Design

#### Site Layout

- The arrangement of multiple buildings and associated circulation and parking shall reflect a well-organized site plan that emphasizes pedestrian connectivity and landscaped areas that enhance publicly-accessible spaces. **See Figure 34.**
- Loading areas, access and circulation driveways, trash enclosures, storage areas, and rooftop equipment shall be located as far as possible from adjacent sensitive uses.
- Buildings may be located adjacent to the street with a fully landscaped setback or buildings may be set back with limited parking in front. **See Figure 35.**

#### Courtyards, and Plazas

- The organization and design of buildings shall encourage and facilitate pedestrian activity.
- Buildings should be organized to create usable open space, courtyards, plazas and dining areas. **See Figure 36.**

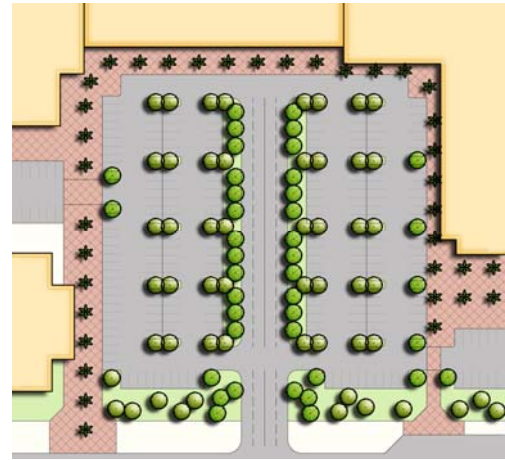


Figure 34. Site plan emphasizes pedestrian connectivity.



Figure 35. Limited parking adjacent to street with landscape setback.



Figure 36. Buildings create courtyard.

- Pedestrian-oriented open spaces, courtyards and plazas shall include a focal element such as a sculpture and/or water feature and sitting areas. **See Figure 37.**

### 2. Building Orientation

- The organization of buildings, parking areas, and landscaping shall recognize the existing characteristics of the site and shall relate to the surrounding development in scale and character.
- Commercial buildings on corner parcels shall establish a strong tie to both streets and should encourage pedestrian activity at corner locations. **See Figure 38.**
- Buildings associated with service retail and restaurant uses shall be pedestrian-scaled, with entries fronting onto streets, plazas or courtyards to reinforce pedestrian orientation.
- Buildings adjacent to sensitive uses (i.e. schools) shall be buffered. This may be accomplished by providing masonry walls, landscaped berms, appropriate building orientation, building height stepbacks and limitations on activities adjacent to sensitive uses. **See Figure 39.**



Figure 37. Open plaza areas with seating.



Figure 38. Commercial/retail buildings on corners should establish strong tie to the street.

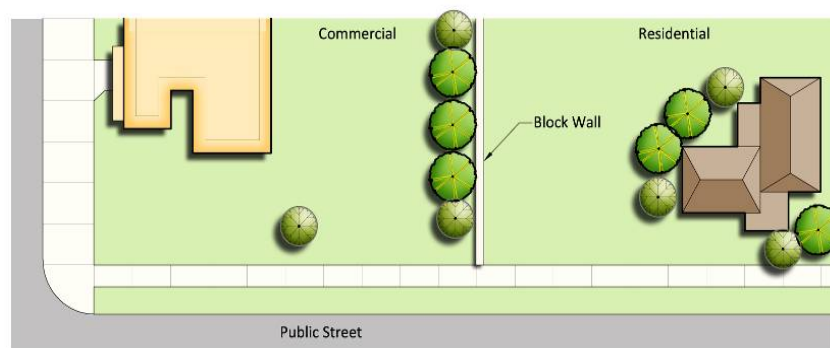


Figure 39. Masonry wall and landscaping separates uses.

- Commercial and retail buildings should generally be placed at or near setback lines with developments oriented in a manner that will provide visual interest.
- Buildings should be oriented in a manner that takes advantage of passive solar design to the maximum extent feasible.

### 3. Site Elements

#### Fences and Walls

- Wall heights and surfaces shall be articulated with varying façade depths or pilasters to promote architectural interest, and may include a cap along the top of the wall. **See Figure 40.**
- Walls visible from public streets shall be decorative and complement the design of on-site buildings.
- Wall and fencing materials may consist of brick, stone, stucco, wrought iron or tubular steel. Wall and fencing colors should match building colors, with neutral earth tones. **See Figure 41.**
- Walls and fences shall be integrated with landscaping along the base of the wall or fence.
- Electric fences, barbed wire, concertina wire, or other security wire is prohibited.



Figure 40. Wall incorporates pilasters and cap.



Figure 41. Stone wall.



### Screening

- Service and delivery areas shall be screened by building placement, decorative walls or landscaping to the fullest extent feasible so that views of loading areas are minimized from adjacent public streets. **See Figure 42.**
- Outdoor mechanical equipment should be screened from public view.
- Roof-mounted equipment shall be screened from public view through use of parapet walls or other screening devices. **See Figure 43.**

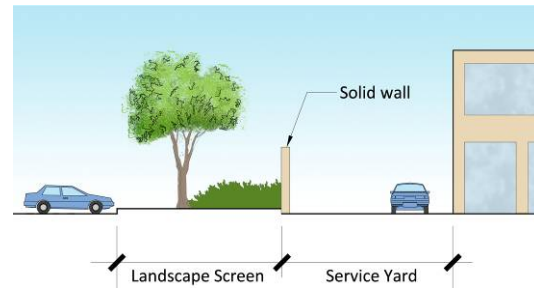


Figure 42. Screened delivery area.

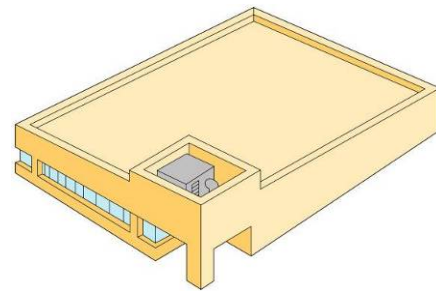


Figure 43. Screening of roof-mounted equipment.

### Trash Enclosures

- Trash enclosures shall be incorporated as part of the building design.
- If trash enclosures cannot be located out of public view, the design of trash storage areas shall incorporate architectural screening elements and landscaping compatible with the design of buildings and landscaping on the site.
- Trash enclosures visible from the public view shall integrate horizontal screening such as trellises.

### Lighting

- Outdoor lighting plans shall take into consideration the location and potential growth pattern of nearby trees (existing and planned) so that appropriate lighting levels are maintained over time.
- Energy efficiency shall be considered through use of proper light location and placement, as well as use of energy-efficient bulbs or fixtures.
- Lighting fixtures shall include hoods or other design techniques to reduce glare and light pollution, especially along major streets, and to prevent light spillover into adjacent properties. **See Figure 44.**



Figure 44. Hooded light fixture directs light downward.

- Lighting shall be provided in project entryways, walkways, parking lots, and plazas or courtyards to promote safety. **See Figure 45.**
- Lighting may be mounted on poles or bollards, affixed to building walls, or placed within paved or landscaped areas. Appropriate materials and construction methods shall be used to ensure proper function of project lighting fixtures. **See Figure 46.**
- Decorative light fixtures are encouraged, as long as fixtures are consistent with the architectural design of the building. **See Figure 47.**

#### 4. Parking and Access

##### Parking

- Parking lots should be designed with a clear hierarchy of circulation: major access drives with no direct access to parking spaces; major circulation drives with little or no parking; and parking aisles for direct access to parking.
- Large commercial and retail parking areas should be located behind building facades so as not to be visible from major streets.
- Parking lots shall not be the dominant visual element on the site.
- Surface parking areas shall integrate trees and landscape improvements to reduce the heat island effect. **See Figure 48.**
- Large parking lots (usually over 100 spaces) shall be divided into multiple, smaller areas and provided with canopy trees located throughout the parking area to reduce the effects of heat gain and the visual impacts of large parking areas.



Figure 45. Bollard lighting along pedestrian walkway.



Figure 46. Pole mounted light.



Figure 47. Decorative light fixtures.



Figure 48. Landscaped parking lot.

- Internal vehicular and pedestrian circulation within a development involving multiple buildings or lots shall interconnect in an obvious and consistent manner. **See Figure 49.**
- Parking lot design shall include water quality storm water facilities consistent with City standards. **See Figure 50.**

### Access - Vehicular

- Site access shall promote safety by providing an adequate stacking distance for vehicles between the back of the sidewalk and the first parking stall or circulation aisle.
- Conflict between vehicles and pedestrians shall be avoided at access driveways by providing a walkway on at least one side of the driveway.
- The number of access driveways shall be minimized and located as far as possible from street intersections.
- Site access locations shall be coordinated with existing or planned median openings and driveways on the opposite side of the roadway.
- Unobstructed line of sight at corners and driveways shall be provided to reduce vehicular conflicts. **See Figure 51.**
- Avoid placing primary vehicle access in close proximity to major building entrances in order to minimize pedestrian and vehicular conflicts. **See Figure 52.**

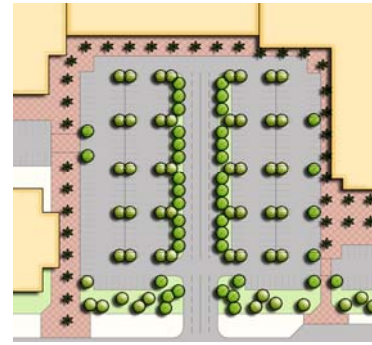


Figure 49. Pedestrian circulation is consistent along perimeter of parking lot.



Figure 50. On-site storm water capture.

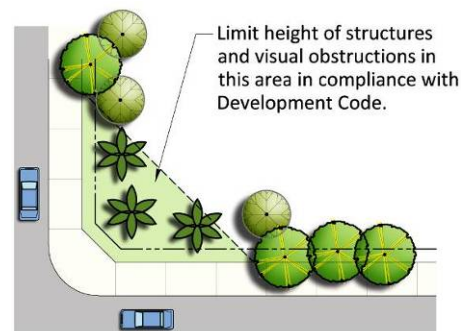


Figure 51. Unobstructed sight lines.



Figure 52. Vehicle access is placed away from building entrances.



## Access - Pedestrian

- Clearly defined pedestrian walkways or paths should be provided from parking areas to primary building entrances. Clear and convenient pedestrian access shall be provided between the public sidewalk and the pedestrian areas of the development. **See Figure 53.**
- Raised walkways, decorative paving, landscaping and/or bollards shall be used to separate pedestrian paths from vehicular circulation areas. **See Figure 54.**

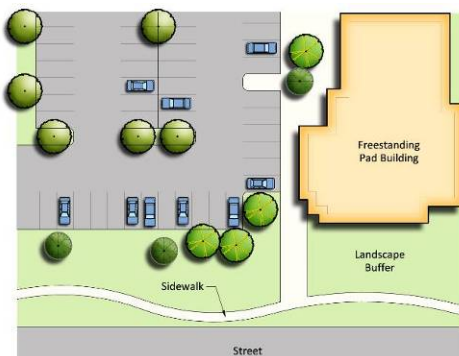


Figure 53. Clearly defined pedestrian walkways.

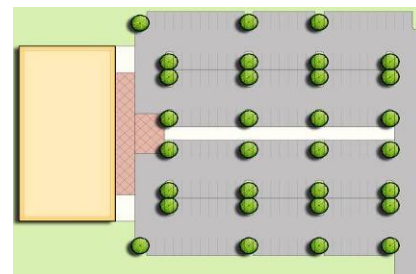


Figure 54. Raised walkway and landscaping in parking lot.

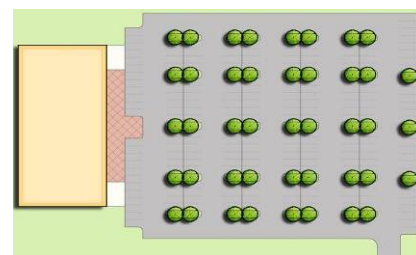
- Parking areas should be designed so that pedestrians walk parallel to moving cars. **See Figure 55.**

## Loading and Delivery

- Loading and delivery service areas shall be located and designed to minimize their visibility, circulation conflicts, and adverse noise impacts to the maximum extent feasible.
- Loading and delivery service areas shall be screened with portions of the building, architectural wing walls, freestanding walls or landscape planting.



Appropriate



Inappropriate

Figure 55. Pedestrian circulation.

- Loading areas shall be designed to not interfere with circulation or parking, and to permit trucks to fully maneuver on the property without backing from or onto a public street. **See Figure 56.**
- Service, loading and delivery areas should take access from planned shared access points to reduce curb cuts along project frontages.

### 5. Architecture

#### Mass and Scale

- The mass and scale of new developments shall be compatible with the existing, adjacent structures. This can be accomplished by transitioning from the height of adjacent buildings to the tallest elements of the new development by stepping back the upper portions of taller buildings.
- Human-scale elements, such as pedestrian-scaled doors, windows and building modules shall be used to emphasize pedestrian orientation.
- The size and location of various building elements (e.g., roofs, parapet walls, wing walls, etc.) shall be in scale to the building as a whole and provide visual interest. **See Figure 57.**

#### Building Facades

- Buildings shall include enhanced and articulated facades along public streets.
- Design details shall be continued or repeated upon all building elevations.
- Building entrances should be readily identifiable. The use of recesses, projections, columns, and other design elements to articulate entrances are encouraged. **See Figure 58.**
- Facades shall provide visual interest with vertical and horizontal variations in wall



Figure 56. Loading area placed behind building outside of circulation lanes.



Figure 57. Building elements add visual interest.



Figure 58. Building Entry.

and roof planes, building projections, door and window bays, arcades, and similar elements/techniques. **See Figure 59.**

- Buildings shall undergo a break in façade approximately every 40 feet, to create a varied wall surface along public areas. Higher facades and rooftops should be incorporated at corners and intersections, and appropriate massing and scale should be considered for the remainder of the building spanning public right-of-way frontage.
- Buildings should include vertical elements (e.g., clock tower, building articulation) that create points of visual interest when viewed from the public right-of-way.
- Roof designs that are visually interesting and designed to completely screen all rooftop equipment from public streets are required. **See Figure 60.**
- Buildings should use large windows along walls and skylights in rooftop designs to capture natural light during operating hours.
- The interior areas of commercial development should have shaded or covered walkways.

### Storefronts

- Storefronts shall be comprised predominantly of transparent surfaces (windows). **See Figure 61.**
- The use of clear glass (on the first floor) is strongly encouraged.
- Storefront windows shall be large and a minimum of 24 inches off the ground. The maximum bulkhead (wall plane between the ground and the bottom of the windows) height should be approximately 36 inches.
- Storefront entries should promote a sense of entry into the structure as well as provide a sense of shelter by incorporating



Figure 59. Horizontal and vertical articulation.



Figure 60. Full roof screens all equipment and provides visual interest.



Figure 61. Storefront windows.



elements such as overhangs, canopies, awnings, and recesses. **See Figure 62.**

- If security grilles are necessary, they shall be placed inside the building behind the window display area at a minimum distance of two feet behind the window.
- Product storage racks shall not block views through storefront windows.

### Colors and Materials

- The use of a coordinated three-color palette for the base color and major and minor trim accents is encouraged.
- Colors for all structures on-site should be varied and should consist of neutral, earth tones. **See Figure 63.**
- Exterior finish materials shall be appropriate for the architectural style and/or theme of the entire development and should contribute towards a high quality image. **See Figure 64.**
- Changes in materials shall occur at inside corners to make building volumes appear substantial. **See Figure 65.**
- Materials shall be varied to provide architectural interest, however, the number of materials shall be limited and not exceed what is required for contrast and accent of architectural features.
- Exterior materials and architectural details shall relate to each other in ways that are traditional and logical. For example, heavy materials should appear to support lighter ones. **See Figure 65.**



Figure 62. Storefront overhangs provide a sense of shelter and entry.



Figure 63. Use of neutral, earth tones.



Figure 64. Exterior finish materials.



Figure 65. Heavy materials at base of building with lighter materials above.

## 6. Landscaping

### Plants and Irrigation

- Landscaping should help complete the design of the site and enhance the quality of commercial developments by framing and softening the appearance of buildings, screening undesirable views, and buffering incompatible uses.
- Landscaped areas should generally incorporate planting utilizing a three tiered system:
  - 1) ground covers (including flowering plants—annuals and perennials),
  - 2) shrubs and vines, and
  - 3) trees.

**See Figure 66.**



Figure 66. Example of three tier landscape system.

- Entry and exit points shall be highlighted through a combination of distinctive landscape and hardscape features. **See Figure 67.**
- Planting materials shall be used in plazas or gathering areas to provide shade and soften the appearance of hard surfaces. Water features and public art are also encouraged in these places. **See Figure 68.**
- Trees located along street frontages shall be selected to match or complement existing or proposed street trees in the public right-of-way.
- A minimum five-foot landscape strip shall be used along circulation aisles in parking lots, and along building side/rear elevations if a walkway is not used. A landscape strip is also encouraged in nonpublic areas and service areas between pavement and buildings.



Figure 67. Highlighting entry points.



Figure 68. Public plaza area within commercial development incorporates water feature.

- On-site water filtration features and bioswales are strongly encouraged, and can also be used as buffering methods for adjacent businesses.
- Drought tolerant and low-water trees, vines, and groundcovers shall be used on-site. When feasible, drip irrigation systems shall be installed to provide on-site vegetation with appropriate irrigation and ensure the highest possible volume of water conservation.
- Planting materials shall be used to provide a buffer against noise, and may be integrated with walls or fences to achieve desired sound reduction and appearance.
- Tree and shrub planting shall be in large masses.
- Plant material selected shall be suited to the specific soil and micro climatic conditions.
- Trees shall be healthy and have a uniform branching pattern.
- All ground cover shall be healthy and densely foliated and comprised of well rooted cuttings or container plants.
- Availability and specific site conditions should be considered in final selection. Ground cover shall achieve 100% coverage in one year.
- Informal tree masses should be planted in a mix of sizes.

### Site Furniture

- Outdoor furniture and fixtures (e.g., lighting, directional signs, trellises, raised planters, works of art, benches, trash receptacles, fencing, etc.) shall be integral elements of the building and landscape design. **See Figure 69.**



Figure 69. Trellis.

- Outdoor furniture shall be of a sturdy construction to withstand daily use. Wood should be avoided.
- Outdoor furniture shall be located so it will not conflict with the pedestrian and motor vehicle circulation patterns. **See Figure 70.**
- Outdoor seating should be shaded.



Figure 70. Outdoor furniture outside of pedestrian walkway.

## Paving

- Decorative paving shall be incorporated into courtyards, plazas, pedestrian walkways, and crosswalks. **See Figure 71.**
- Paving materials shall complement the architectural design of the building and landscape design of the project. The use of stamped concrete, stone, brick, permeable pavers, exposed aggregate, or colored concrete is encouraged. The use of slippery materials (e.g., polished marble or granite) is prohibited.



Figure 71. Enhanced paving in pedestrian areas.

## E. Flex-Tech Multi-Use Facility

The design guidelines in this Subsection shall apply to all flex-tech projects within this land use district.

### 1. Site Design

#### Site Layout

- The arrangement of multiple buildings and associated circulation, and parking areas should reflect a well-organized site plan that emphasizes pedestrian connectivity and landscaped areas responsive to the public.
- Site development may utilize variations on building placement and landscaping adjacent to the public street. Appropriate configurations may include, but are not limited to the following:



- Fully landscaped setback between building and street.
  - Parking in front of building with a landscape buffer between parking and street.
- 
- Visitor parking may be located at located near the front/visitor entries to the businesses, while employee parking and service areas are located at the sides and rear of the building.
  - Service and loading area should not be located on building side(s) adjacent to a public street. Service and loading areas should be located to the rear of the buildings or in the interior of a multiple building complex. **See Figure 72.**
  - Outdoor storage, work, and loading areas shall be incorporated within the building design and located to the rear or side of buildings and screened from view from adjacent public streets. Accessory buildings such as equipment enclosures or storage buildings should be minimized. These service areas should be incorporated into the building design to the greatest extent feasible. **See Figure 73.**
  - The design and location of accessory buildings (e.g., security kiosks, maintenance buildings, and outdoor equipment enclosures) shall be incorporated into and be compatible with the overall design of the project and the main buildings on the site.
  - With the exception of security kiosks, accessory buildings shall be located as far back from the front and street side setback area as possible.
  - Sea/train-type metal containers are prohibited.



Figure 72. Loading and service areas accessed between buildings in a multiple building complex.

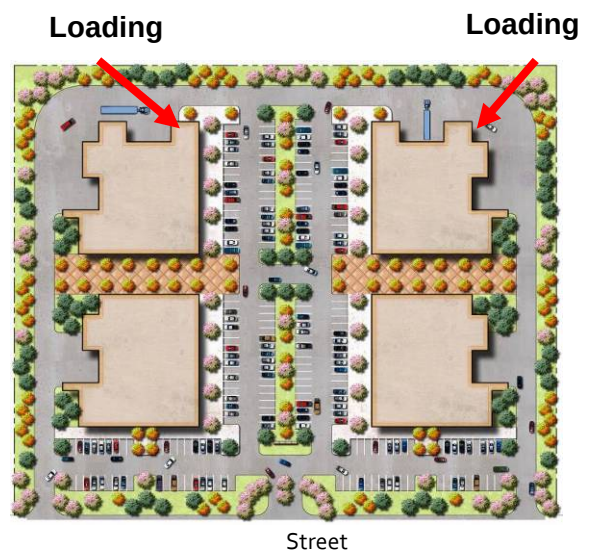


Figure 73. Appropriate location of loading areas.

- Noise-generating activities and storage areas shall be located as far as possible from adjacent properties. Sound attenuation walls shall be used where appropriate to reduce noise.

### Courtyards and Plazas

- Buildings should be arranged to create opportunities for open space amenities (e.g., plazas, courtyards, outdoor eating areas, recreation areas, etc.). **See Figure 74.**
- Larger developments should provide recreational facilities (e.g., bicycle paths, tennis courts, volleyball courts, gymnasiums, etc.).

### 2. Building Orientation

- Multiple building developments should be oriented in a manner that will form gateways through facade enhancement, maximize public view, and capture public interest along adjacent major streets.
- Retail and office space should be located on the front of the building, visible from the public realm and adjacent to visitor parking. Flex areas used for warehousing, distribution, light manufacturing, research and development and other uses without a visitor component should be located to the sides or rear of the building.
- The organization of buildings, parking areas, and landscaping shall recognize the existing characteristics of the site and shall relate to the surrounding development in scale and character.
- Buildings should generally be placed at or near setback lines with development oriented in a manner that will provide visual interest.
- Buildings should be oriented in a manner that takes advantage of passive solar design.



Figure 74. Outdoor seating area provided between buildings.

- Buildings shall be oriented to provide a buffer between surrounding properties and outdoor work areas, loading, and storage.

### **3. Site Elements**

#### **Fences and Walls**

- Walls and fencing materials shall consist of wrought iron, tubular steel, stone, stucco, or brick, and shall be compatible with the overall design character/style of the development. The use of chain-link fence material is not allowed if visible from the public right-of-way.
- Walls and fences shall be integrated with landscaping along the base of the wall or fence.
- Wall heights and surfaces shall be articulated with varying facade depths or pilasters to promote architectural interest, and shall include a cap along the top of the wall.
- Landscaping shall be used in combination with walls and fences to visually soften blank surfaces and to deter graffiti.

#### **Screening**

- Loading bays and service areas shall be screened by building placement, decorative walls or landscaping to the fullest extent feasible so that views of loading areas are minimized from visitor areas and adjacent public streets.

- Trash storage enclosures and outdoor mechanical equipment shall be screened from public view.
- Roof-mounted equipment shall be screened from public view through use of parapet walls or other screening devices. **See Figure 75.**

### Trash Enclosures

- Trash enclosures shall be incorporated as part of the building design.
- If trash enclosures cannot be located out of public view, the design of trash storage areas shall incorporate architectural screening elements and landscaping compatible with the design of buildings and landscaping on the site. **See Figure 76.**
- Trash enclosures shall integrate horizontal screening such as trellises.

### Lighting

- Outdoor lighting plans shall take into consideration the location and potential growth pattern of nearby trees (existing and planned) so that appropriate lighting levels are maintained over time.
- Energy efficiency shall be considered through use of proper light location and placement, as well as use of energy-efficient bulbs or fixtures.
- Lighting fixtures shall include hoods or other design techniques to reduce glare and light pollution, especially along major streets and adjacent to residential zones, and to prevent light spillover onto adjacent properties.
- Lighting shall be provided in project entryways, walkways, parking lots, and plazas or courtyards to promote safety. **See Figure 77.**

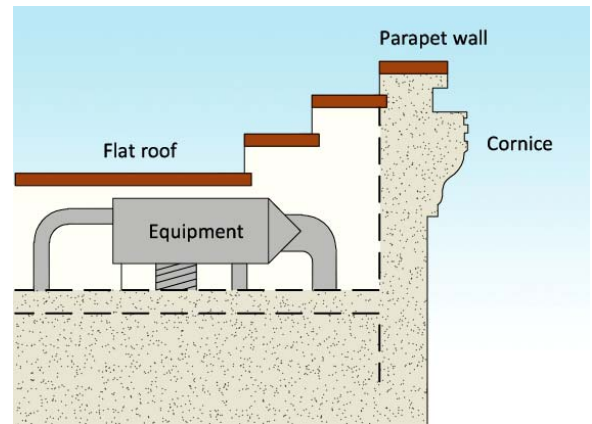


Figure 75. Screening of roof mounted equipment.

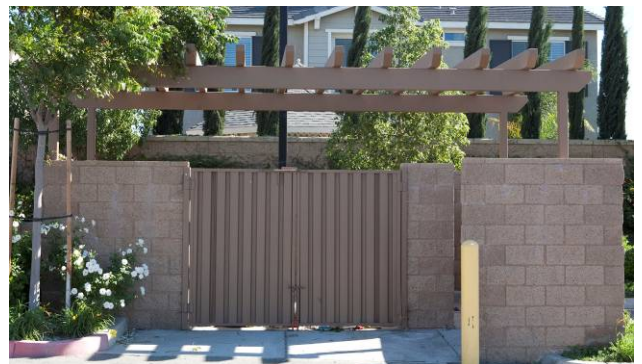


Figure 76. Trash enclosures with architectural screening elements.



Figure 77. Lighting along pedestrian walkway.

- Lighting may be mounted on poles or bollards, affixed to building walls, or placed within paved or landscaped areas. Appropriate materials and construction methods shall be used to ensure proper function of project lighting fixtures.
- Decorative light fixtures shall be consistent with the architectural design of the building.

#### **4. Parking and Access**

##### **Parking**

- Parking lots shall not be the dominant visual element on the site.
- Parking lots adjacent to and visible from public streets shall be appropriately screened to minimize undesirable visual impacts.
- Surface parking areas shall integrate trees and landscape improvements to reduce the heat island effect.
- Large parking lots (usually over 100 spaces) shall be divided into multiple, smaller areas and provided with canopy trees located throughout the parking area to reduce the effects of heat and the visual impacts of large parking areas.
- Employee parking areas should be located behind the building or alongside of the building so as not to be visible from adjacent streets.



- Internal vehicular and pedestrian circulation within a development involving multiple buildings or lots shall interconnect in an obvious and consistent manner. **See Figure 78.**
- Parking shall be provided within walking distance of all tenants and public sidewalks.
- Parking lot design shall include water quality stormwater facilities consistent with City standards. **See Figure 79.**

#### Access

- The use of common (shared) access points and driveways is encouraged; placement of vehicle access points close to building entries shall be avoided to minimize pedestrian and vehicular conflicts.
- Entry drives shall be clearly marked by special features, (e.g., enhanced paving, prominent landscape features, low-level decorative walls, and well-designed monument-type signs). **See Figure 80.**
- Access to each development site shall be clearly visible to pedestrians and motorists.
- Service and loading areas should take access from shared access points to reduce curb cuts along streets.

#### 5. Architecture

##### Mass and Scale

- The mass and scale of the buildings shall respect the visual and physical relationship to the adjacent buildings and surrounding sensitive uses. Taller building elements should be placed towards the center of the site, with lower elements adjacent to surrounding properties.

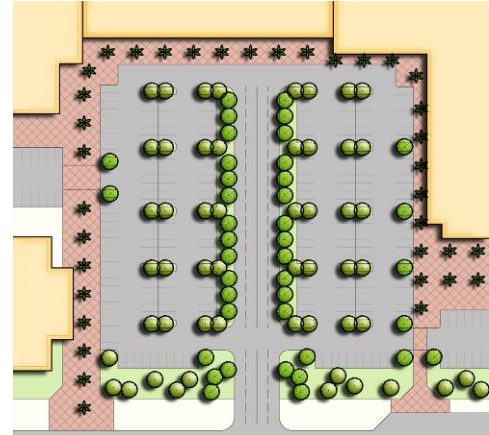


Figure 78. Pedestrian circulation is consistent along perimeter of parking lot.



Figure 79. On-site stormwater capture system.

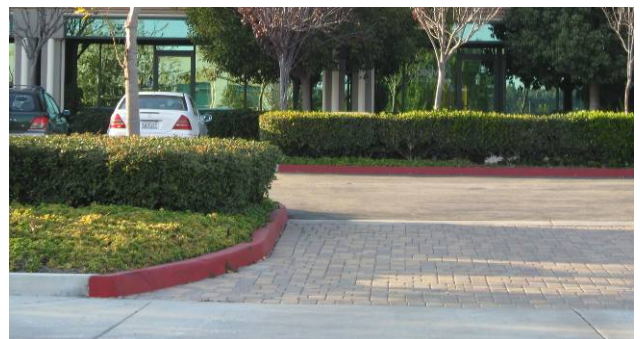


Figure 80. Entry drive.

- Buildings should be stepped back when adjacent to or in close proximity to sensitive uses (e.g., residential, schools, etc.).
- Vertical and horizontal offsets shall be provided to reduce the visual bulk of the building. **See Figure 81.**
- Buildings should be designed to accommodate a wide range of uses, from office to small scale retail and service to light manufacturing. Interior spaces should allow for a variety of configurations, combining and dividing spaces as needed based on the uses.



Figure 81. Façade articulation.

### Building Facades

- Building facades shall incorporate architectural elements such as windows, pillars, wall plane breaks to minimize blank walls and to create visual interest.
- All building elevations, whether front, side, or rear shall be architecturally detailed.
- Architectural accents (e.g., cornices, tiles, trim around windows, grooves in building faces, accent band details, bulkheads, etc.) shall be used to create variation along building facades. **See Figure 81.**
- Higher facades and rooftops should be incorporated at corners and intersections, and appropriate massing and scale shall be considered for the remainder of the building spanning public street frontage. **See Figure 82.**
- The orientation of windows in buildings adjacent to a residential zone shall preclude a direct line of sight into residential properties.



Figure 82. Enhanced corner elements.



- Visitor entries to retail and office uses shall be easily identified through the use of prominent architectural elements, signage, landscaping, lighting, canopies, roof form, hardscape, architectural projections, columns, vertical elements, or other design features that help emphasize a space's entry. **See Figure 83.**
- Roofs shall be designed as an integral component of building form, mass, and facade. Building form should be enhanced by sloped or offset roof planes, eave heights, and rooflines. **See Figure 84.**

### Color and Materials

- Colors and materials for all structures on-site should consist of earth tones. Use of at least two to three different colors, materials or textures is encouraged.
- Building materials shall be durable and able to withstand long-term exposure to the elements.
- Large expanses of smooth material (e.g., concrete) shall be broken up with expansion joints, reveals, or changes in texture and color.
- To the fullest extent feasible, buildings should use large windows along walls and skylights in rooftop designs to capture natural light during working hours.

### 6. Landscaping

- Landscaping shall be in scale with adjacent structures, streets, and public spaces, and shall be sized appropriately when fully grown.
- Landscaped areas should incorporate a three-tiered planting system:
  - 1) trees;
  - 2) shrubs and vines; and
  - 3) ground coversSee suggested Plant Palette in Table 6-6.
- Special landscape features, such as specimen trees, shall be provided at major



Figure 83. Awnings articulate entries to tenant spaces.



Figure 84. Offset roof planes.

focal points (e.g., project entries, building entries, and pedestrian gathering areas).

- Entry and exit points shall be highlighted through a combination of distinctive landscape and hardscape features.
- Development on corner lots shall be enhanced with a combination of specimen trees, accent plantings, upgraded perimeter wall surfaces, hardscape treatments and landscape lighting adjacent to the street intersection.
- Drought-tolerant and low-maintenance trees, vines, and groundcovers shall be used on-site. Drip irrigation systems shall be installed where feasible to ensure the highest possible level of water conservation.
- Planting materials shall be used in plaza areas to provide shade and soften the appearance of hard walls.
- The use of vines is encouraged on walls to soften the appearance of buildings and screen walls, and to help deter graffiti. **See Figure 85.**
- Planting materials shall be installed to provide a buffer against noise and should be integrated with walls or fences to achieve desired sound reduction.
- Landscaping and trellises with vines are encouraged for screening trash storage areas, service areas and mechanical equipment.
- Setbacks adjacent to residential zones shall include dense landscaping to provide visual screening and noise abatement.



Figure 85. Wall incorporates landscaping at the base.

- Landscaped berms along site edges may be used to screen parking, loading and service areas and to serve as a sound reduction measure. **See Figure 86.**
- Surface parking lots shall be well-landscaped to reduce heat island effect and visually reduce the expanse of paved area.
- Pervious paving materials are strongly encouraged for sidewalks, pathways, parking lots, plazas or gathering areas or other paved surfaces on-site.
- An automatic irrigation system using current equipment and technology shall be provided for planted areas.
- Run-off retention and on-site water filtration/stormwater treatment features and bioswales should be a part of the overall landscape design, and can also serve as buffering methods for adjacent businesses. **See Figure 87.**
- Trees shall be selected and placed to provide canopy and shade for walkways, pedestrian open spaces, and parking areas.
- Landscape material in the setback and visible from the public right-of-way shall blend with and seem a part of the public right-of-way landscaping.
- Tree and shrub planting shall be in large masses.
- Plant material selected shall be suited to the specific soil and micro climatic conditions.
- Trees shall be healthy and have a uniform branching pattern.
- All ground cover shall be healthy and densely foliated and comprised of well rooted cuttings or container plants.



Figure 86. Landscaped berm buffers parking.



Figure 87. On-site water filtration.

- Availability and specific site conditions should be considered in final selection.
- Ground cover shall achieve 100% coverage in one year.
- Informal tree masses should be planted in a mix of sizes.

### F. Special Commercial Uses

#### 1. Drive-Through Uses

##### Site Design

- The predominant feature along the street frontage should be the building, not parking lots or the drive-through aisle.
- The building shall be located to maximize the distance for vehicle queuing while screening the drive-through operations. **See Figure 88.**
- Drive-through aisles shall be located in the rear of the building away from the street frontage whenever possible. If the drive-through aisle is located between the building and the street, dense landscaping and landscaped berms or a screen wall (42 inches high or less) shall be provided to screen the drive-through aisle from street view. **See Figure 89.**

##### Building Design

- All building elevations shall receive the same level of architectural detailing.
- Buildings shall incorporate roof designs with built-in equipment wells or other built-in screening methods, so that screening devices do not appear added-on.
- If the drive-through facility is a pad building within a shopping center, the architecture shall relate to and be compatible with the design of the center. The only feature that identifies the

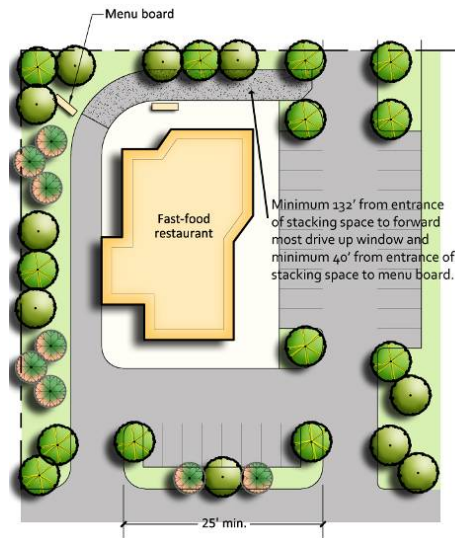


Figure 88. Vehicle queuing.



Figure 89. Example of appropriately landscaped and screened drive-through aisle.



franchise shall be the company's logo and signs.

## 2. Mini-Storage Facilities

### Site Design

- Offices and customer service areas shall be located adjacent to the street frontage to provide convenient access and help visually break up the front façade.

### Building Design

- Long, flat, unarticulated walls shall be avoided along street frontages. **See Figure 90.**
- Building walls and screen walls shall incorporate substantial articulation, and changes in plane and height to add visual interest.
- A minimum of two different building materials shall be used on building walls and screen walls adjacent to street frontages (e.g., stucco, brick, stone).
- Building materials, textures and landscaping shall be chosen to deter graffiti.

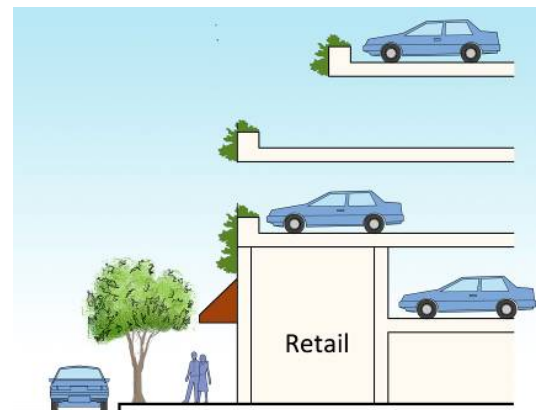


Figure 90. Articulated wall of mini-storage facility.

## 3. Parking Garages

### Site Design

- Where appropriate, parking garages should incorporate ground floor retail adjacent to the public sidewalk. **See Figure 91.**



Incorporate retail or other compatible uses on ground floor whenever possible.

Figure 91. Liner shops.

- A minimum 5-foot wide landscaped strip shall be provided on all sides of the parking structure except where ground floor retail space is provided.

### Building Design

- Parking garages shall be designed to help reduce the mass and scale of the garage and to ensure their compatibility with surrounding uses.
- Conceal view of vehicles in the garage through a combination of screen walls and plantings. **See Figure 92.**
- Avoid a monolithic appearance. This can be accomplished as follows:
  - Minimize horizontal and vertical banding by balancing both horizontal and vertical elements.
  - Use simple, clean geometric forms, and coordinated massing.
  - Step back upper levels of the garage 5 to 10 feet above the first floor. **See Figure 93.**
- Coordinate openings in the parking garage with the size and modulation of adjacent windows, structural bays, and storefronts if the parking garage contains other uses.
- Size openings in the parking garage to resemble large windows as in an office building.
- Use masonry materials that are predominantly light in color, but avoid unpainted concrete.
- Avoid a sloping ramp appearance by providing level and uniform wall planes between floors.
- Visually define and differentiate between pedestrian and vehicular entrances through appropriate architectural detailing. **See Figure 94.**



Figure 92. Parking structure with landscaping.



Figure 93. Horizontal and vertical articulation breaks up parking structure elevation.



Figure 94. Paving differentiates between pedestrian and vehicular entries.

## Access and Circulation

- Vehicle stacking areas for entering and exiting traffic shall be sufficient in length to minimize traffic backup into surrounding streets or within the garage. A minimum of two vehicle lengths of stacking distance shall be provided between the back of the sidewalk and the control gate.
- One inbound lane shall be provided for a garage with a capacity of up to 500 vehicles. At least two inbound lanes shall be provided for garages with a capacity of more than 500 vehicles.
- The maximum aisle length shall not exceed 400 feet without providing a cross aisle.
- Ramp grades shall not exceed 10 percent and parking areas should not exceed a slope of four to five percent.

## Security and Lighting

- The design of the garage shall eliminate possible hiding places and openings that could allow random pedestrian access.
- During periods when parking activity is substantially less than the garage capacity (i.e., during night operations), there shall be a means of securing unused parking levels from use, including stairwells and elevators. If the garage is not operated on a 24-hour basis the entire facility shall be secured from access during hours when the facility is closed.
- For security reasons, at least one or two sides of the stair tower shall include glass running vertically the height of the tower. Elevators shall be provided with glass-back cabs and shafts. **See Figure 95.**



Figure 95. Glass-back elevator cab and shaft.



- Stairs and elevators shall be located adjacent to a street on the exterior of the structure where lobbies can be exposed to outside view.
- The use of security cameras is required.
- A minimum of five foot-candles shall be provided inside the structure and a minimum of three foot-candles for exterior parking areas. Higher levels are recommended for remote areas subject to security problems such as stairways, elevators, and other pedestrian access points.
- Lighting levels shall be equally distributed to provide uniform illumination over all parking areas.
- Light sources shall be shielded so that the source of the illumination is not seen from outside the structure.

### 5. Service Stations

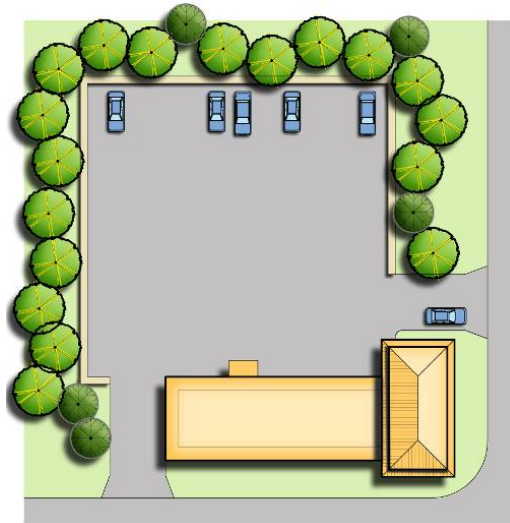
#### Site Design

- The site shall be designed to accommodate anticipated circulation patterns and those patterns should be defined by paving and by well-placed landscaped areas.
- In areas developed with buildings adjacent to the sidewalk, service stations shall also be oriented to the sidewalk, placing any service bay door and car wash openings on the rear of the structure.
- Where commercial development abuts the service station, two-way vehicular access integrated with the adjacent commercial development shall be provided where feasible.
- The site design for projects located at street corners shall provide a strong design element at the corner to help frame the public right-of-way and anchor the corner. **See Figure g6.**



Figure g6. Corner landscaping element.

- Parking spaces for vehicles left for repair shall be located in the least visible areas of the site and screened from public view.
- Service or car wash bays shall not face toward a public street.
- Work bays shall be oriented so that the interior of the bays are not visible or audible from a public street. **See Figure 97.**
- Each pump island shall include a vehicle stacking area for at least two vehicles (38-feet), on at least one end of the pump island and shall not restrict vehicle circulation and parking areas.
- A gasoline tanker truck unloading zone shall be provided and shall not obstruct vehicle circulation and parking areas.



Work Bays

Figure 97. Work bays face interior

### Building Design

- Service station buildings shall be designed to complement and be compatible with the predominant architectural theme and scale of the area. If located within a multi-use center, the architectural design shall be compatible with the design of the center.
- The design of the building should be clean and simple, and shall relate to surrounding buildings through use of similar scale, materials, colors, and/or detailing.
- Building elevations facing public streets shall be architecturally detailed to provide interest and the appearance of quality development.
- The roof design of service stations, including pump island canopies, shall incorporate full, pitched roof treatments with a low to moderate slope. **See Figure 98.**
- Building materials shall have the appearance of substance and permanency (e.g., masonry).



Figure 98. Sloped roof on pump island canopies.

### Landscaping and Walls

- A three-foot high, landscaped berm, a dense hedge, or a low wall shall be provided along all street frontages where parking is provided. **See Figure 99.**
- A minimum six-foot high decorative masonry wall shall be provided along side and rear property lines not abutting public streets. A minimum five-foot wide landscaped planter shall be provided adjacent to the wall in areas accessible to the public.



Figure 99. Landscaped berm.

### Site Elements

- Gates, fencing, and walls shall remain free of signs or other advertisements.
- The use of chain-link fencing is prohibited if visible from a public street.
- Where security is an issue, fencing shall consist of open grille work, and the use of surveillance cameras is encouraged.
- Electric fences, barbed wire, concertina wire, or other security wire is prohibited.

## 4. Shopping Centers

### Site Design

- Portions of primary buildings and/or freestanding satellite buildings shall be located at the street setback lines to enclose the site and help frame the street. **See Figure 100.**



Figure 100. Buildings placed at street setback lines.

- Buildings within the center shall have a logical spatial and functional relationship to each other and shall provide for convenient pedestrian circulation throughout the center.
- Parking shall be provided within convenient walking distances of all tenants. Walking paths to buildings from the public street shall be provided. **See Figure 101.**
- To reduce the visual impact of large paved areas, parking lots shall be broken up into smaller areas separated by landscaping, pedestrian circulation areas and drive aisles.
- Storage areas and loading facilities shall be limited in number and shall be designed, located, and screened to minimize their visibility from outside public areas and surrounding streets.

### Building Design

- Buildings, hardscape, landscape, site furnishings and signage should reflect a unified theme. **See Figure 102.**
- Long, linear buildings shall be avoided. Where such buildings are unavoidable, their length shall be mitigated by changes in building height, wall plane, and spatial volumes and by varied use of window areas, arcades, roof elements, and building materials. **See Figure 103.**
- If the shopping center contains a large scale building, integration of smaller-scale shops along the exterior of the building with entrances from the exterior of the building are desirable in order to create a more human scale and pedestrian-oriented character.



Figure 101. Walking paths.



Figure 102. Unified theme.



Figure 103. Articulation along wall plane.



- Side and rear elevations of commercial buildings that are visible from public rights-of-way shall be architecturally consistent with the front elevations of the building.
- Blank walls adjacent to main pedestrian areas shall be avoided.
- Flat roofs, mansard roofs, and veneer parapets are strongly discouraged in favor of full, pitched roof treatments. In large centers, a combination of flat roofs with decorative cornices and full, pitched roofs may be acceptable if the design presents a balanced appearance. **See Figure 104.**
- All roof-top and ground-mounted equipment shall be screened from view.
- Outdoor sales and storage areas shall be designed to blend with the architecture of the main building. The height of the screening elements shall be tall enough to screen all stored materials. **See Figure 105.**



Figure 104. Appropriate roofing.



Figure 105. Outdoor sales area.

### **7.10 Development Incentives**

This Section offers development incentives to produce greater land use efficiencies and reduce incremental costs for new development.

#### **A. Applicability**

The incentives in this Section shall apply to all new development that meet(s) the applicable eligibility criteria.

#### **B. Definitions**

For the purposes of this Section, lot consolidation shall have the following meaning:

1. Lot consolidation. A legal action in which a lot line is removed or abandoned; a lot line is adjusted; lots are merged; or other equivalent action is taken, for the purpose of allowing a structure or development to be built so that it extends over what were previously two or more separate lots. A lot consolidation cannot create additional lots and cannot make existing lots nonconforming. All lots must be identical in ownership.

#### **C. Lot Consolidation and Lot Integration Incentives**

1. Eligibility requirements. In order to be eligible for the by-right development incentives indicated in Subparagraph 2, below, the minimum consolidated lot size for a development shall be 97,500 square feet.
2. By-right incentives. Eligible projects shall receive one or more of the following incentives:
  - a. Expedited application processing. Applications for eligible projects shall receive expedited project processing (i.e., projects will move to front of line for assignment to a planner for review), irrespective of the number of lots involved.
  - b. Parking Reduction. Required parking standards may be reduced up to a maximum of 20 percent, provided that the adequacy of proposed parking can be demonstrated in a parking study prepared in compliance with Section 7.6 Parking and Loading Standards.
  - c. Allowable Bonuses. Allowable increases in intensity (i.e., floor area ratio [FAR]) and in maximum height shall be in the amounts listed in Table 7-10 – Allowable Bonuses for Lot Consolidation. The intensity and height bonus incentives shall apply to the total gross square footage of the consolidated lots

| Table 7-10<br>Allowable Bonuses for Lot Consolidation |                                  |                    |                               |
|-------------------------------------------------------|----------------------------------|--------------------|-------------------------------|
| <i>Base Intensity (FAR)</i>                           | <i>Allowable Intensity Bonus</i> | <i>Base Height</i> | <i>Allowable Height Bonus</i> |
| 0.5                                                   | 15%                              | 60 ft              | 15 ft                         |

**D. Green Building Incentives**

1. Eligibility requirements. Projects that are seeking green building certification by a third-party entity (e.g., LEED, etc.) shall be eligible for the by-right development incentives indicated in Subparagraph 2.
2. By-right incentives.
  - a. Expedited application processing. Applications for eligible projects shall receive expedited project processing (i.e., projects will move to front of line for assignment to a planner for review).
  - b. Parking Reduction. Required parking standards may be reduced up to a maximum of 20 percent, provided that the adequacy of proposed parking can be demonstrated in a parking study prepared in compliance with Section 7.6 (Parking and Loading Standards), as approved by the Director of Community Development.
  - c. Allowable Bonuses. Allowable increases in intensity (i.e., floor area ratio (FAR)) and in maximum height shall be in the amounts listed in Table 7-11 – Allowable Bonuses for Green Building. The intensity and height bonus incentives shall apply to the total gross square footage of the project site.

| Table 7-11<br>Allowable Bonuses for Green Building |                                  |                    |                               |
|----------------------------------------------------|----------------------------------|--------------------|-------------------------------|
| <i>Base Intensity (FAR)</i>                        | <i>Allowable Intensity Bonus</i> | <i>Base Height</i> | <i>Allowable Height Bonus</i> |
| 0.5                                                | 15%                              | 60 ft              | 15 ft                         |

**E. Application and Review Process for Incentives.**

1. Written submittal. Interested parties shall submit a written request for approval of incentives to the Director of Community Development.
2. Pre-application hearing. Before the approval of any incentives, the project applicant(s) shall attend a pre-application meeting with the Director of Community Development. Fees for pre-application meetings shall be waived.
3. Determination. The Director of Community Development shall determine whether the proposed new development meets the eligibility criteria in Paragraphs C.1. or D.1.



Additional factors to be considered when reviewing applications for incentives shall include the following:

- a. Detriment. The proposal will not detrimentally affect access, design, or other public safety and welfare concerns.
  - b. Covenants or conditions. The proposal will not violate recorded covenants.
  - c. Right-of-way easements. The proposal will not invalidate any easement(s) unless the adjustment establishes replacement easement(s) that is properly filed with the city.
4. Conditions. Conditions may be imposed in connection with the granting of any incentive where the Director of Community Development deems that conditions are necessary to protect the public health, safety, and welfare.

## **7.11 Entitlement Procedures**

### **A. Purpose**

These administrative procedures have two major purposes:

1. Ensure that development conforms to the SWIP Specific Plan ("Plan").
2. Ensure that the City's review is as expedited as possible while remaining legal and proper.

### **B. Summary of Processing Procedures**

1. Conformity with the Plan. The Director of Community Development shall review each application for conformity with the development regulations in this Chapter. *Conformity* has two components:
  - a. Standards. Compliance with the Standards is mandatory and the City may not approve a project that fails to comply with the Standards.
  - b. Guidelines. The City may exercise discretion in evaluating the project's compliance with the Guidelines.
2. Project Review. Applications for development approvals shall be filed with the Department and will be returned for revision. Applications must strive to meet the "Guidelines," but applicants may propose alternate ways to achieve the goals of the Guidelines.
3. Timing of Permits and Approvals. Required planning approvals shall be obtained before the issuance of any grading, building, or other construction permit, and before the proposed use is constructed, otherwise established, or put into operation.
4. Processing Requirements. Applications for planning permits shall be processed in compliance with Table 7-12 – Hearing Bodies.
5. Timing of Project Review. Project review shall be required before the issuance of a Building or Grading Permit, Business License, or Certificate of Occupancy for any new structure (not including fences or walls) and/or existing structures to be reconstructed or remodeled (including facade improvements).

Table 7-12 – Hearing Bodies

| Reviewing Bodies                       |        |      |    |    |     | Appeal Body |    |
|----------------------------------------|--------|------|----|----|-----|-------------|----|
|                                        | D.A.B. | CD   | PC | CC | PR  | PC          | CC |
| Administrative site plan               | X*     | X    |    |    |     | X           |    |
| Administrative site plan, amendment    | X*     | X    |    |    |     | X           |    |
| Building relocation                    |        | X    |    |    |     |             | X  |
| Certificate of appropriateness         |        |      |    |    |     |             | X  |
| Code of the City of Fontana, Amendment | X      |      | Xf | X  |     |             |    |
| Conditional Use Permit                 | X      |      | X  |    |     |             | X  |
| Density bonus                          | X      | X    | Xf | X  |     |             |    |
| Design review                          | X      |      | X  |    |     |             | X  |
| Design review, amendment               | X      | X    | X  |    |     |             | X  |
| Design review, signs                   |        | X    |    |    |     | X           |    |
| Development agreements                 | X      | X    | Xf | X  |     |             |    |
| Development agreements, amendment      | X      | X    | Xf | X  |     |             |    |
| General plan amendments                | X      | X    | Xf | X  |     |             |    |
| Home occupation                        |        | X    |    |    |     | X           |    |
| Interpretation                         | X*     |      | X  |    |     |             | X  |
| Lot line adjustment                    |        | X*** |    |    |     |             |    |
| Parcel maps, tentative                 | X      | X    | X  |    |     |             | X  |
| Parcel maps, final                     |        | X*** |    |    |     |             |    |
| Pre-Annexation Agreement               |        |      | Xf | X  |     |             |    |
| Specific Plan                          |        |      | Xf | X  | X** |             |    |
| Specific plan, amendment               |        |      | Xf | X  | X** |             |    |
| Tract maps, tentative                  | X      |      | X  |    |     |             | X  |
| Tract maps, final                      |        |      |    | X  |     |             |    |
| Variances                              | X      |      | X  |    |     |             | X  |
| Zone changes                           | X      |      | Xf | X  |     |             |    |
| Administrative Variance                | X      | X    |    |    |     | X           |    |
| Minor Use Permit                       | X      | X    |    |    |     | X           |    |

Notes:

Decisions of any "Reviewing Body" may be appealed to the City Council, except where State law limits such appeal to the City Engineer. If the Planning Commission is listed above as the "Appeal Body", the Commission must first review an Appeal before it may be forwarded to the City Council for consideration.

DAB—Development Advisory Board

CD—Community Development Director

PC—Planning Commission

CC—City Council

PR—Parks and Recreation Commission

X\*—At the discretion of the Director of Community Development or his/her designee

X\*\*—If Public Park(s) are considered

X\*\*\*—City Engineer has final approval

f—Recommending body to the City Council

**C. Administration and Enforcement**

The Director of Community Development shall enforce the provisions in this Specific Plan. All officers, employees, and officials of the City of Fontana, who are vested with the duty or authority to issue permits or licenses shall conform with this Specific Plan and shall not issue any permit or license, or approve any use or building, which would be in conflict with this Specific Plan. Any permit, license or approval issued that is in conflict with the requirements of this Specific Plan shall be considered null and void.

**D. Amendments to the Specific Plan**

The SWIP Specific Plan may be amended utilizing the same procedures by which it was originally adopted. In addition, subsequent amendments to this Specific Plan shall demonstrate the amendment meets the intent of the Specific Plan's existing policy framework, or specific findings to demonstrate the amendment enhances the Plan or is necessary to more effectively implement the Specific Plan. All sections or portions of the Specific Plan proposed to be amended or that may be affected by the amendment must be identified during the amendment process. A concurrent amendment to the General Plan would not be required provided that the Director of Community Development determines that substantive changes would not influence the goals, objectives, policies, or programs of the General Plan.

Allowing flexibility in the administration of the Specific Plan enhances the effectiveness of the Specific Plan as a comprehensive, "living" planning document. The following minor modifications to the Specific Plan qualify for processing as an administrative amendment to the Specific Plan subject to the review and approval of the Director of Community Development:

- Changes in the location of infrastructure and public facilities (e.g., internal roads, drainage facilities, etc.).
- Minor change in roadway alignment.

**E. Similar Use Determination**

1. Applicability and Authority. Unlisted uses in Table 7-2 are prohibited uses, unless the Director of Community Development finds a proposed use to be similar to an expressly allowed use in compliance with this Section. A Similar Use Determination is a process for determining when an unlisted use is similar in nature to a permitted or conditionally permitted use and may be permitted. As specified by Municipal Code Section 30-4 Other Uses to be Determined by the Director of Community Development, the Director of Community Development shall have the responsibility and authority to make Similar Use Determinations.
2. Ministerial Action. A Similar Use Determination shall constitute a ministerial action.
3. Application Contents and Filing. An application for similar use shall be in writing on forms provided by the Director of Community Development.
4. Determination Findings. In determining "similarity," the Director of Community Development shall make all of the following findings:

- a. The characteristics of and activities associated with the proposed use are equivalent to one or more of the listed uses and will not involve a higher level of activity or environmental impacts than the uses listed in the land use district;
  - b. The proposed use will be consistent with the purposes of the applicable land use district; and
  - c. The proposed use will be consistent with the General Plan and this SWIP Specific Plan.
- 5. Notice. A Similar Use Determination shall be made in writing and shall contain the facts that support the determination. The Community Development Department shall maintain all determinations on record for review by the general public upon request. The notice shall include:
  - a. A brief statement explaining the criteria and standards considered relevant to the decision;
  - b. A statement of the standards and facts relied upon in rendering the decision; and
  - c. An explanation of appeal rights and appeal deadlines. The determination of similar use by the Director of Community Development shall be subject to appeal to the Planning Commission.

***F. Nonconforming Lots, Structures, and Uses***

- 1. Nonconformance provisions are established to:
  - a. Bring all uses, structures, sites and signs into conformance with the developmental requirements and design guidelines in the Code;
  - b. Limit the occurrences and extent of nonconformance by prohibiting expansion, intensification, reinstatement, alteration, restoration after destruction, and reestablishment after abandonment; and
  - c. Gradually phase out nonconforming uses, structures, lots, and signs.
- 2. Applicability
  - a. Nonconforming uses, structures, signs and lots may be maintained, expanded, altered and/or abated only in accordance with the provisions of this Specific Plan.
  - b. Any Designated Historic Landmark, or any property listed on the California Register of Historical Resources or National Register of Historic Places, shall be exempt from the provisions of this Section with respect to the restoration and maintenance of structures, provided that any construction plans are approved through a Certificate of Appropriateness by the Historic Preservation Commission/Planning Commission.

3. Nonconforming Uses. A use that lawfully occupied a building or land at the time this Specific Plan became effective, and that does not conform to the use regulations of the land use district in which it is located, is deemed a "legal nonconforming use." A legal nonconforming use may continue, subject to the following:
  - a. Discontinuation of Use
    - i. Loss of legal nonconforming status. If a legal nonconforming use is discontinued for a period of 90 or more days, regardless of the owner's intent, it shall lose its legal nonconforming status and the continued use of the property shall be required to conform to all provisions of this Specific Plan.
    - ii. Extension of legal nonconforming status. Wherein special circumstances exist, the Director of Community Development may extend the legal nonconforming status of a use, for up to an additional 90-day period. Furthermore, an additional extension may be granted by the Planning Commission, for up to an additional 90-day period. The total time period of all time extensions shall not exceed 180 days.
    - iii. Extension of legal nonconforming use.
      - (1) An application for a Minor Use Permit shall be filed with the Community Development Department on a City application form, together with all required fees, plans, maps, reports, special studies, exhibits, and any other information deemed necessary by the Director of Community Development to process the application. The application shall be filed prior to the expiration of the 90-day period.
      - (2) The application shall be reviewed by the Director of Community Development within 30 days following application filing. The Director of Community Development shall notify the applicant, in writing, as to whether the application is complete. If the application is not complete, the Director of Community Development shall specify those parts of the application that are not complete and shall identify the manner by which it can be made complete. If written notification is not provided to the applicant within 30 days following application filing, the application shall be deemed complete.
      - (3) The Director of Community Development shall investigate the facts bearing on the application and provide the information necessary for action on the application, consistent with this Specific Plan and the General Plan. The applicant shall have made a good faith effort through the submittal of documentation and has diligently pursued compliance with this Specific Plan.
      - (4) The application shall be reviewed by the Director of Community Development at a duly noticed public hearing, whom shall then approve, modify or deny such application. The decision of the Director of Community Development shall be final and conclusive in

the absence of a timely filed appeal to the Planning Commission. An appeal of the Director of Community Development's decision shall be filed within 10 days from the date of the decision of the Director of Community Development. An appeal of the Director of Community Development's decision shall be reviewed by the Planning Commission. The decision of the Planning Commission shall be final and conclusive in the absence of a timely filed appeal to the City Council.

- (5) The applicant may appeal the decision of the Planning Commission to the final deciding body, the City Council. The City Council decision shall be final and conclusive. If the application to extend the legal nonconforming use is approved by the City Council, the extension shall be granted for 90 days from the date of approval.
  - (6) If the Director of Community Development or appointed designee has determined that the applicant has failed to show a good faith effort towards continually processing the extension of legal nonconforming use application (i.e., revising plans, withdrawing the application, placing the project on hold, etc.), the legal nonconforming use shall cease within 60 days from the application submittal date.
  - (7) In granting an extension of the legal nonconforming status, the Director of Community Development may attach reasonable conditions and restrictions to the request, in addition to those required by this Specific Plan, which will ensure that the use:
    - Will not endanger the public health, safety or general welfare;
    - Will not injure the value of adjoining or abutting property;
    - Will not result in any significant environmental impacts; and
    - Will be in harmony with the area in which it is located.
  - (8) In approving an extension of the legal nonconforming status, the Director of Community Development or Planning Commission shall consider and clearly establish the following findings of fact:
    - The non-conforming use has been discontinued within the 90-day period.
    - A physical and/or economic hardship has prevented the nonconforming use from being in compliance prior to the expiration of the 90-day period;
    - Approving the extension will not adversely affect the health, safety or general welfare.
- b. Change in Ownership, Tenancy or Management. A change in ownership, tenancy or management of a nonconforming use shall not affect its legal nonconforming status, provided that the use did not discontinue pursuant to Section (3.a.i.) "Loss



of legal nonconforming status or the type of use and/or intensity of use do not change.

- c. New Development. New development on any lot or parcel upon which a legal nonconforming use exists shall require that all uses on the property conform to the provisions of this Specific Plan.
  - d. Alterations and Expansion of Use
    - i. A nonconforming use shall not be enlarged or extended in such a way as to occupy any part of any structure or property that it did not occupy prior to the creation of the nonconformity.
    - ii. A structure fully or partially occupied by any nonconforming use shall not be moved, altered or enlarged, unless required by law, or unless the moving, alteration or enlargement will result in the elimination of the nonconforming use.
  - e. Intensification of Use. A nonconforming use shall not be intensified in such a way as to increase the discrepancy between existing conditions and the standards set forth in this Specific Plan.
4. Nonconforming Structures. A structure lawfully existing at the time this Specific Plan became effective, any portion of which does not comply with the requirements of the land use district in which it is located, including setbacks, separations, height and design, is deemed a "legal nonconforming structure." A legal nonconforming structure may continue to exist, subject to the following:
- a. Damage or Destruction
    - i. A legal nonconforming structure that is damaged or partially destroyed by fire, flood, wind, earthquake or other calamity, or the public enemy, or other cause which is beyond the control of the property owner, and which could not otherwise have been prevented by reasonable care and maintenance of the structure, may be reconstructed up to the original size, placement and density, provided that total cost of such reconstruction does not exceed more than 50 percent of the structure's current fair market value. The structure may be restored and the nonconforming use may be resumed, provided that restoration is started within six months, unless extended by the Director of Community Development, and diligently pursued.
    - ii. In the event that the cost of repairing such damage exceeds 50 percent of the current fair market value of the structure prior to such damage occurring, the structure may be reconstructed up to the original size, placement and density, subject to all of the following:
      - The Planning Commission, at a duly noticed public hearing, must find that continuing the nonconforming structure will not result in an annoyance to and/or reduction of any surrounding property; and

- The extent of damage or partial destruction shall be based upon a comparison of the estimated cost of restoring the structure to its condition prior to such damage or partial destruction with its value at the time the structure was damaged or partially destroyed. Estimates for such purpose shall be made by or reviewed by the Building Official; and
  - The restoration is commenced within six months and diligently pursued to completion.
  - An application for a Nonconforming Structure shall be filed with the Community Development Department on a City application form, together with all required fees, plans, maps, reports, special studies, exhibits, and any other information deemed necessary by the Director of Community Development to process the application. The application shall be filed prior to the expiration of the 90-day period.
  - A structure or development that has been damaged or destroyed by fire, flood, wind, earthquake, or other calamity, or by public enemy, or other cause which is beyond the control of the property owner, and which could not otherwise have been prevented may be reconstructed up to the original size, placement and density, except a multiple family dwelling or development which has been abandoned for a period of 90 or more days prior to being involuntarily damaged or destroyed, or a multiple family dwelling or development constituting a public nuisance prior to being involuntarily damaged or destroyed may not be reconstructed unless the structure is made to comply to all provisions of this Specific Plan.
- b. Alterations and Expansion
- i. A nonconforming structure shall not be moved, altered or enlarged so as to increase the discrepancy between existing conditions and the most current standard as prescribed by the land use district in which the structure is located, except alteration and/or enlargement to a single family dwelling conducted pursuant to section ("e") Nonconforming Single-Family Residential Structures".
  - ii. Within land use districts, reasonable repairs and alterations may be made to legal nonconforming structures, provided that no structural alterations shall be made which would prolong the life of supporting members of a structure, such as bearing walls, columns, beams or girders. Structural elements may be modified only if such modification or repair is immediately necessary to protect the public health and safety, occupants of the legal nonconforming structure, or adjacent property, as determined by the Building Official. The total cost of such repairs or alterations may not exceed 50 percent of the replacement cost of the nonconforming structure.

- c. **New Structures.** Any new structure constructed on a lot or parcel with an existing legal nonconforming structure shall be constructed in conformance with all applicable provisions of this Specific Plan. However, in no case may a new nonresidential structure be constructed on the same lot as an existing legal nonconforming residential structure.
- d. **Abatement of Nonconforming Structures Posing a Threat to the Public Health, Safety and General Welfare.** A structure which is nonconforming because of a violation or deficiency that poses a threat to the public health, safety or general welfare, as determined by the Building Official, and which fails to resolve, repair or improve such, or to fully mitigate the hazard involved, shall be abated, condemned or demolished upon the issuance by the City of a nuisance abatement, condemnations or demolition order.
- e. **Nonconforming Single-Family Residential Structures.** In addition to the requirements of subsections a and d above, a nonconforming single family residential lot and/or structure that was lawfully established and maintained before the adoption of this Specific Plan, but which under the provisions of this Specific Plan does not conform with the regulations of the land use district in which it is located with respect to use, design and/or development standards, and which is continuously used and maintained for single family residential purposes, shall be subject to the following:
  - i. **Alterations and expansions to structures within nonresidential zones.**
    - Necessary repairs and desirable alterations, as deemed appropriate by the Director of Community Development, may be made to a legal nonconforming single family residential structure that is nonconforming as to use.
    - A single family dwelling that is nonconforming as to its location within a land use district that does not permit single family dwellings, and in which the residential use was lawfully established and continuously maintained, shall be subject to the development regulations of the Municipal Code Chapter 30 Zoning and Development Code that pertain to the R1 zoning district and off-street parking and loading regulations.
- 5. **Nonconforming Signs.** A sign lawfully existing at the time this Specific Plan became effective, any portion of which does not comply with the requirements of Section 7.7 Sign Standards, is deemed a "legal nonconforming sign." A sign that presents a hazard to public safety, as determined by the City, shall be removed upon the issuance of a notice by the City. A legal nonconforming sign may continue to exist, subject to the following:
  - a. A nonconforming sign may not be altered, enlarged, extended, or moved, except in conformity with the requirements of Section 7.7 Sign Standards, or as otherwise required by law;

- b. Where a use or a structure associated with a nonconforming sign is abandoned or discontinued, any sign associated with a new use of the site shall be in full conformity with the requirements of Section 7.7 Sign Standards.
- 6. Nonconforming to Development Standards. The development that is not in compliance with the site development standards prescribed by the regulations of the land use district in which the lot or parcel is located, including area, coverage, configuration, dimensions, parking, landscaping, screen walls, fences and enclosure trash receptacles, is deemed "legal nonconforming," provided such development was lawfully created and existing at the time this Specific Plan, which created the nonconformity, became effective.
  - a. A development that is nonconforming as to landscaping, screen walls, fences and enclosure of trash receptacles, shall be altered to comply with the district regulations covering the following standards, or as a condition of any subsequent Development Plan or Conditional Use Permit approval.
- 7. Nonconforming Lots. A lot or parcel that is not in compliance with the site development standards prescribed by the regulations of the land use district in which the lot or parcel is located, including area and configuration is deemed a "legal nonconforming lot," provided such lot or parcel was lawfully created and existing at the time this Specific Plan, which created the nonconformity, became effective.
  - a. A lot or parcel that is nonconforming as to minimum area or dimension shall be granted all development rights and uses of the land use district within which it is located.
    - i. The landscaping of setback areas insofar as a setback exists;
    - ii. The landscaping of parking areas, provided fulfilling the requirement does not reduce off-street parking or loading spaces to fewer than prescribed in this Specific Plan;
    - iii. The screening of storage areas; and
    - iv. The enclosure of trash receptacles.
- 8. Elimination of Nonconforming Adult Business Uses. Nonconforming adult business uses shall be eliminated in compliance with Municipal Code Chapter 30 Zoning and Development Code.
- 9. Abatement of Nonconforming Uses, Structures, Lots and Signs. Whenever a use, structure, site or sign becomes nonconforming because of a change of land use district boundaries or a change of the regulations prescribed for the district in which the site is located, the period of time prescribed in this Specific Plan for the abatement period for the elimination of the use, the removal of the structure or sign, or the improvement of the lot or parcel shall begin on the effective date of the change of district boundaries or regulations.

## Chapter 8.o – Jurupa South Industrial District



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**Southwest Industrial Park Specific Plan**

*Jurupa South Industrial District*

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### **8.1 Purpose**

The Jurupa South Industrial District (JSD) is intended to maintain and promote larger scale industrial uses, including manufacturing and warehousing, while focusing on compatibility with residential uses to the east. It will also serve as an entry point into the project from the southwest and west. General features of this District include:

- Landscape/Streetscape Enhancement
- Preservation and revitalization of existing uses
- Focusing on regional connectivity
- Establishment of uses that capitalize on regional market potential
- Development that complements the adjacent portions of the project area to the northeast
- Development that respects adjacent residential and institutional development
- Providing unique streetscape and edge treatments on Jurupa and Etiwanda to create a SWIP Gateway

## **8.2 Applicability**

### **A. Projects Subject to Development Regulations**

This Chapter contains the Development Regulations that govern all future private development actions in the JSD, including new construction, additions or renovations to existing structures and/or new land uses proposed for existing facilities.

### **B. Right of Continued Use**

This Chapter shall not require any change in any existing building or structure for which a building permit has been previously issued, or for approved plans on file in the Community Development Department before the effective date of this Specific Plan. Changes in the property's ownership or tenants of legal existing uses shall likewise require no change in any existing building or structure. Nonconforming standards and provisions shall be governed by Section 8.11 Entitlement Procedures.

### **C. Other Requirements**

This Chapter does not eliminate the need for obtaining any other permits required by the City, or any permit, approval or entitlement required by any other applicable special district or agency, and/or the regulations of any State or Federal agency.

### **D. Types of Development Regulations**

The Development Regulations are of two types – Standards and Guidelines – as follows:

1. Standards address those aspects of development that are essential to achieve the goals of the Specific Plan. They include specifications for allowable land uses and site development (e.g., building height, setbacks, etc.). Conformance with Standards is mandatory. Standards are indicated by use of the words "shall," "must," or "is / is not permitted."
2. Guidelines provide guidance for new development in terms of aesthetics and design details. They are intended to direct building and site design in a way that results in the desired character for the JSD. Whereas conformance with the Standards is mandatory, conformance with the Guidelines is preferred and/or recommended. Provisions that fall into this category are indicated by the use of the words "should," "may" or "are encouraged to." In various cases, the Guidelines provide a choice of treatments that will achieve the desired effect. Developers are permitted to propose alternative design details if they are able to show that such details implement the Specific Plan objectives with respect to the desired character of the JSD.

### **E. Minimum Requirements**

The provisions in this Chapter shall be minimum requirements. When this Chapter provides for discretionary authority on the part of the Director of Community Development, Planning Commission, or City Council, that discretion may be exercised to impose more stringent requirements if deemed necessary to accomplish the overall objectives of the JSD.

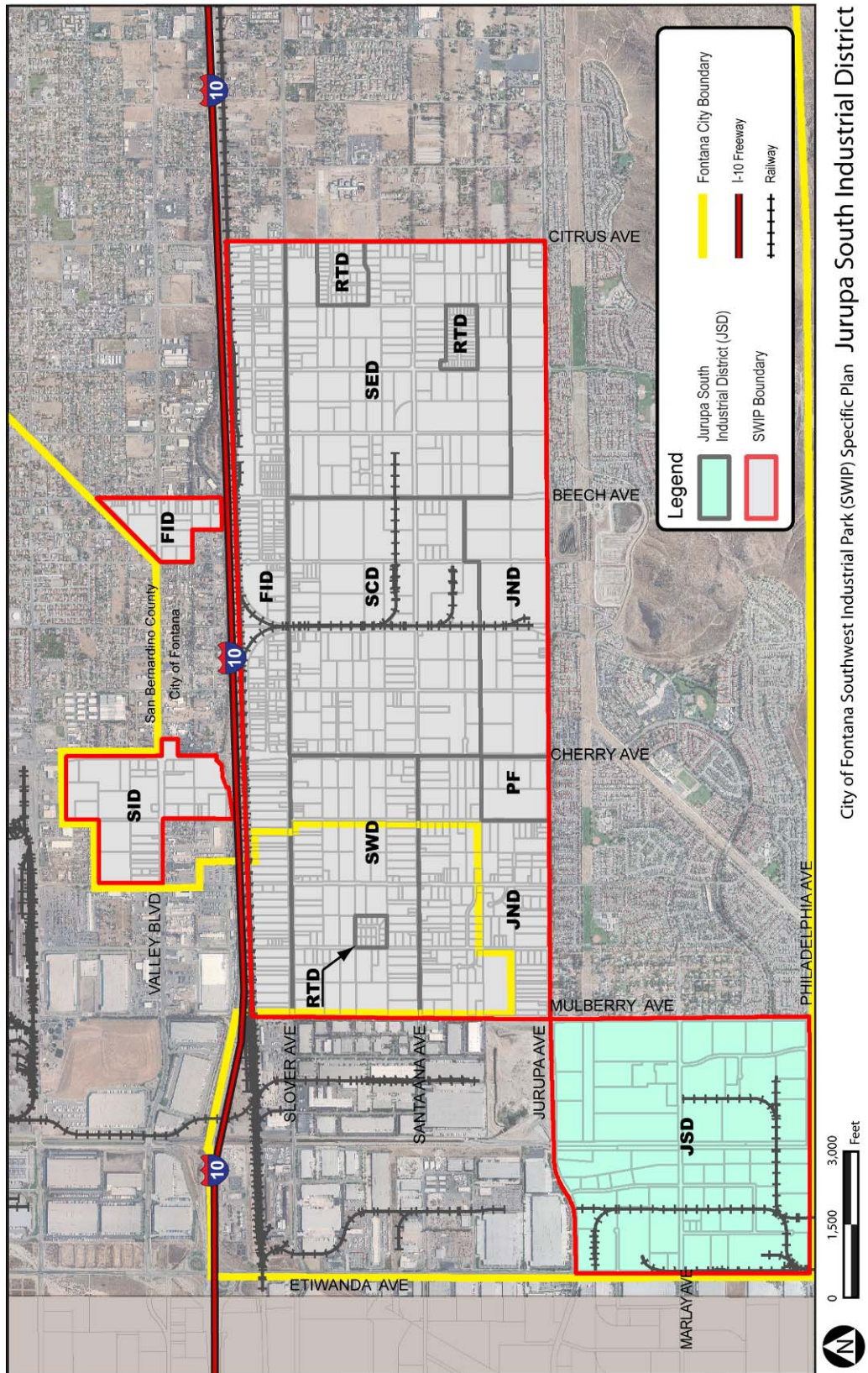
### **F. Overview of Development Regulations**

1. Relationship of Land Use Districts. The Development Regulations in this Chapter are applied to those properties that are within the JSD. Exhibit 8-1 – Land Use Plan indicates the location of the JSD and its relationship to the other land use districts in the Specific Plan area.
2. Standards, Guidelines, and Procedures. The Development Regulations are divided into the following sections: 8.3 Allowable Land Uses and Permit Requirements; 8.4 Development Standards; 8.5 Landscape Standards; 8.6 Parking and Loading Standards; 8.7 Sign Standards; 8.8 Public Right of Way Streetscape; 8.9 Design Guidelines; 8.10 Development Incentives; and 8.11 Entitlement Procedures. Projects must meet all development standards in order to achieve approval in the development review process. Projects are encouraged to adhere to the guidelines contained in Section 8.9 Design Guidelines.
3. Steps for Using Chapter. Table 8-1 – Process Procedures illustrates the steps for using this Chapter.

| <b>Table 8-1 – Process Procedures</b>                                                                                       |                                                        |                             |
|-----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|-----------------------------|
| <b><i>Instructions</i></b>                                                                                                  | <b><i>Information Source</i></b>                       | <b><i>Where to Find</i></b> |
| Locate property and its street frontage                                                                                     | Land Use Plan                                          | Exhibit 8-1                 |
| Identify the allowable uses and refer to the definitions of the uses                                                        | Allowable Land Uses & Permit Requirements Definitions  | Table 8-2<br>Appendix A     |
| Comply with the requirements for intensity, lot dimensions, height limits, and setbacks                                     | Intensity and Dimensional Standards                    | Table 8-3                   |
| Comply with fence, wall, and screening standards                                                                            | Fence, Wall, and Screening Standards                   | Table 8-4                   |
| Comply with landscaping requirements                                                                                        | Landscape Standards<br>Public Right-of-Way Streetscape | Section 8.5<br>Section 8.8  |
| Comply with parking requirements                                                                                            | Parking and Loading Standards                          | Section 8.6                 |
| Comply with sign requirements                                                                                               | Sign Standards                                         | Section 8.7                 |
| Review the design guidelines for preferred site layout, building orientation and architectural detail, fencing, and parking | Design Guidelines                                      | Section 8.9                 |
| Determine if development is eligible for incentives                                                                         | Development Incentives                                 | Section 8.10                |
| Submit project application and proceed through project approval process Development                                         | Entitlement Procedures                                 | Section 8.11                |

# Southwest Industrial Park Specific Plan

Jurupa South Industrial District



City of Fontana Southwest Industrial Park (SWIP) Specific Plan Jurupa South Industrial District

Exhibit 8-1 – Land Use Plan

### **8.3 Allowable Land Uses and Permit Requirements**

This Section identifies allowable land uses and their permit requirements.

#### **A. Allowed Uses**

Table 8-2 – Allowable Land Uses and Permit Requirements identifies the types of land uses allowed in the JSD and the use permit required to establish each use.

#### **B. Uses Not Listed**

Uses not listed in Table 8-2 – are prohibited land uses, until and unless the Director of Community Development makes a similar use determination in compliance with Section 8.11.C Entitlement Procedures – Similar Use Determination.

#### **C. Other Applicable Regulations**

The provisions contained in this SWIP Specific Plan constitute the primary land use and development standards for the Specific Plan area. These regulations are in addition to the provisions in the City of Fontana Municipal Code.

This Specific Plan provides all development standards and guidelines necessary to approve subsequent project applications, unless otherwise noted. Permit processing procedures (e.g., noticing, hearing, appeals, and expiration procedures) and enforcement procedures are provided in Municipal Code Chapter 30 (Zoning and Development Code) shall apply, unless otherwise noted. Where there is a conflict between the provisions in this Specific Plan and those in the Zoning and Development Code, the Specific Plan provisions shall prevail to the extent allowable under Federal or State law. Where there is no conflict, both shall be applied concurrently.

#### **D. Definitions**

Definitions for land uses are provided in Appendix A Definitions. If a definition is not provided, the definitions in the Municipal Code shall apply. The Director of Community Development shall interpret the definitions; make a similar use determination in compliance with Section 8.11.C Entitlement Procedures – Similar Use Determination; and/or refer any questions to the Planning Commission for its determination. For the purposes of this Specific Plan, the following definitions shall apply:

1. Commercial Use: Activity involving the sale of goods or services carried out for profit.
2. Industrial Use: Those fields of economic activity including construction, manufacturing, transportation, communication, electric, gas, and sanitary services, and wholesale trade.

**Table 8-2 – Allowable Land Uses and Permit Requirements**

| <b>Land Use</b>                                           | <b>Permit Requirement</b>                                        |
|-----------------------------------------------------------|------------------------------------------------------------------|
|                                                           | "P" = Use Permitted by Right                                     |
|                                                           | "C" = Conditional Use Permit Required                            |
|                                                           | "M" = Minor Use Permit Required                                  |
| <b>Jurupa South Research and Development District</b>     |                                                                  |
| <b>Entertainment, Recreation and Public Assembly Uses</b> |                                                                  |
| Adult Businesses                                          | Municipal Code §30-11 & Municipal Code Chapter 15, Article XVIII |
| Open Space / Park                                         | P                                                                |
| Public Assembly Facilities                                | C                                                                |
| Recreational Facilities                                   | C                                                                |
| <b>Industry, Manufacturing, and Processing Uses</b>       |                                                                  |
| Flex-Tech Multi-Use Facilities (1)                        | P                                                                |
| Manufacturing, Light                                      |                                                                  |
| • Appliance Manufacturing                                 | M                                                                |
| • Electronics & Equipment                                 | P                                                                |
| • Furniture and Fixture Manufacturing                     | P                                                                |
| • Glass Product Fabrication                               | P                                                                |
| • Machinery Manufacturing                                 | P                                                                |
| • Paper Product Manufacturing                             | P                                                                |
| • Product Assembly and Distribution                       | P                                                                |
| General Manufacturing                                     |                                                                  |
| • Stone and Cut Stone Product Manufacturing               | P                                                                |
| • Structural Clay and Pottery Product Manufacturing       | P                                                                |
| • Textile and Leather Product Manufacturing               | P                                                                |
| Research and Development                                  | P                                                                |
| <b>Residential Uses</b>                                   |                                                                  |
| Caretaker Housing (2)                                     | C                                                                |
| <b>Retail Uses</b>                                        |                                                                  |
| Factory/Warehouse Outlet Store                            | P                                                                |
| Retail Sales, General (3)                                 | P                                                                |
| <b>Service Uses</b>                                       |                                                                  |
| Business Support Services                                 | P                                                                |
| Food Service                                              |                                                                  |
| • Outdoor Dining                                          | P                                                                |
| Industrial Repair                                         | P                                                                |
| Mini Storage Facility                                     | P                                                                |
| Motor Vehicle                                             |                                                                  |
| • Motor Vehicle Rental, Sales, and Leases                 | C                                                                |



Table 8-2 – Allowable Land Uses and Permit Requirements (continued)

| <b>Land Use</b>                                                             | <b>Permit Requirement</b>                                                                               |
|-----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
|                                                                             | "P"= Use Permitted by Right "<br>C"= Conditional Use Permit Required<br>"M" = Minor Use Permit Required |
|                                                                             | <b>Jurupa South Research and Development District</b>                                                   |
| Offices                                                                     | <b>P</b>                                                                                                |
| School, Commercial                                                          | <b>M</b>                                                                                                |
| <b>Distribution, Wholesaling and Warehousing Uses</b>                       |                                                                                                         |
| Industrial Equipment, Materials, and Supplies, Truck, Truck Trailer Storage | <b>C</b>                                                                                                |
| Logistics and Distribution Facilities                                       | <b>P</b>                                                                                                |
| Petroleum/Hazardous Material Storage                                        | <b>C</b>                                                                                                |
| Warehousing Facilities                                                      | <b>P</b>                                                                                                |
| <b>Transportation, Communications and Infrastructure Uses</b>               |                                                                                                         |
| Antennas                                                                    | <b>M</b>                                                                                                |
| Broadcasting Offices or Studios                                             | <b>P</b>                                                                                                |
| Parking Facilities (3)                                                      | <b>P</b>                                                                                                |
| <b>Vehicle Auction</b>                                                      |                                                                                                         |
| Vehicle Auction                                                             | <b>P</b>                                                                                                |
| <b>Other Uses</b>                                                           |                                                                                                         |
| Drive-Through Uses (3)                                                      | <b>M</b>                                                                                                |
| Outdoor Display & Sales                                                     | <b>M</b>                                                                                                |
| Public Facilities                                                           | <b>P</b>                                                                                                |
| Temporary Uses                                                              | Municipal Code Chapter 30, Division 14 (Temporary Use).                                                 |

(1) See Section 8.9E

(2) See Section 8.4D

(3) See Section 8.9F

## 8.4 Development Standards

New land uses and structures and alterations to existing land uses and structures in the JSD shall be designed, constructed, and established in compliance with the requirements in this Section.

### A. Intensity and Dimensional Standards

Table 8-3 – Intensity and Dimensional Standards provides the required intensity and dimensional standards for proposed development. The Director of Community Development is authorized to approve modifications of 10 percent or less of any land use district setback, lot width, lot depth, building coverage, building height, or wall height standard in compliance with the administrative variance procedures in Municipal Code Section 30-51.6 (Findings necessary for granting a variance). See Exhibit 8-2 – Dimensional Standards.

The Director of Community Development may grant an administrative variance from the requirements of this chapter where practical difficulties, unnecessary hardships, or results contrary to the intent of this chapter would occur from the strict and literal interpretation and enforcement of the Code. An administrative variance may be granted upon conditions which will ensure the protection of the public safety, health and welfare. To grant an administrative variance, the Director of Community Development must find from the facts presented that the following conditions exist.

#### Municipal Code Section 30-51.6: Findings necessary for granting a variance

- (1) That because of circumstances applicable to the property including size, shape, topography, location or surroundings, the strict application of this chapter will deprive the property of privileges enjoyed by other property in the vicinity and under identical zoning classification;
- (2) That the granting of such an administrative variance will be subject to conditions assuring that the variance shall not constitute a grant of special privileges inconsistent with the limitations upon other properties in the vicinity and zoning district in which the property is located;
- (3) That the administrative variance does not authorize a use or activity which is not a specifically allowed use in the zoning district in which the property is located; and
- (4) That the granting of one administrative variance will not be contrary to the general plan.

Table 8-3 – Intensity and Dimensional Standards

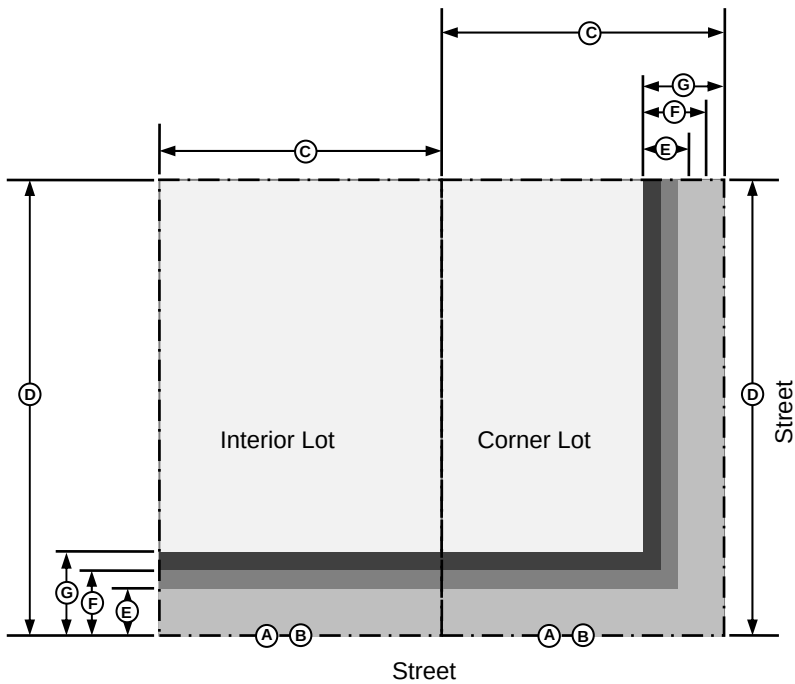
| Lot Size and Building Placement                                  |                                                       |                                                       |
|------------------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------|
|                                                                  | Industrial Use                                        | Commercial Use                                        |
| <b>INTENSITY</b>                                                 |                                                       |                                                       |
| Floor Area Ratio(3)                                              | 1.0 max. FAR                                          | 1.0 max. FAR                                          |
| <b>LOT DIMENSIONS</b>                                            |                                                       |                                                       |
| Lot Size                                                         | 45,000 sq ft min.                                     | 35,000 sq ft min.                                     |
| Lot Width (C)                                                    | 200 ft min.                                           | 150 ft min.                                           |
| Lot Depth (D)                                                    | 200 ft min.                                           | 200 ft min.                                           |
| <b>BUILDING SETBACKS</b>                                         |                                                       |                                                       |
| Front Setback (1)                                                |                                                       |                                                       |
| Major Highway (Etiwanda, Jurupa, and Mulberry) (G)               | 30 ft min. (4)                                        | 30 ft min. (4)                                        |
| Primary Highway (Not applicable) (F)                             | Not applicable                                        | Not applicable                                        |
| Secondary Highway/Collector Street (Marlay and Philadelphia) (E) | 20 ft min. (4)                                        | 20 ft min. (4)                                        |
| Side (Street) Setback (1)                                        |                                                       |                                                       |
| Major Highway (Etiwanda, Jurupa, and Mulberry) (G)               | 30 ft min. (4)                                        | 30 ft min. (4)                                        |
| Primary Highway (Not applicable) (F)                             | Not applicable                                        | Not applicable                                        |
| Secondary Highway/Collector Street (Marlay and Philadelphia) (E) | 20 ft min. (4)                                        | 20 ft min. (4)                                        |
| Side (Interior) Setback (2)                                      | None                                                  | None                                                  |
| Rear Setback (2)                                                 | None                                                  | None                                                  |
| Adjacent to Residential                                          | 50 ft min.                                            | 50 ft min.                                            |
| Adjacent to San Sevaine Channel (1)                              | Comply with MC Chapter 12 (Flood Control)             | Comply with MC Chapter 12 (Flood Control)             |
| Accessory Buildings Setbacks                                     | Comply with setbacks applicable to primary structures | Comply with setbacks applicable to primary structures |

(Continued)

See footnotes next page

**Table 8-3 – Intensity and Dimensional Standards (continued)**

| Building Height and Mass                                                                                                                                                                                                                             |                                            |                                            |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|--------------------------------------------|
|                                                                                                                                                                                                                                                      | Industrial Use                             | Commercial Use                             |
| <b>HEIGHT</b>                                                                                                                                                                                                                                        |                                            |                                            |
| Primary Building (3)                                                                                                                                                                                                                                 | 60 ft max.                                 | 60 ft max.                                 |
| Accessory Building                                                                                                                                                                                                                                   | 1-story or 14 ft max. to eave/parapet line | 1-story or 14 ft max. to eave/parapet line |
| Interior (Floor-to-Floor, excluding parking levels)                                                                                                                                                                                                  | Ground floor – 12 ft min                   | Ground floor – 12 ft min                   |
| <b>UPPER STORY STEPBACKS</b>                                                                                                                                                                                                                         |                                            |                                            |
| All buildings regardless of street frontage                                                                                                                                                                                                          | Allowed.                                   | Allowed.                                   |
| <i>Notes:</i><br>(1) <i>Setback is measured from public right-of-way line.</i><br>(2) <i>Setback is measured from property line.</i><br>(3) <i>See Section 8.10 Development Incentives.</i><br>(4) <i>Corner cut-off setbacks per Specific Plan.</i> |                                            |                                            |



- Ⓐ = Public Right-of-Way Line
- Ⓑ = Property Line
- Ⓒ = Lot Width
- Ⓓ = Lot Depth
- Ⓔ = Front/Side Setbacks – Secondary Highway/Collector Street
- Ⓕ = Front/Side Setback – Primary Highway
- Ⓖ = Front/Side Setback – Major Highway

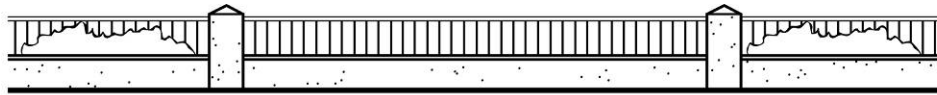
Exhibit 8-2 – Dimensional Standards.

## B. Fences, Walls, and Screening

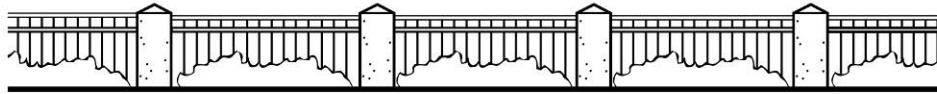
1. Standards. Table 8-4 – Standards for Fences, Walls, and Screening contains standards for fences, walls, and screening. Refer to Section 8.9 Design Guidelines for guidelines about the design, materials, and construction of fences, walls, and screening.

| Table 8-4 Standards for Fences, Walls, and Screening                                                                |                                                                                                                                                                |                                                                                                           |
|---------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| <i>Location</i>                                                                                                     | <i>Materials</i><br><i>See Section 8.9 Design Guidelines</i>                                                                                                   | <i>Maximum Height (1)</i>                                                                                 |
| Within front setback area                                                                                           | Solid fencing/wall                                                                                                                                             | 36 inches                                                                                                 |
|                                                                                                                     | Open fencing/wall                                                                                                                                              | 6 ft                                                                                                      |
| Within street side setback area                                                                                     | Tubular steel construction allowed in required setback area if set back at least 15 ft from lot line. Solid masonry wall not allowed in required setback area. | 8 ft if necessary for security purposes, with 18-inch maximum width pilasters a minimum of 8 ft on center |
| Within interior side setback area                                                                                   | Any type of fence, hedge, or wall is allowed                                                                                                                   | 8 ft                                                                                                      |
| Within rear setback area                                                                                            | Any type of fence, hedge, or wall is allowed                                                                                                                   | 8 ft                                                                                                      |
| Outside of a required setback area                                                                                  | Solid or open fencing/wall                                                                                                                                     | No height limit                                                                                           |
| At intersections of alleys, streets, and driveways                                                                  | Solid or open fencing/ wall                                                                                                                                    | 30 inches                                                                                                 |
| Within setback area from San Sevaire Channel                                                                        | MC Chapter 12 (Flood Control)                                                                                                                                  | MC Chapter 12 (Flood Control)                                                                             |
| Within Railroad setback area                                                                                        | Open fencing/wall                                                                                                                                              | 8 ft                                                                                                      |
| Note: (1) All fences and walls shall meet the City's line of sight regulations, as determined by the City Engineer. |                                                                                                                                                                |                                                                                                           |

2. Materials.
  - a. Open fencing shall mean fencing with over 50 percent of the surface area open for free passage of light and air and through which the area behind the fence is visible to public view. See Exhibit 8-3 – Open and Solid Fencing.
  - b. Solid fencing shall mean fencing with 50 percent or less of the surface area open for free passage of light and air and designed to conceal the area behind the fence from public view. See Exhibit 8-3 – Open and Solid Fencing.
  - c. Barbed wire fence, concertina fence, or similar fencing material is prohibited.
  - d. Chain link fencing is allowed on interior property lines that are not visible from public rights-of-way.

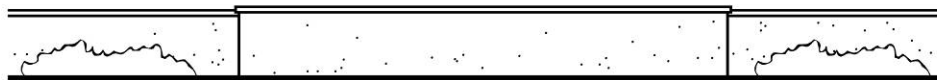


Elevation of Wall / Wrought Iron Combination

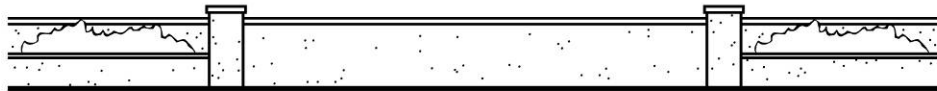


Elevation of Wrought Iron with Pilasters

*Examples of Open Fencing*



Elevation of Staggered Wall



Elevation of Planters / Wall



Elevation of Wall with Breaks

*Examples of Solid Fencing*

Exhibit 8-3 – Open and Solid Fencing.



3. Screening and buffering.
  - a. Roof-mounted and ground-mounted mechanical equipment, utilities, storage, and solid waste storage areas shall be screened from adjoining properties and public right-of-ways by a visual barrier (e.g., wall, fence, landscape material, etc.) to the satisfaction of the Director of Community Development. Where only landscaping is used for screening, it shall be planted with five-gallon (minimum size) shrubs spaced to provide a continuous dense screen.
  - b. Parking lot perimeters shall be screened and planted in compliance with Section 8.6 Parking and Loading Standards.

**C. Outdoor Activities and Storage**

1. Storage in Setback Areas. Material or equipment shall not be stored anywhere in the front yard. Temporary storage of construction materials during construction on the same site is permitted. Boats, campers, motor vehicles, trailers, equipment, materials, or antenna that may be stored in side and rear yards, provided that they are outside the required setback areas identified in Table 8-3 – Intensity and Dimensional Standards.
2. Limitations on Outdoor Uses
  - a. All uses shall be conducted entirely within a completely enclosed building that is attached to a permanent foundation, except approved outdoor dining areas, vehicle sales and rental businesses, parking areas, nursery growing areas, industrial activities, and other approved uses that require outdoor activities.
  - b. Areas used for the approved outdoor storage of vehicles, equipment and/or building materials (raw or finished) may use compacted slag, gravel, or other similar material deemed suitable by the Director of Community Development.
3. Outdoor Wholesaling. Outdoor wholesaling of goods and materials shall comply with the following:
  - a. A building shall be provided on the same parcel or on an adjacent parcel associated with the same business.
  - b. All display materials, including vehicles, shall be set back five feet from any landscaped area and shall not be located on required parking areas.
  - c. The entire area used for display purposes shall be surfaced with asphalt or an equally serviceable hard pavement surface. The surface shall be maintained in good condition.

- d. Storage of equipment or materials, with the exception of the display of vehicles for sale or rent, shall be screened by a visually solid masonry wall of minimum height six feet. The approving authority may determine through the design review process that the subject use requires a solid masonry wall higher than six feet.
- e. Outdoor display areas shall be maintained in a neat and orderly condition.

***D. Caretaker Housing***

Caretaker housing shall be:

1. Accessory to a principal use;
2. A maximum of 1,500 square feet total floor area unless otherwise approved by the Planning Commission;
3. Limited to one unit per lot; and
4. Subject to the setback requirements applicable to the principal structure with which it is associated.

***E. Solar Access***

A structure, fence, or wall shall not be constructed or modified, and vegetation shall not be placed or allowed to grow so as to obstruct more than 10 percent of the absorption area of a solar energy system on an abutting or adjacent lot at any time.

***F. Undergrounding of Utilities***

1. Utility service laterals to new development shall be installed underground.
2. Temporary overhead power and telephone facilities are permitted only during construction.
3. Placement, location and screening of utilities of any kind, which cannot be installed underground and must be placed above ground for function and safety reasons, require written approval by the Director of Community Development or the Planning Commission prior to any administrative or discretionary approval.
4. Transformer enclosures shall be designed of durable materials with finishes and colors used that are compatible and harmonious with the overall architectural theme.
5. All utilities including, but not limited to drainage systems, sewers, gas lines, water lines, and electrical, telephone, and communications wires and equipment shall be installed and maintained underground. Placement, location, and screening of utilities of any kind, which cannot be installed underground and must be placed above ground for function and safety reasons, require written approval by the Director of Community Development or the Planning Commission before any administrative or discretionary approval.

## 8.5 Landscape Standards

### A. Required Landscaping

This section provides the required minimum standards for all landscaped areas within any new and rehabilitated development.

1. Landscaped area means the entire parcel less the building footprint, driveways, nonirrigated portions of parking lots, and hardscapes (driveways, approaches, sidewalks, etc.). Decorative hardscapes used to enhance the landscape will be considered as part of the landscape area; this would include such things as cobble rock, decomposed granite, brickwork, stamped concrete, gravel, pavers, and water features.
2. Landscape setbacks along public right-of-ways shall incorporate landscape buffers with undulating and variable height earth-mounding (berms), and/or low walls, and required plant materials as shown in Table 8-5 – Landscape Standards.
3. Block wall and wrought iron fencing shall be located behind landscape setback area(s).
4. The developer shall submit to the City's Department of Engineering, a Landscape Documentation Package that conforms to the Water Efficient Landscape Ordinance, in the Municipal Code, Chapter 28Vegetation.
5. All new development landscaping shall comply with the standards shown in Table 8-5 – Landscape Standards. Additional guidelines that should be considered are addressed in Section 8.9 Design Guidelines.
6. The Recommended Plant Materials Palette, Table 8-6 can be found immediately after this section. The plant materials palette is provided to ensure the installation of drought-tolerant, water efficient landscaping that will provide wind breaks and thrive in the local climate conditions. In an effort to provide visual elements that distinguish this district from others, please note that turf (grass) does not appear in the Plant Materials Palette, and shall be prohibited, in lieu of drought-tolerant ground covers.
7. Public right-of-way improvements, including street improvements, streetscape/landscape (parkway) improvements, and street tree requirements, are in Section 8.8 Public Right-of-Way Streetscape.

**Table 8-5 – Landscape Standards (1)**

|                                                                                                    |                                                                                                                                                                                                                                                                                                                        |
|----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Minimum Landscaped Area<br>Mixture of turf, ground cover, trees, and decorative hardscape features | 15% of total site area, not including areas covered by buildings, structures, or areas used for approved outside storage, loading, or other activities.<br><br>25% of total site area, for hotels, not including areas covered by buildings, or areas used for approved outside storage, loading, or other activities. |
| Decorative hardscape features<br>Brick, stone, art, fountains, ponds, etc.                         | Maximum 15 % of the total required landscaping of site                                                                                                                                                                                                                                                                 |
| Minimum plant sizes in landscaped areas                                                            | Minimum Ratio of 1 tree/500 SF of landscape area                                                                                                                                                                                                                                                                       |
| Trees                                                                                              | 50% - 15-gallon<br>40% - 24-inch box<br>10% - 30-inch box or greater                                                                                                                                                                                                                                                   |
| Shrubs                                                                                             | 50% - 5-gallon<br>50% - 1-gallon                                                                                                                                                                                                                                                                                       |
| Groundcover                                                                                        | 12-inch maximum on center spacing that will cover area within one year of initial planting                                                                                                                                                                                                                             |
| Street trees in parkways per Master Plan of Parkway Trees                                          | 1 tree of not less than 24-inch box size for each 30 linear feet of street frontage<br><br>In parkways of inadequate width, street trees shall be planted in abutting setback/yard, in addition to the required buffer landscaping in setback area                                                                     |
| Landscape buffer in front setback area                                                             | 1 tree for each 20 linear feet minimum of street frontage and three 5-gallon shrubs for each tree<br><br>Undulating earth berms with informal tree and shrub massing and/or low decorative walls may be utilized.<br><br>Maximum slope: 3:1 for berms                                                                  |
| Additional landscape requirements                                                                  | 1 tree for each 800 square feet minimum of other required landscaped area and 8 shrubs for each tree.                                                                                                                                                                                                                  |
| Landscape Buffer<br>Front setback area and street-side setback area                                | Major Highway: 25 ft minimum width<br>Primary Highway: 20 ft minimum width<br>Collector/Local Streets: 15 ft minimum width                                                                                                                                                                                             |
|                                                                                                    |                                                                                                                                                                                                                                                                                                                        |

Notes: (1) The Director of Community Development may require additional setbacks.

**B. Recommended Plant Materials Palette**

The Recommended Plant Materials Palette in Table 8-6 provides a listing of primarily drought-tolerant trees, shrubs, and ground covers to provide water-efficient landscaping in new projects. The limited selection of landscape material in the palette is envisioned to assist the user in incorporating sustainable landscaping into the project, while including enough variety of size, form, and density, to meet the requirements within buffer setbacks and screening techniques. Final selection shall be approved the City. The Director of Community Development shall approve artificial turf.

**Table 8-6 (a) – Recommended Plant Materials Palette  
Recommended Trees**



**Aleppo Pine**  
*Pinus halepensis*



**Honey Locust**  
*Gleditsia triacanthos*



**Bottle Tree**  
*Brachychiton populneus*



**Holly Oak**  
*Quercus ilex*



**Canyon Live Oak**  
*Quercus chrysolepis*



**Mexican Fan Palm**  
*Washingtonia robusta*

**Table 8-6 (a) – Recommended Plant Materials Palette**  
**Recommended Trees (continued)**



**Golden Rain Tree**  
*Koelreutaria paniculata*



**Stone Pine**  
*Pinus pinea*

**Table 8-6 (b) – Recommended Plant Materials Palette**  
**Recommended Shrubs**



**Agave**  
*Agave species*



**Coyote Brush**  
*Baccharis pilularis*



**Aloe**  
*Aloe species*



**India Hawthorne**  
*Raphiophora indica*



**Blue Hibiscus**  
*Alyogyne huegelii*



**Kangaroo Paw**  
*Anigozanthus hybrids*



Table 8-6 (b) – Recommended Plant Materials Palette  
Recommended Shrubs (continued)



**Bush Morning Glory**  
*Convolvulus cneorum*



**Lavender**  
*Lavandula species*



**Coffeeberry**  
*Rhamnus californicus*



**Natal Plum**  
*Garissa grandiflora*



**Purple Fountain Grass**  
*Pennisetum setaceum*  
'Cupreum'



**Silverberry**  
*Elaeagnus pungens*



**Redberry**  
*Rhamnus croceus*



**Toyon**  
*Heteromeles*  
*arbutifolia*



**Table 8-6 (b) – Recommended Plant Materials Palette**  
**Recommended Shrubs (continued)**



**Red Hot Poker**  
*Kniphofia uvaria*



**Yaupon**  
*Ilex vomitoria*

**Table 8-6 (c) – Recommended Plant Materials Palette**  
**Recommended Groundcover**



**Bearberry**  
*Arctostaphylos uva-ursi*



**Snow-in-Summer**  
*Cerastium tomentosum*



**Dymondia**  
*Dymondia margaretae*



**Trailing Lantana**  
*Lantana montevidensis*



**Peruvian Verbena**  
*Verbena peruviana*



**Wholly Thyme**  
*Thymus species*

Table 8-6 (c) – Recommended Plant Materials Palette  
Recommended Groundcover (continued)



**Rosea Ice Plant**  
*Drosanthemum*  
*floribundum*

## 8.6 *Parking and Loading Standards*

### **A. *Applicability***

This section contains regulations for off-street parking and loading. Regulations identify required number of parking and loading spaces for all new development projects and those proposing substantial modification to existing buildings. Please refer to Municipal Code Chapter 30 Zoning and Development Code for all parking and loading-related information or regulations not specifically addressed in this section.

### **B. *General Parking and Loading Regulations***

1. Methods of Calculation.
  - a. Multiple Uses. If more than one use is located on a site, the total number of required off-street parking and loading spaces shall be the sum of the requirements for the various uses computed separately. If individual uses on the same site have a floor area less than that for which loading spaces would be required, then the total gross floor area of all uses on the site or lot shall be used in determining the required number of loading spaces.
  - b. Fractional number. Whenever the computation of the required number of off-street parking or loading spaces results in a fractional number, one additional space shall be required for a fraction of more than one-half, but shall not be required for a fraction of one-half or less.
2. Off-Site Location. Required off-street parking spaces shall be located on the same property as the use that they are intended to serve. Where the required parking spaces cannot be accommodated on the same property, they may be located in a separate off-site parking facility that is not more than 300 feet from the use(s) they serve.
3. Shared Use. Required off-street parking and loading spaces shall not be considered as providing parking or loading spaces for any other use, except where share use facilities are approved in compliance with Subparagraph 5 Adjustments to Parking Requirements, below.
4. Uses Not Specified. For uses not specified, the Director of Community Development shall determine parking requirements based upon the requirements of the most similar use. See Subsection 8.11.C. Entitlement Procedures – Similar Use Determination.
5. Adjustments to Parking Requirements.
  - a. Administrative Variance. The Director of Community Development is authorized to approve alternate parking plans involving a modification of 10 percent or less of any of the off-street parking and loading standards in compliance with Section 30-51.5 in Municipal Code.
  - b. Parking Study Option. An applicant may submit a separate parking and loading study for new development to the Director of Community Development for review and approval. A parking and loading study shall provide sufficient data and

information to justify the need for adjustments to the parking and loading requirements and shall analyze whether:

- i. Adequate off-street parking will be provided for the project;
  - ii. The project demonstrates the use of creative design concepts, including but not limited to shared parking facilities, transit accessibility, pedestrian amenities, and bicycle amenities;
  - iii. Environmental impacts associated with the project will not be increased by the modification of standards; and
  - iv. Traffic safety and pedestrian safety will be enhanced by the modifications.
- c. Shared Use Facility. Required off-street parking and loading spaces may be considered as providing parking or loading spaces for another use where joint facilities serving more than one use contain no less than the total number of spaces deemed necessary for each individual use added together with other uses. Where adjoining uses on the same site have different hours of operation with minimal conflict, the Director of Community Development may determine that some or all of the same spaces may be counted as satisfying the requirements for both uses, provided that the number of spaces shall not be less than the prescribed for the use requiring the greater number.

***C. Required Number of Parking Spaces***

Each land use shall provide the number of off-street parking spaces indicated in Table 8-7 – Parking Requirements by Land Use, except where adjustment has been granted in compliance with Subparagraph 8.6.B.5 Adjustments to Parking Requirements, above. For the purposes of this Section, the following definitions shall apply:

1. Commercial Use: Activity involving the sale of goods or services carried out for profit.
2. Industrial Use: Those fields of economic activity including construction; manufacturing; transportation, communication, electric, gas, and sanitary services; and wholesale trade.

**Table 8-7 – Parking Requirements by Land Use**

| <b>Land Use</b>                                                                     | <b>Motor Vehicle Spaces (Minimum #)<br/>GFA – Gross Floor Area</b>                                                                                                                                | <b>Bicycle Spaces<br/>(Minimum #)</b>                                  |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|
| <b>Entertainment, Recreation and Public Assembly Uses</b>                           |                                                                                                                                                                                                   |                                                                        |
| Adult Businesses                                                                    | Subject to Parking Plan required by Municipal Code §15-918                                                                                                                                        |                                                                        |
| Open Space / Park                                                                   | Public - Determined by Parks and Recreation Department<br>Private - .25 spaces/1,000 sq ft of total park area                                                                                     | 1 space/ 33 vehicle parking spaces                                     |
| Public Assembly Facilities                                                          | With fixed seats – 1 space/3 fixed seats;<br>Without fixed seats – 25 spaces/1,000 sq ft of seating area;<br>and<br>4 spaces/1,000 sq ft GFA outside assembly area                                | 1 space/33 vehicle parking spaces                                      |
| Recreational Facilities – Indoor, except for the following:                         | 1 space/each 4 persons of the facility's allowed maximum capacity, unless otherwise modified in compliance with Section 8.6.B.5 – Adjustments to Parking Requirements                             |                                                                        |
| Amusement Arcade                                                                    | 1 space/each 4 persons of the facility's allowed maximum capacity                                                                                                                                 | 1 space/ 3 games up to 20 games; and 1 space/5 games for over 20 games |
| Athletic Club/Gym                                                                   | 4 spaces/1,000 sq ft GFA;<br>20 spaces/1,000 sq ft of exercise floor area;<br>3 spaces/outdoor ball court                                                                                         | .4 spaces/1,000 sq ft GFA                                              |
| Bowling Alley                                                                       | 4 spaces/lane, and<br>additional spaces required for restaurant and other accessory uses                                                                                                          | 1 space/33 vehicle parking spaces                                      |
| Dancing                                                                             | 14 spaces/1,000 sq ft GFA                                                                                                                                                                         |                                                                        |
| Pool/Billiard Hall                                                                  | 2 spaces/table                                                                                                                                                                                    | 1 space/5 tables                                                       |
| Skating Rink                                                                        | 14 spaces/1,000 sq ft GFA                                                                                                                                                                         | 1 space/33 vehicle parking spaces                                      |
| Recreational Facilities – Outdoor, except for the following:                        | 1 space/each 4 persons of the facility's allowed maximum capacity, unless otherwise modified in compliance with Section 8.6.B.5 – Adjustments to Parking Requirements                             |                                                                        |
| • Golf driving range, batting cage                                                  | 1 space/tee, cage, or similar; and<br>1 space/employee at maximum shift                                                                                                                           | 1 space/33 vehicle parking spaces                                      |
| • Swimming pools                                                                    | 14 spaces/1,000 sq ft of water surface area                                                                                                                                                       | 1 space/33 vehicle parking spaces                                      |
| <b>Industry, Manufacturing, and Processing Uses</b>                                 |                                                                                                                                                                                                   |                                                                        |
| Flex-Tech Multi-Use Facilities                                                      | 3.5 spaces per 1,000 sq ft GFA                                                                                                                                                                    | 1 space/33 vehicle parking spaces                                      |
| Light Manufacturing<br>All uses listed under "Manufacturing, Light" in Table 8-2    | 1 space/600 sq ft GFA for initial 40,000 sq ft;<br>1 space/4,000 sq ft above 4,000 sq ft used exclusively for storage;<br>1 space /employee on maximum shift;<br>1 space/250 sq ft GFA in offices | 1 space/33 vehicle parking spaces                                      |
| General Manufacturing<br>All uses listed under "General Manufacturing" in Table 8-2 | 1 space/600 sq ft GFA for initial 40,000 sq ft;<br>1 space/4,000 sq ft above 4,000 sq ft used exclusively for storage;                                                                            | 1 space/50 vehicle parking spaces                                      |

## Southwest Industrial Park Specific Plan

Jurupa South Industrial District

| <b>Table 8-7 – Parking Requirements by Land Use (continued)</b>             |                                                                                                                                                                                                                                                         |                                                                                                     |
|-----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| <b>Land Use</b>                                                             | <b>Motor Vehicle Spaces (Minimum #)<br/>GFA – Gross Floor Area</b>                                                                                                                                                                                      | <b>Bicycle Spaces<br/>(Minimum #)</b>                                                               |
| Research and Development                                                    | 2 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                | 1 space/33 vehicle parking spaces                                                                   |
| <b>Residential Uses</b>                                                     |                                                                                                                                                                                                                                                         |                                                                                                     |
| Caretaker Housing                                                           | 2 spaces in an enclosed garage                                                                                                                                                                                                                          | None                                                                                                |
| <b>Retail Uses</b>                                                          |                                                                                                                                                                                                                                                         |                                                                                                     |
| Factory/Warehouse Outlet Store                                              | 5 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                | None                                                                                                |
| <b>Retail Sales, General</b>                                                |                                                                                                                                                                                                                                                         |                                                                                                     |
| Not in shopping center or factory/warehouse outlet mall)                    | 4 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                | 1 space/33 vehicle parking spaces                                                                   |
| Convenience uses not in shopping center                                     | 1 space/175 sq ft GFA for the initial 5,000 sq ft;<br>1 space/200 sq ft for next 5,000 sq ft; and<br>1 space/225 sq ft for over 10,000 GFA                                                                                                              | 1 space/33 vehicle parking spaces                                                                   |
| <b>Service Uses</b>                                                         |                                                                                                                                                                                                                                                         |                                                                                                     |
| Business Support Services                                                   | 1 space/400 sq ft GFA                                                                                                                                                                                                                                   | None                                                                                                |
| Industrial Repair                                                           | 1 space/800 sq ft GFA<br>4 spaces/1,000 sq ft GFA of office space, where those uses exceed 10% of GFA                                                                                                                                                   | None                                                                                                |
| <b>Food Service:</b>                                                        |                                                                                                                                                                                                                                                         |                                                                                                     |
| • Outdoor dining                                                            | 1 space/3 seats; and<br>1 space/employee                                                                                                                                                                                                                | 1 space/20 seats                                                                                    |
| Mini-Storage Facility                                                       | 1.75 spaces/100 units; and<br>1 space/employee                                                                                                                                                                                                          | None                                                                                                |
| Motor Vehicle Rental, Sales, and Leases                                     | Indoor display/sale/service = 3.3 spaces/1,000 sq ft GFA;<br>Outdoor display/sale = .40 spaces/1,000 sq ft GFA; and<br>1 space/employee                                                                                                                 | None                                                                                                |
| Offices                                                                     | 4 spaces/1,000 sq ft GFA with a minimum of 3 spaces/office                                                                                                                                                                                              | Under 50,000 sq ft – 2 spaces<br>50,001 – 100,000 sq ft – 3 spaces<br>Over 100,000 sq ft – 5 spaces |
| School, Commercial                                                          | 1 space/teaching and non-teaching position on maximum shift; and<br>1 space/2 students on maximum enrollment                                                                                                                                            | 1 space/33 vehicle parking spaces                                                                   |
| <b>Distribution, Wholesaling and Warehousing Uses</b>                       |                                                                                                                                                                                                                                                         |                                                                                                     |
| Industrial Equipment, Materials, and Supplies, Truck, Truck Trailer Storage | 2 spaces/3 employees on maximum working shift;<br>1 space for visitor parking on the basis of each 10 employees on maximum working shift, or a minimum of 3 spaces, whichever is greater; and<br>1 truck/trailer storage space/every truck to be stored | None                                                                                                |

**Table 8-7 – Parking Requirements by Land Use (continued)**

| Land Use                                                                                                                                                                                                                                                                                                                                       | Motor Vehicle Spaces (Minimum #)<br>GFA – Gross Floor Area                                                                                                                                                                                                                                                                                                                                                                                       | Bicycle Spaces<br>(Minimum #) |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| Logistics and Distribution Facilities<br>(High Cube)                                                                                                                                                                                                                                                                                           | <b>Vehicle Parking:</b><br>1 space/1,000 sq ft GFA for the first 20,000 sq ft;<br>1 space/2,000 sq ft for the second 20,000 sq ft;<br>1 space/5,000 sq ft for that portion over 40,000 sq ft.<br>No add'l spaces if office area less than 10% GFA.<br>Office space rate if office area over 10% GFA.<br><b>Truck and Trailer Parking:</b><br>1 oversized truck space/5,000 sq ft GFA*<br>*Truck docks shall not be included in this calculation. | None                          |
| Petroleum/Hazardous Material Storage                                                                                                                                                                                                                                                                                                           | 1 space/employee on maximum shift                                                                                                                                                                                                                                                                                                                                                                                                                | None                          |
| Warehousing Facilities                                                                                                                                                                                                                                                                                                                         | 2 spaces/3 employees on maximum working shift;<br>No additional spaces if office area is less than 10% GFA.<br>Office space rate if office area over 10% GFA.<br>Space to accommodate all trucks and other vehicles used in connection with use                                                                                                                                                                                                  | None                          |
| Transportation, Communications and Infrastructure Uses                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                               |
| Antennas                                                                                                                                                                                                                                                                                                                                       | 1 space                                                                                                                                                                                                                                                                                                                                                                                                                                          | None                          |
| Broadcasting Offices or Studios                                                                                                                                                                                                                                                                                                                | 5 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                                                                                                                                                         | None                          |
| Other Uses                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                               |
| Drive-Through                                                                                                                                                                                                                                                                                                                                  | Stacking for 7 vehicles at each bay, window, lane, ordering station, or machine                                                                                                                                                                                                                                                                                                                                                                  | None                          |
| Outdoor Display & Sales                                                                                                                                                                                                                                                                                                                        | 1 space/1,000 sq ft of outdoor merchandise areas                                                                                                                                                                                                                                                                                                                                                                                                 | None                          |
| Public Facilities                                                                                                                                                                                                                                                                                                                              | Per Public Agency                                                                                                                                                                                                                                                                                                                                                                                                                                |                               |
| Temporary Uses                                                                                                                                                                                                                                                                                                                                 | Per Temporary Use Permit                                                                                                                                                                                                                                                                                                                                                                                                                         |                               |
| Note: Sources consulted to compile the table entries include the Municipal Code; The Dimensions of Parking, ULI and National Parking Association, 5th Edition, 2010; Recommended Zoning Ordinance Provisions, National Parking Association, December 2006; and Parking Standards, APA Planning Advisory Service Report 510/511; November 2002. |                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                               |

**D. Required Number of Loading Spaces**

Each land use shall provide the number of off-street loading spaces indicated in Table 8-8 – Loading Space Requirements by Land Use. Requirements for uses not specifically listed shall be determined by the Director of Community Development based upon the requirements for comparable uses and upon the particular characteristics of the proposed use. For other standards (e.g., size of loading spaces, location, turning radius, etc.), refer to Article XI Off-Street Parking and Loading Standards, Division 4 Loading Area Regulations, in Municipal Code Chapter 30 Zoning and Development Code.



## Southwest Industrial Park Specific Plan

Jurupa South Industrial District

**Table 8-8 – Loading Space Requirements by Land Use (JSD)**

| Land Use                                                                    | Loading Spaces (minimum #)                                                                                                                                                                | Type of Loading Space (1) |
|-----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| Entertainment, Recreation and Public Assembly Uses                          |                                                                                                                                                                                           |                           |
| Public Assembly Facilities                                                  | 1 space, plus additional spaces as required by design review                                                                                                                              | Van                       |
| Recreational Facilities                                                     | 0 to 29,999 sq ft, 1 space<br>30,000 to 99,999 sq ft, 2 spaces<br>100,000 sq ft, 3 spaces                                                                                                 | Truck                     |
| Industry, Manufacturing, and Processing Uses                                |                                                                                                                                                                                           |                           |
| All uses listed under "Light Manufacturing" in Table 8-2                    | 5,000 - 30,000 sq ft: 1 space; and<br>1 additional space for each additional 30,000 sq ft                                                                                                 | Truck                     |
| All uses listed under "General Manufacturing" in Table 8-2                  |                                                                                                                                                                                           |                           |
| Research and Development                                                    |                                                                                                                                                                                           |                           |
| Retail Uses                                                                 |                                                                                                                                                                                           |                           |
| Retail Sales, General                                                       | up to 10,000 sq ft, 1 space                                                                                                                                                               | Truck                     |
|                                                                             | 10,001 to 30,000 sq ft, 1 space<br>30,001 to 90,000 sq ft, 2 spaces<br>Over 90,000 sq ft, 2 spaces plus 1 additional space for each additional 50,000 sq ft over the initial 90,000 sq ft | Tractor Trailer           |
| Service Uses                                                                |                                                                                                                                                                                           |                           |
| All uses listed under "Service Uses" in Table 8-2                           | up to 10,000 sq feet, 1 space                                                                                                                                                             | Truck                     |
|                                                                             | 10,001 to 30,000 sq ft, 1 space<br>30,001 to 90,000 sq ft, 2 spaces<br>Over 90,000 sq ft, 2 spaces plus 1 additional space for each additional 50,000 sq ft over the initial 90,000 sq ft | Tractor Trailer           |
| Industrial Repair                                                           | 5,000 to 30,000 sq ft, 1 space; and<br>1 additional space for each additional 30,000 sq ft                                                                                                | Truck                     |
| Motor Vehicle Rental, Sales, and Leases                                     | 1 space                                                                                                                                                                                   | Tractor Trailer           |
| School, Commercial                                                          | 1 space, plus additional spaces required by design review                                                                                                                                 | Van                       |
| Distribution, Wholesaling, and Warehousing Uses                             |                                                                                                                                                                                           |                           |
| Industrial Equipment, Materials, and Supplies, Truck, Truck Trailer Storage | 1 space                                                                                                                                                                                   | Tractor Trailer           |
| Logistics and Distribution Facilities                                       | Per design review                                                                                                                                                                         |                           |
| Warehousing Facilities                                                      | 5,000 to 30,000 sq ft, 1 space; and<br>1 additional space for each additional 30,000 sq ft                                                                                                | Truck                     |

**Table 8-8 – Loading Space Requirements by Land Use (JSD) (continued)**

| Land Use                                                                                                                                                                                                                                                                                                                                              | Number of Spaces Required              |                           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|---------------------------|
|                                                                                                                                                                                                                                                                                                                                                       | Jurupa South Industrial District (JSD) |                           |
|                                                                                                                                                                                                                                                                                                                                                       | Loading Spaces                         | Type of Loading Space (1) |
| Transportation, Communications and Infrastructure Uses                                                                                                                                                                                                                                                                                                |                                        |                           |
| Broadcasting Offices or Studios                                                                                                                                                                                                                                                                                                                       | 1 space                                | Van                       |
| Other Uses                                                                                                                                                                                                                                                                                                                                            |                                        |                           |
| Temporary Uses                                                                                                                                                                                                                                                                                                                                        | Per Temporary Use Permit               |                           |
| Notes:                                                                                                                                                                                                                                                                                                                                                |                                        |                           |
| (1) A van loading space shall be a minimum of 12 ft wide by 19 ft long with a minimum 10 ft overhead clearance. A truck loading space shall be a minimum of 12 ft wide by 45 ft long with a minimum 14 ft overhead clearance. A tractor trailer loading space shall be a minimum of 12 ft wide by 70 ft long with a minimum 14 ft overhead clearance. |                                        |                           |

**E. Landscaping Standards for Parking Areas**

Within any parking area, one tree shall be planted for every five single-row parking stalls or 10 double-row parking stalls. Eighty percent of these shall be 15 gallons in size and the remaining 20 percent shall be 24-inch box or larger in size. If for some reason the contractor is unable to distribute trees in the interior of the parking area in compliance with these standards, the Director of Community Development may approve the placement of no more than 40 percent of the trees within the perimeter of the parking area. Planters shall not have a dimension less than four feet, excluding the thickness of the curbing. These requirements may be reduced for industrial parking areas that are screened from public view.

1. Parking areas shall contain a minimum landscape area equivalent to 30 percent of the total required 15 percent landscaping for the total site area.
2. Parking area perimeter landscaping.
  - a. Parking areas for nonresidential uses abutting or adjacent to residentially zoned property shall provide a landscape strip that is a minimum of 10 feet in width, excluding overhang, curb, and walkways, between the parking area and the common property line bordering the residentially zoned property. Parking areas shall be screened from the residentially zoned property by a solid decorative masonry wall that is a minimum of six feet in height.
  - b. Parking areas for nonresidential uses abutting or adjacent to non-residentially zoned property or a street shall install a landscape strip that is a minimum of five feet in width, excluding overhang, curb, and walkways, between the parking area and the common property line or the parking area and the street right-of-way. This requirement may be reduced or modified if a joint access agreement exists that is satisfactory to the Director of Community Development. Parking areas shall be screened from streets through combinations of plant materials, earth berms, raised planters, grade separations, or low walls. Slopes shall not exceed three to one or exceed 36 inches in height measured from the parking lot surface.

- c. Plant materials, walls, or structures within a traffic sight area shall not block sight lines from driveways to streets and shall not exceed 36 inches in height.
  - d. The minimum width of a landscape finger shall be five (5) feet.
  - e. End of aisle spaces adjacent to landscape finger shall be two feet wider for step out area.
3. Parking area interior landscaping.
- a. Tree number and location. One tree shall be provided for each four parking spaces and shall be evenly spaced throughout the interior parking area at a rate of one tree for every eight parking spaces. See Exhibit 7-4 – Parking Lot Landscaping. The required number of trees in the interior area shall not include trees required around the parking area perimeter. Trees are not required for tractor-trailer parking. A minimum of one cluster of trees shall be provided for each 100 feet of a row or double row of parking spaces. Trees shall be located in planters that are bounded on at least two sides by parking area paving. Planters shall have a minimum exterior dimension of five feet.

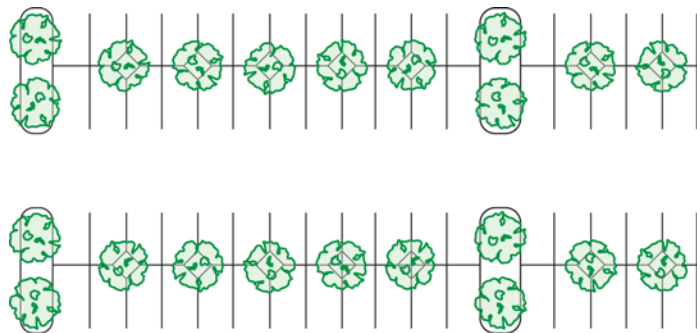


Exhibit 8-4 – Parking Lot Landscaping.

- b. Tree size. All trees within the parking area shall be a minimum 24-inch box container at time of planting.
- c. Landscape protection. Landscaping shall be protected by concrete curbs of at least six inches in height. An end-of-aisle planter shall be provided at the ends of all parking aisles. Finger aisle planters shall be a minimum of nine feet wide and end-of-aisle planters shall be a minimum of seven feet wide, as measured from the inside of the curb. The parking space side of finger and end-of-aisle planters shall have a 24-inch wide concrete surface measured from the face of the curb. Planters shall be landscaped with a mixture of trees, shrubs, and ground cover. Planting areas shall have round corners instead of 90 degree corners and shall be shaped to allow vehicle movements. The Director of Community Development may approve alternative barriers designed to protect landscaped areas from vehicle damage. Wheel stops may be placed to allow for two feet of vehicle overhang area within the dimension of the parking space. To increase the parking lot landscaped area, a maximum of two feet of the parking stall depth may be landscaped with low-

growth, hardy materials in-lieu of paving, allowing a bumper overhang while maintaining the required parking dimensions. However, the overhang area shall not be counted as part of the minimum landscape area required by paragraph (1) above, and when adjacent to a required landscaping strip shall be in addition to the minimum required width. Fixtures (e.g., lights, sprinklers) that are higher than the curb are prohibited within a bumper overhang area. Curbing that creates a bumper overhang barrier shall not exceed a height of five inches.

- d. Parking areas with more than 100 spaces shall provide an appropriate entry feature consisting of a concentration of landscape elements, including trees, flowering plants, enhanced paving, and project identification.
4. Parking structures. A landscaping strip 10 feet wide shall be provided on all sides of a parking structure. One tree shall be provided for each 20 to 40 feet of perimeter of the structure, based on species selected. These trees shall be distributed evenly throughout the subject landscape area.

## 8.7 Sign Standards

### A. Applicability

This section contains standards and guidelines for signage to ensure that signs are consistent with the overall quality and character of anticipated new development. Regulations identify permitted sign types; provide standards for number of signs, size, and location; and provide design guidelines for color, materials, and illumination. Refer to the Fontana Municipal Code for all sign-related information or regulations not specifically addressed in this section.

### B. Standards and Guidelines

1. Standards. The following standards shall apply to all signs, regardless of type:
  - a. Sign types not listed in this Section are not permitted.
  - b. Linear Frontage Ratio. For each establishment, one and one-half (1 ½) square feet of total sign area shall be allowed for each linear foot of building frontage. Unless otherwise noted, all signs (including temporary signs) shall count toward the total sign area permitted based on the Linear Frontage Ratio. For multi-tenant buildings, each establishment shall be calculated individually. For corner establishments, each facade shall be calculated individually. Permitted sign area based on the linear frontage of one establishment or facade shall not be placed on another establishment or facade.
  - c. Signs shall not be animated.
  - d. Commercial messages that identify, advertise, or attract attention to a business, product, service, or event or activity sold, existing, or offered elsewhere than upon the same property where the sign is displayed are expressly prohibited.
  - e. In the event of a conflict between this Section and any other City regulation, the provisions of this Section shall apply.
  - f. All issues not specifically addressed herein (signage in the public right-of-way, exempt signs, permit processing, etc.) shall be addressed pursuant to the Fontana Municipal Code.
2. Guidelines. The following guidelines shall apply to all signs, regardless of type.
  - a. Design Compatibility
    - Provide signage that is compatible with the building architecture and coordinate sign materials and colors with the building facade/storefront design.
    - Place signs in accordance with facade rhythm, scale, and proportion.
    - Ensure that signs associated with multi-tenant buildings are complementary to one another. A consistent location for tenant identification signs is recommended.

b. Location

- Signs shall be placed at or near the public entrance to a building or main parking area to indicate the most direct access to the business.
- Signs shall not be located so that they cover or interrupt the architectural details or ornamentation of a building's facade.
- Signs shall not project above the edge of the rooflines and shall not obstruct windows and/or doorways.

c. Sign Legibility

- Avoid hard-to-read, intricate typefaces. Typefaces that are difficult to read reduce the sign's ability to communicate.
- Avoid spacing letters and words too close together. Lettering shall not occupy more than 75 percent of the sign face.
- Limit the number of lettering styles in order to increase legibility. Signs shall be limited to no more than two styles for small signs (generally up to 10 square feet) and three styles for larger signs.
- Use significant contrast through incorporating light colored letters and a darker, contrasting background to provide the most visible and best-looking image.
- Incorporate business identity symbols and logos.
- Logo means any symbol or any combination thereof adopted and used by an individual or corporation to identify goods made or sold or services rendered by an individual or corporation and to distinguish them from goods made or sold or services rendered by others and that is nationally or State of California registered.

d. Color and Materials

- Bright day-glo (fluorescent) colors shall be avoided as they are distracting and do not blend well with other background colors.
- Sign colors shall relate to and complement the materials or color scheme of the buildings, including accent and trim colors.
- Sign materials shall be selected with consideration for the architectural design of the building's façade and also contribute to the legibility of the sign.
- Construct signs of durable, high-quality materials.
- Wood, paper, and cloth signs, and painted wall signs are prohibited.

e. Illumination

- Individually illuminated letters, either internally illuminated or back-lighted solid letters (reverse channel), are a preferred alternative to internally illuminated plastic-faced cabinet signs.
- Signs shall be comprised of individual letters.
- The use of backlit, individually cut letter signs is strongly encouraged for all types of business and signs, including monument-type signs.
- Whenever indirect lighting fixtures are used, care shall be taken to properly shield the light source.

f. Electrical Raceways and Conduits

- Electrical transformer boxes and raceways shall be concealed from public view.
- All exposed conduit and junction boxes shall be appropriately concealed from public view.

c. **Sign Types**

For the purposes of this plan, Table 8-9 – Sign Types indicates the signs that are allowed in the Jurupa South Industrial District.

| Table 8-9 – Sign Types |                                                                                                              |
|------------------------|--------------------------------------------------------------------------------------------------------------|
| 1                      | <b>Grand Wall Sign</b><br>Non-residential uses with unfenestrated wall areas of 2,000 square feet or greater |
| 2                      | <b>Wall Sign</b><br>Non-residential uses with a dedicated ground floor entrance                              |
| 3                      | <b>Projecting Sign</b><br>Non-residential uses with a dedicated ground floor entrance                        |
| 4                      | <b>Awning Valance Sign</b><br>Non-residential uses with a dedicated ground floor entrance                    |
| 5                      | <b>Awning Side Sign</b><br>Non-residential uses with a dedicated ground floor entrance                       |
| 6                      | <b>Canopy Fascia Sign</b><br>Non-residential uses with a dedicated ground floor entrance                     |
| 7                      | <b>Under-Awning or Under-Canopy Sign</b><br>Non-residential uses with a dedicated ground floor entrance      |
| 8                      | <b>Recessed Entry Sign</b><br>Non-residential uses with a dedicated ground floor entrance                    |
| 9                      | <b>Window Sign</b><br>Non-residential uses with a dedicated ground floor entrance                            |
| 10                     | <b>Temporary Window Sign</b><br>Non-residential uses with a dedicated ground floor entrance                  |
| 11                     | <b>Temporary Wall Sign</b><br>Non-residential uses with a dedicated ground floor entrance                    |
| 12                     | <b>Monument Sign</b><br>Any building with continuous linear street frontage of 200 feet or greater           |
| 13                     | <b>Directional Sign</b><br>Each vehicle entrance                                                             |
| 14                     | <b>Accessory Sign</b><br>Identified specific uses                                                            |



## D. Sign Type Standards and Guidelines

This section provides Standards and Guidelines for each Sign Type.

### 1. Grand Wall Sign

Grand Wall Signs are large signs located on, and parallel to, large unfenestrated building wall areas.

#### a. Standards

- i. A Grand Wall Sign shall only be located on unfenestrated wall areas of 2,000 square feet in size or greater.
- ii. Only one (1) Grand Wall Sign shall be permitted per establishment.
- iii. The Grand Wall Sign area shall not count towards the total sign area permitted based on the Linear Frontage Ratio.
- iv. A Grand Wall Sign shall not exceed 1,000 square feet or 25 percent of the total wall area, whichever is less.
- v. A Grand Wall Sign shall project no more than one (1) foot from the façade of the building.

#### b. Commercial Guidelines

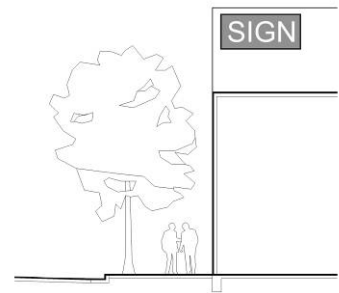
- i. Materials used in Grand Wall Signs shall be wood, ceramic, metal, or paint only.
- ii. Grand Wall Signs shall be illuminated by external illumination only.

#### c. Industrial Guidelines

- i. Materials used in Grand Wall Signs shall be ceramic or metal.
- ii. Grand Wall Signs shall be illuminated by external illumination only.

### 2. Wall Sign

Wall Signs are signs that are located on, and parallel to, a building wall. Business Identification Wall Signs are signs that announce the name of a business within a building and Building Identification Wall Signs are signs that announce the name of a building. Both are located on, and parallel to, a building wall.



1) Grand Wall Sign.



2) Building Identification Wall Sign.

a. Standards

- i. Wall Signs shall be located below the second floor and within the middle 50 percent of the building or tenant frontage measured from lease line to lease line. Building Identification Wall Signs shall be located only on the frieze or fascia (articulated banding across the top of every building floor) area of storefront level; frieze, fascia, parapet of the uppermost floor; or above the entrance to main building lobby.
- ii. No Wall Sign shall exceed 150 square feet in size. Building Identification Wall Signs shall be no taller than 24 inches in height.
- iii. Wall Signs shall count towards the total sign area permitted based on the Linear Frontage Ratio, except that the area of Building Identification Wall Signs shall not count towards the total sign area permitted based on the Linear Frontage Ratio.
- iv. Wall Signs shall project no more than one (1) foot from the façade of the building.

b. Commercial Guidelines

- i. Materials used in wall signs shall be wood, ceramic, and/or metal. Wall signs may also be inscribed into the façade of the building. Building Identification Wall Signs shall be inscribed into the façade or constructed of individual metal letters.
- ii. Wall Signs shall be illuminated by external illumination or halo illumination only.
- iii. Where individual letters are used, letters shall be three-dimensional, created by raised letter forms mounted to the building façade or sign panel, or by incised openings cut out from the sign panel.
- iv. New wall signs for individual businesses in a shopping center shall be placed consistent with the location of signs for other businesses in the center. This will establish visual continuity among storefronts and create a unified appearance for the center.
- v. When signs that are attached to a wall are removed, holes and other disfigurements of the wall's surface shall be patched and painted to match surrounding areas.

c. Industrial Guidelines

- i. Materials used in wall signs shall be ceramic, and/or metal. Wall signs may also be inscribed into the façade of the building. Building Identification Wall Signs shall be inscribed into the façade or constructed of individual metal letters.
- ii. Wall signs shall be illuminated by external illumination, exposed neon tube illumination, exposed incandescent bulb illumination, or halo illumination only. Building Identification Wall Signs shall be illuminated by external illumination or halo illumination only.
- iii. Where individual letters are used, letters shall be three-dimensional, created by raised letter forms mounted to the building façade or sign panel, or by incised openings cut out from the sign panel.
- iv. When signs that are attached to a wall are removed, holes and other disfigurements of the wall's surface shall be patched and painted to match surrounding areas.

**3. Projecting Sign**

Projecting Signs are signs that are oriented perpendicularly to the building façade and are either (1) suspended under a bracket, armature, or other mounting device or (2) are cantilevered (i.e., structurally affixed to the building).

a. Standards

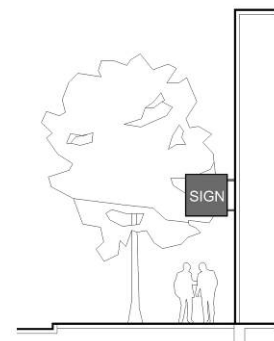
- i. Projecting Signs shall only be mounted on the wall area below the second floor.
- ii. No Projecting Sign shall exceed 16 square feet in size.
- iii. Projecting Signs shall project no more than four feet from the façade of the building.
- iv. No portion of a Projecting Sign shall be lower than eight feet above the level of the walkway over which it projects.

b. Commercial and Industrial Guidelines

- i. Projecting Signs that are suspended under a bracket, armature, or other mounting device shall be wood or metal and shall be illuminated by external illumination only.
- ii. Projecting Signs that are cantilevered signs shall be wood, ceramic or metal and shall be illuminated by external illumination or halo illumination only.



3) Suspended Projecting Sign.



3) Cantilevered Projecting Sign.

- iii. Sign supports and brackets shall be compatible with the design and scale of the sign and the architectural design of the building.

#### **4. Awning Valance Sign**

Awning Valance Signs are signs applied to the awning valance and are contained completely within the valance.

- a. Standards

- i. Lettering for Awning Valance Signs shall include one (1) line of lettering not to exceed two-thirds ( $2/3$ ) the height of the valance or 12 inches, whichever is less.
- ii. Awning Valance Signs shall project no farther from the building than its associated awning.
- iii. No portion of an Awning Valance Sign shall be less than eight feet above the level of the walkway over which it projects.



4) Awning Valance Sign.

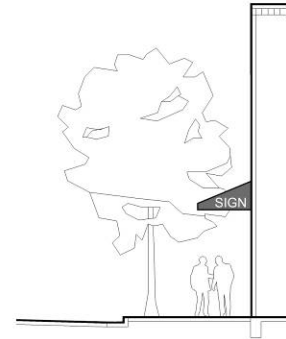
- b. Commercial and Industrial Guidelines

- i. Awning Valance Signs shall consist of metal, or vinyl or paint applied directly to the awning.
- ii. Awning Valance Signs shall be illuminated by external illumination only.
- iii. The shape, design, and color of awnings shall be carefully designed to coordinate with, and not dominate, the architectural style of the building. Where multiple awnings are used on the building, the design and color of the sign awnings shall be consistent with all other awnings.
- iv. The use of temporary signs/letters on awnings is not allowed. Only permanent signs that are an integral part of the awning or canopy shall be used.
- v. The use of adhesive/press on lettering is not allowed. Awning signs shall be painted directly on the canvas awning.
- vi. To avoid having to replace awnings or paint out previous tenant signs when a new tenant moves in to a building, the use of replaceable valances shall be considered.

## 5. *Awning Side Sign*

Awning Side Signs are signs applied to the side panel of an awning.

- a. Standards
  - i. The area of Awning Side Signs shall not count towards the total sign area permitted based on the Linear Frontage Ratio.
  - ii. Lettering for Awning Side Signs shall not exceed 12 inches in height with total sign area not to exceed 20 percent of the area of the awning side area.
  - iii. Awning Side Signs shall project no farther from the building than its associated awning.
  - iv. No portion of an Awning Side Sign shall be less than eight feet above the level of the walkway over which it projects.
- b. Commercial and Industrial Guidelines
  - i. Awning Side Signs shall consist of vinyl or paint applied directly to the awning.
  - ii. Awning Side Signs shall be illuminated by external illumination only.
  - iii. The shape, design, and color of awnings shall be carefully designed to coordinate with, and not dominate, the architectural style of the building. Where multiple awnings are used on the building, the design and color of the sign awnings shall be consistent with all other awnings.
  - iv. The use of temporary signs/letters on awnings is not allowed. Only permanent signs that are an integral part of the awning or canopy shall be used.
  - v. The use of adhesive/press on lettering is not allowed. Awning signs shall be painted directly on the canvas awning.
  - vi. To avoid having to replace awnings or paint out previous tenant signs when a new tenant moves in to a building, the use of replaceable valances shall be considered.

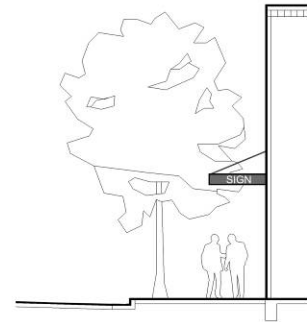


5) Awning Side Sign.

## 6. *Canopy Fascia Sign*

Canopy Fascia Signs are signs that are mounted to the front or side fascia of a canopy and contained completely within that fascia.

- a. Standards
  - i. The height of Canopy Fascia Signs shall not exceed two-thirds ( $2/3$ ) the height of the fascia or 12 inches, whichever is less.
  - ii. The width of Canopy Fascia Signs shall not exceed two-thirds ( $2/3$ ) of the canopy width.
  - iii. Canopy Fascia Signs shall project no farther from the building than its associated canopy.
  - iv. No portion of a Canopy Fascia Sign shall be less than eight feet above the level of the walkway over which it projects.
  - v. Canopy Fascia Signs shall consist of only one (1) line of lettering articulated as individual letters mounted directly to the canopy.
- b. Commercial and Industrial Guidelines
  - i. Materials used in Canopy Fascia Signs shall be metal and paint only.
  - ii. Canopy Fascia Signs shall be illuminated by external illumination only.

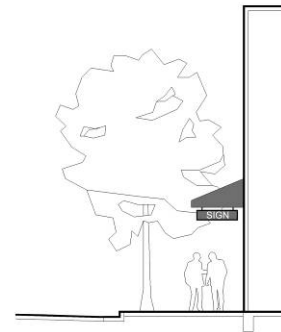


6) Canopy Fascia Sign.

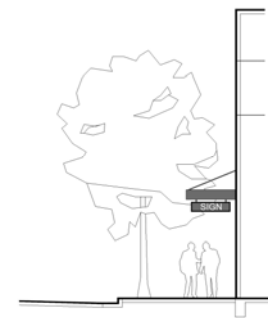
## 7. *Under-Awning or Under-Canopy Sign*

Under-Awning or Under-Canopy Signs are signs that are suspended under an awning or canopy, perpendicular to the building facade.

- a. Standards
  - i. Under-Awning or Under-Canopy Signs shall be located adjacent to a public entrance.
  - ii. No more than one (1) Under-Awning or Under-Canopy Sign shall be permitted per establishment per façade.
  - iii. The area of Under-Awning or Under-Canopy Signs shall not count towards the total sign area permitted based on the Linear Frontage Ratio.
  - iv. Under-Awning or Under-Canopy Signs shall not exceed three (3) square feet in area.



7) Under-Awning Sign.



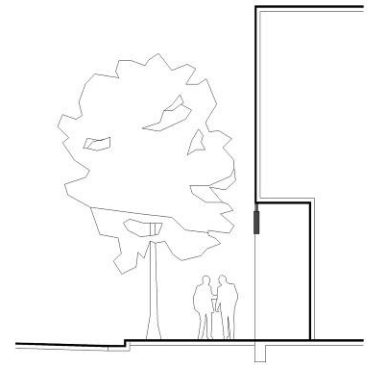
7) Under-Canopy Sign.

- v. Under-Awning or Under-Canopy Signs shall project no farther from the building than its associated awning or canopy.
- vi. No portion of an Under-Awning or Under-Canopy Sign shall be less than eight feet above the level of the walkway over which it projects.
- b. Commercial Guidelines
  - i. Materials used in Under-Awning or Under-Canopy Signs shall be wood or metal.
  - ii. Under-Awning or Under-Canopy Signs shall be illuminated by external illumination only.
- c. Industrial Guidelines
  - i. Materials used in Under-Awning or Under-Canopy Signs shall be wood or metal.
  - ii. Under-Awning or Under-Canopy Signs shall be illuminated by external illumination only.

## 8. ***Recessed Entry Sign***

Recessed Entry Signs are signs that are oriented parallel to the building façade and that are suspended over a recessed entry.

- a. Standards
  - i. No Recessed Entry Sign shall exceed twenty (20) square feet in size.
  - ii. Recessed Entry Signs shall not project beyond the façade of the building.
  - iii. No portion of a Recessed Entry Sign shall be lower than eight feet above the level of the walkway.
- b. Commercial Guidelines
  - i. Materials used in Recessed Entry Signs shall be wood or metal.
  - ii. Recessed Entry Signs shall be illuminated by external illumination only.
- c. Industrial Guidelines
  - i. Materials used in Recessed Entry Signs shall be wood or metal.



8) Recessed Entry Sign- Section View.



8) Recessed Entry Sign- Elevation View.



- ii. Recessed Entry Signs shall be illuminated by external illumination only.

**9. Window Sign**

Window Signs are signs that are applied directly to a window or mounted or suspended directly behind a window.

**a. Standards**

- i. Window Signs shall be permitted on windows below the second floor level only. A Window Sign that only identifies a building shall be located on a transom window above a primary entrance, or the glazed area of primary door.
- ii. Window signs shall count towards total sign area permitted based on the Linear Frontage Ratio, except that the area of a Window Sign that only identifies a building shall not count towards the total sign area permitted based on the Linear Frontage Ratio. One (1) Window Sign that only identifies a building shall be permitted per building per street-facing façade.
- iii. No more than 25 percent of any individual window area shall be covered or otherwise occupied by signage.
- iv. The letter height of each Window Sign shall not exceed 12 inches.



g) Window Sign.



g) Building Identification Window Sign.

**b. Commercial and Industrial Guidelines**

- i. Ground-floor Window Signs shall consist of vinyl or paint applied to the glass, neon mounted or suspended behind the glass, or framed and mounted paper signs. Window Signs that only identify a building shall consist of vinyl or paint applied to the glass only.
- ii. Ground floor Window Signs shall not be illuminated.

## 10. Temporary Window Sign

Temporary Window Signs are signs that are applied directly to a window or mounted or suspended directly behind a window and are designed, constructed, and intended for display on private property for a period of not more than 90 consecutive days per year. Examples include “grand opening”, “special sale,” and seasonal signage.

### a. Standards

- i. Temporary Window Signs shall be located only on ground floor windows on building facades that face a public street or a parking lot.
- ii. Temporary Window Signs shall not exceed six square feet in size.
- iii. Temporary Window Signs shall not cause the total amount of the window area covered with signage to exceed 25 percent.
- iv. Temporary Window Signs that satisfy the above standards and General Standards do not require a permit.



10) Temporary Window Sign.

### b. Commercial and Industrial Guidelines

- i. Temporary Window Signs shall be constructed of paint applied directly to the glass or framed paper signs placed behind the glass.
- ii. Temporary Window Signs shall not be illuminated.
- iii. Temporary Window Signs that satisfy the above guidelines and General Guidelines do not require a permit.

## 11. Temporary Wall Sign

Temporary Wall Signs are signs that are located on, and parallel to, a building wall and are designed, constructed, and intended for display on private property for a period of not more than ninety (90) consecutive days per year. Examples include “grand opening”, “special sale,” and seasonal temporary banner signage.



11) Temporary Wall Sign.

### a. Standards

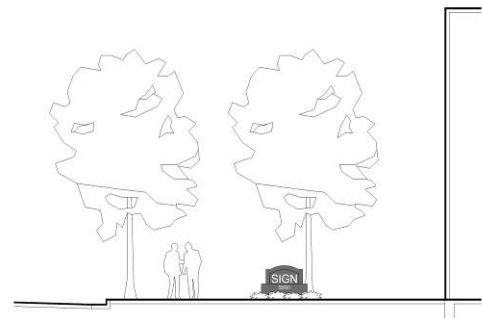
- i. Temporary Wall Signs shall only be mounted on a wall area below the second floor level that faces a public street or a parking lot.
- ii. A maximum of one (1) Temporary Wall Sign is allowed per establishment.

- iii. No Temporary Wall Signs shall exceed 32 square feet in area.
  - iv. Temporary Wall Signs shall project no more than one (1) foot from the façade of the building.
- b. Commercial and Industrial Guidelines
- i. Materials used in Temporary Wall Signs shall consist of a flexible vinyl material with grommet holes installed around the edges to accommodate attachment to a building.
  - ii. Temporary Wall Signs shall not be illuminated.

**12. Monument Sign**

A Monument Sign is a freestanding sign supported by a solid architectural element at its base.

- a. Standards
- i. A maximum of one Monument Sign is allowed per street frontage for single-purpose buildings, multi-tenant buildings or complexes and shopping centers on a parcel with one or more street frontages of at least 100 feet.
  - ii. A Monument Sign shall not exceed eight feet in length or six feet in height.
  - iii. Monument Signs shall be placed perpendicular or parallel to the street. The base of a Monument Sign shall be set back a minimum of five feet from any public right-of-way or interior property line; a minimum of 10 feet from the edge of a driveway; and a minimum of 50 feet and from any Monument Signs or Pylon Signs on adjoining sites. Monument Signs shall not block sight lines at entry driveways and circulation aisles.
  - iv. The sign copy for a Monument Sign shall only identify the name of the center, complex, or building and the address; however, the name of the primary tenant, if any, may be included in the copy. The minimum letter size allowed shall be six inches. Sign copy shall not be located closer than one half-letter height to the sign edge or other line of copy. Between 5 to 10 percent of the sign area should be dedicated to identification of the street address.



12) Monument Sign.

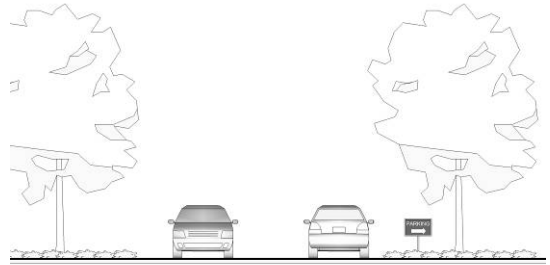
- v. The area of Monument Signs shall not count towards the total sign area permitted based upon Linear Frontage.
  - vi. Monument Signs shall not project over any on-site driveway or vehicle circulation area.
  - vii. Landscaping with automatic irrigation shall be provided at the base of the supporting structure equal to twice the area of one face of the sign or 75 square feet, whichever is greater. For example, 40 sq. ft. of sign area = 80 sq. ft. of landscaped area.
- b. Commercial and Industrial Guidelines
- i. Monument Signs may be illuminated, however the sign copy shall be the only portion of the sign face that is illuminated. The sign background or field shall be opaque with a nonglossy, nonreflective finish.
  - ii. The sign area and height of the sign shall be in proportion to the site and surrounding buildings. Signs shall not be overly large so as to be a dominant feature of the site.
  - iii. Monument Signs shall incorporate architectural elements, details, and articulation as follows:
    - Provide a solid architectural base that supports the sign. The base shall be a minimum of one-foot in height.
    - Provide architectural elements on the sides and top to frame the sign pane(s). Use columns, pilasters, cornices, and similar details to provide design interest.
    - Incorporate materials and colors into the sign support structures to match or be compatible with materials and colors of the development the sign serves so it does not appear out of scale with its adjacent building(s).
    - Keep the overall size of the sign in proportion with the development it serves so it does not appear out of scale with its adjacent building(s).

### 13. Directional Sign

A Directional Sign is an on-premise sign giving directions, instructions, or facility information of an establishment (e.g., parking signs, exit and entrance signs, etc.).

a. Standards

- i. One (1) directional sign for each vehicle entry to a site with a maximum area of three square feet per sign. Maximum sign height shall be four feet. Additional directional signs may be allowed with approval of a Comprehensive Sign Program.



b. Commercial and Industrial Guidelines

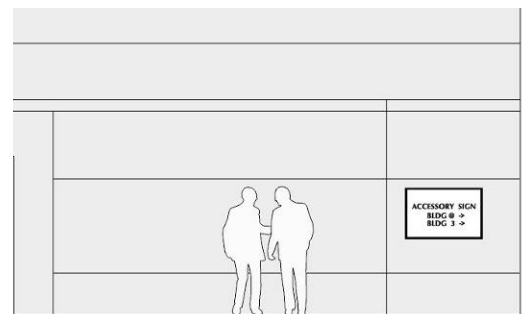
13) Directional Sign.

- i. Directional signs and their supports shall use the same color palette of the proposed building.
- ii. Directional signs shall be located to maintain sight lines along major circulation routes and shall be illuminated for visual clarity and safety.
- iii. Directional signs shall be designed with easy-to-read fonts, contrasting colors from the surrounding support panels, and durable materials.
- iv. Double-sided parking directional signs shall incorporate messaging and direction arrows on both sides of sign.
- v. Parking directional signage shall be used consistently throughout each individual development.

### 14. Accessory Signs

Accessory Signs are signs that provide incidental information about a project site or a business and its goods or services. For the purposes of this plan, Accessory Signs include:

- Directory Sign. A sign listing the tenants or occupants of a building or building complex.
- Nameplate Sign. A sign indicating the name and/or address of a building or occupant.
- Restaurant Menu Sign. Menus displayed on the exterior premises of a restaurant.
- Fuel Price Signs: One per street frontage with a maximum sign area of 12 square feet and a maximum height of four feet. Fuel price signs shall only advertise the price and grade of fuel and on other advertising shall



14) Accessory Sign.

be allowed. Located in a landscaped planter with a minimum area equal to the area of the sign.

- a. Standards
  - i. The area of Accessory Signs shall not count towards the total sign area permitted based upon Linear Frontage.
  - ii. Directory Signs: Limited to a total sign area of 10 square feet.
  - iii. Fuel Price Signs: One per street frontage with a maximum sign area of 12 square feet and a maximum height of four feet. Fuel price signs shall only advertise the price and grade of fuel and no other advertising shall be allowed. Located in a landscaped planter with a minimum area equal to the area of the sign.
  - iv. Nameplate Sign: One non-illuminated sign not to exceed one square foot in area.
- b. Commercial and Industrial Guidelines
  - i. Materials used in Accessory Signs shall be wood and metal.
  - ii. Accessory Signs shall be illuminated by internal or external illumination as appropriate.

## **8.8 Public Right-of-Way Streetscape**

This section establishes standards for streetscape landscaping improvements within the public rights-of-way along the major highways, primary highways, and secondary highways as identified in the General Plan, Circulation Master Plan, as well as district gateway/intersection enhancements. The intent of these streetscape improvement concepts, and gateway enhancements is to provide a “sense of place” or identity within each district, while interweaving the standards and tree palettes that may be provided by any overriding City Master Street Tree Plan.

### **A. Street Classifications**

Streets within the JSD are classified as follows:

1. Major highways:
  - a. Six-lane major highways – Etiwanda Avenue and Jurupa Avenue.
  - b. Modified six-lane residential adjacent major highway – Mulberry Avenue.
  - c. Modified six-lane no median major highways – none within JSD.
  - d. Eight-lane major highways – none within JSD.
2. Primary highways
3. Secondary highways – Marlay Avenue and Philadelphia Avenue.
4. Collector streets – none within the JSD.

### **B. General Design Criteria**

The following general design criteria are intended to articulate consistent landscape treatments on similar classifications of corridors and provide a hierarchy of conceptual treatments for district gateway/intersection enhancements.

1. Landscaping should be used to accentuate and frame important view corridors.
2. Landscaping shall employ a common three-tiered approach to design:
  - a. Trees
  - b. Shrubs, vines and tall grass-like materials
  - c. Groundcovers (does not include turf)
3. Landscaping should be consistent and accentuated along arterial corridors and gateway intersections to emphasize district areas.
4. Street trees on major highways shall consist of on-center planting of deciduous trees in medians (whenever medians are required) and evergreen trees in parkways to provide



seasonal variations of views during fall and winter months (clearer air and snow-capped peaks).

5. Secondary highways shall provide single species of evergreen trees planted in parkways.
6. Gateway intersection enhancements should incorporate the adjacent property tree species (used in buffer setback) in order to provide background and screening, and be enhanced with accent trees selected for their character and shape.
7. Primary and secondary gateways will include thematic monumentation for district identification and reflect elements of local identity (i.e. river rock, concrete, City logo, etc.).
8. All gateway intersection enhancement shall incorporate decorative paving at corner areas and plant materials that promote the best of water-efficient landscaping.

### **C. Streetscape Concept**

The Streetscape Concept Plan for the entire Specific Plan area is shown on Exhibit 8-4. The plan identifies major, primary, and secondary highways, as well as collector streets and the gateway intersections within the Specific Plan area. Roadway classifications are consistent with the General Plan, Circulation Master Plan.

1. **Major Highway Streetscape.** Major highway streetscapes define the image of the City and its districts, while providing arterial linkages within and beyond the City. There are four streetscape concepts for major highways: Six-Lane Major Highway, Modified Six Lane No Median Major Highway, Modified Six Lane Residential Adjacent Major Highway, and Eight-Lane Major Highway. These major highway streetscapes are designed in response to special design needs, right-of-way, and adjacencies. Major highways within the JSD are short sections of Etiwanda Avenue, Jurupa Avenue, and Mulberry Avenue. Streetscape cross-sections are in Exhibits 8-5 and 8-6.
2. **Primary/Secondary Streetscape.** Primary/Secondary highway streetscapes define areas within the Specific Plan and its districts, and connect to the major thoroughfares throughout the City. There are no primary highways within the JSD. Secondary highways within the JSD are Marlay Avenue and Philadelphia Avenue. A streetscape cross-section is in Exhibit 8-7.

# Southwest Industrial Park Specific Plan

Jurupa South Industrial District

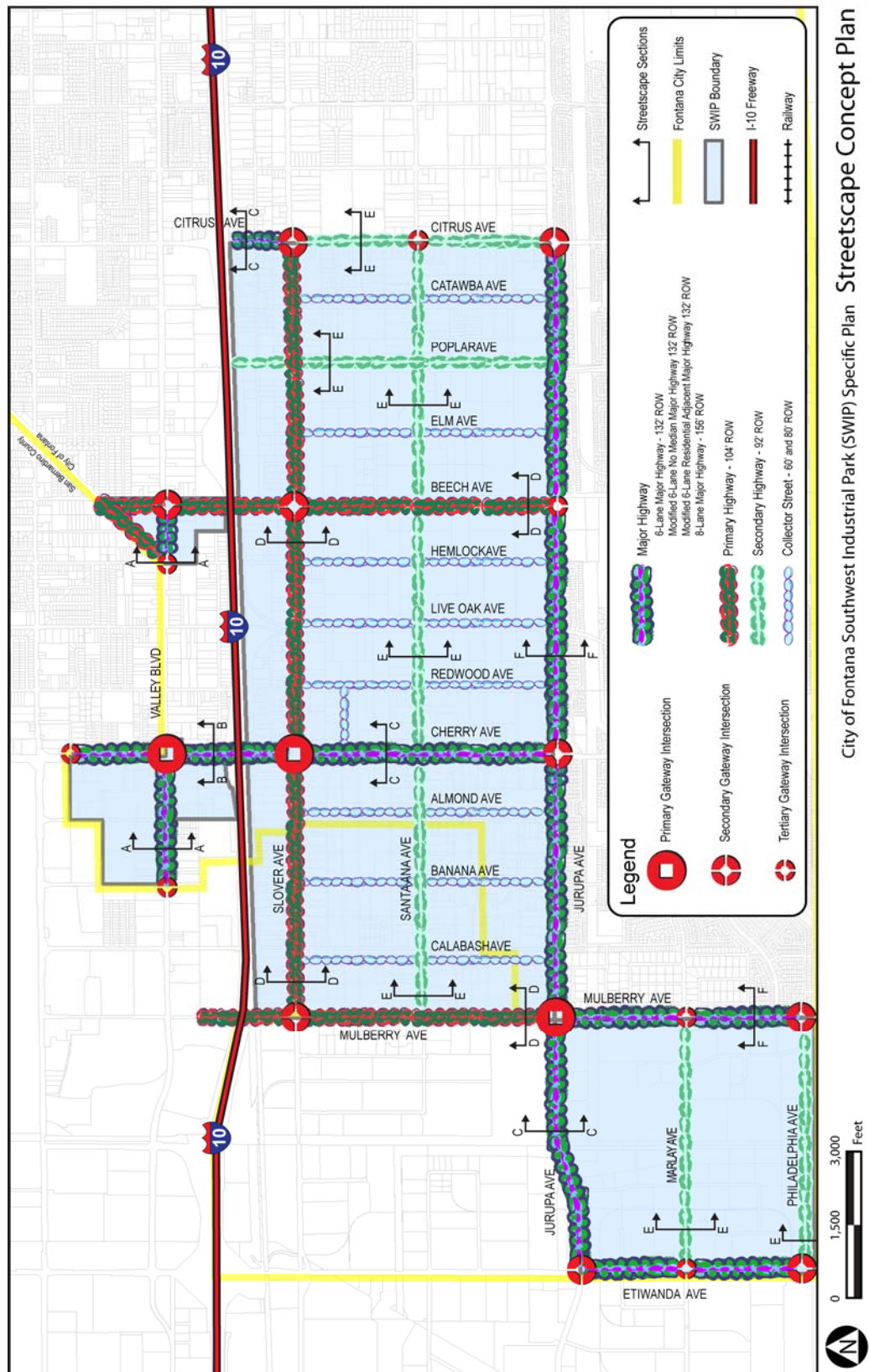


Exhibit 8-5 – Streetscape Concept Plan



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8-51

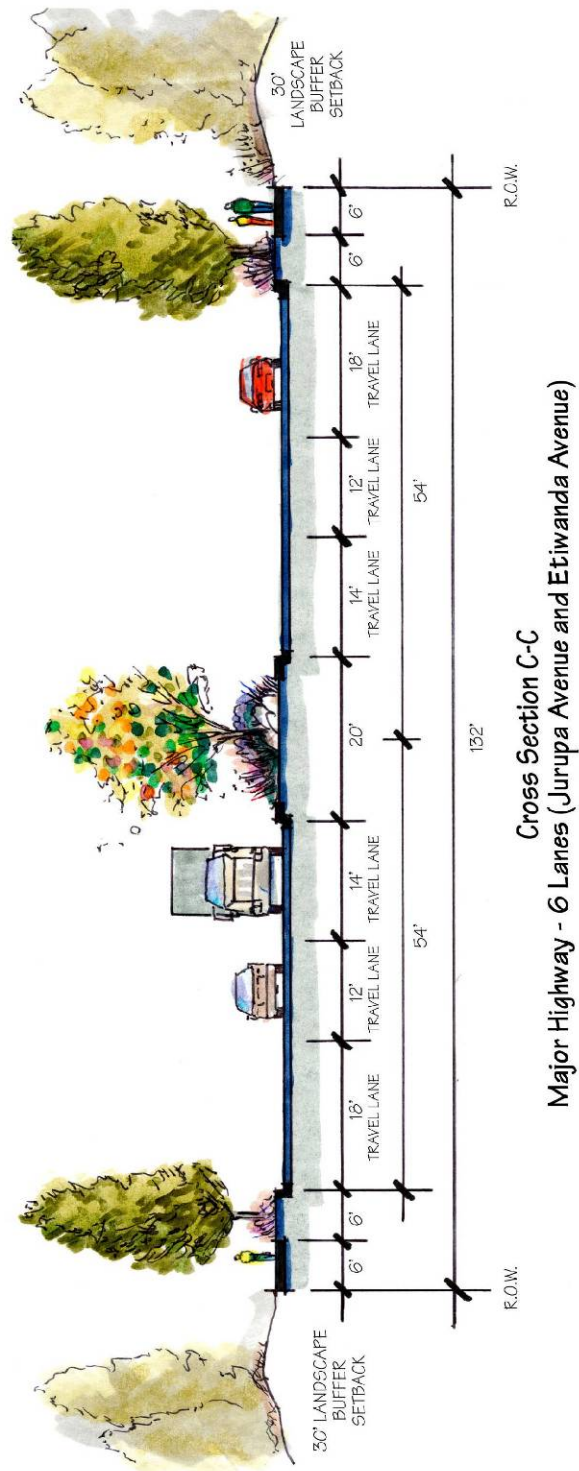


Exhibit 8-7 – Major Highway – 6 Lanes – Cross Section C-C  
Jurupa Avenue and Etiwanda Avenue

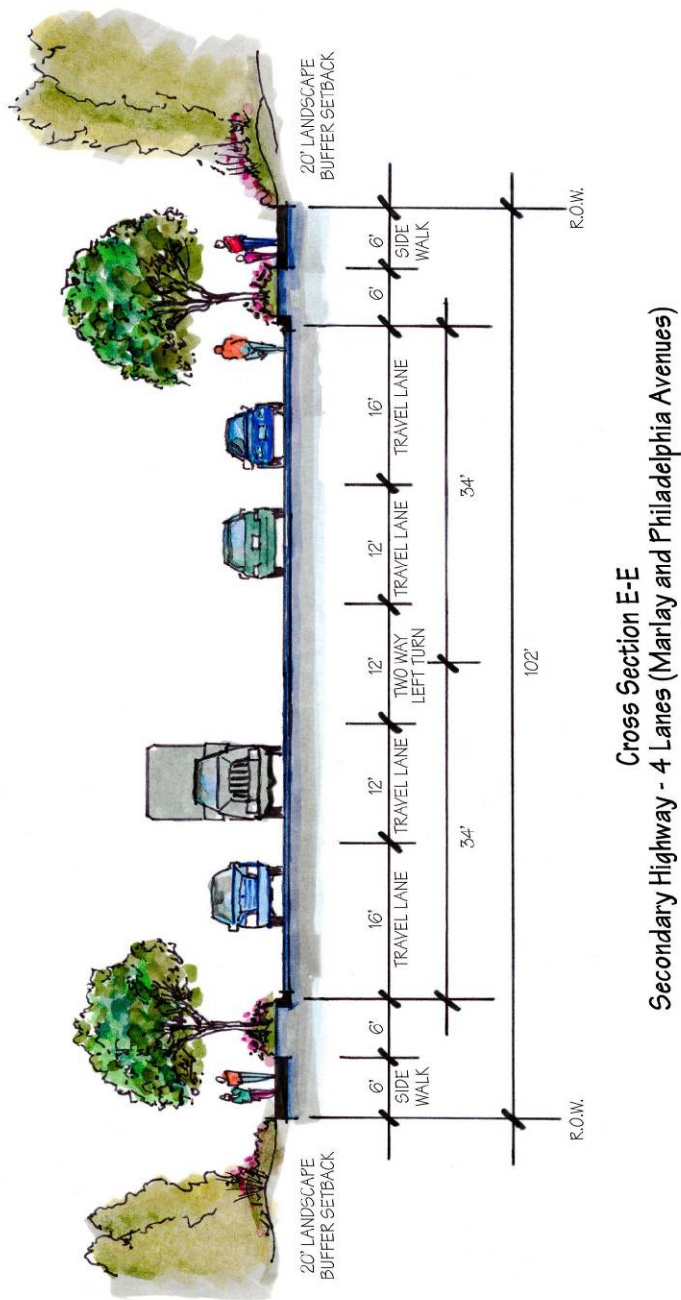


Exhibit 8-8 – Secondary Highway – 4 Lanes – Cross Section E-E  
Marlay Avenue and Philadelphia Avenue

3. Gateways

**A. Concept Plan**

The Streetscape Concept Plan – Exhibit 8-4 identifies a hierarchy of primary, secondary, and tertiary gateways. The intent of the gateway intersection enhancements is to provide a visual statement that you are within the Specific Plan area.

The gateway intersection enhancements should all incorporate uniform treatments (to varying degrees) within expanded corner setback areas (45 degree diagonal right-of-way). Depending on the hierarchy level, each gateway shall include special corner/sidewalk paving, planting schemes that highlight drought tolerant species, and monumentation signage. Monument signs are optional on tertiary gateway intersections.

Each corner planting scheme shall incorporate the three-tiered planting concept, consisting of accent trees, shrubs, or tall grass-like plant material, and a ground cover. Dense planting of evergreen tree species consistent with adjacent buffer setback plantings shall provide a background/screen for each corner setback area.

Gateway conceptual designs with typical dimensions (plan views) are illustrated in Exhibits 8-8, 8-9, and 8-10. The monument sign concept as it would appear in front of the planting treatment is illustrated in Exhibit 8-11.

Gateway enhancements and monument sign enhancements shall meet the City's line of sight regulations, as determined by the City Engineer. Dimensions of monument signs shall comply with Section 7.7.D.13 Monument Sign.

**B. Dedication and Maintenance of Gateway Intersection Improvements**

1. When dedication and maintenance is required.
  - a. Whenever a development project is proposed on land that is designated as a location for district gateway improvements in Section 8.8 Public Right-of-Way Streetscape, the developer shall:
    - i. Dedicate any necessary right-of-way area to the City or provide an easement in favor of the City for the installation of gateway intersection enhancements;
    - ii. Construct the gateway intersection enhancements to the standards indicated in Section 8.8 Public Right-of-Way Streetscape; and
    - iii. Enter into an agreement with the City that specifies perpetual maintenance.
  - b. The applicable review authority shall impose the dedication (or easement) requirement as a condition of project approval.

- c. The City Attorney and the Director of Community Development shall approve the form and content of any dedication or easement instrument used to ensure the installation and perpetual maintenance of the Gateway Intersection Enhancements.



## Southwest Industrial Park Specific Plan

Jurupa South Industrial District

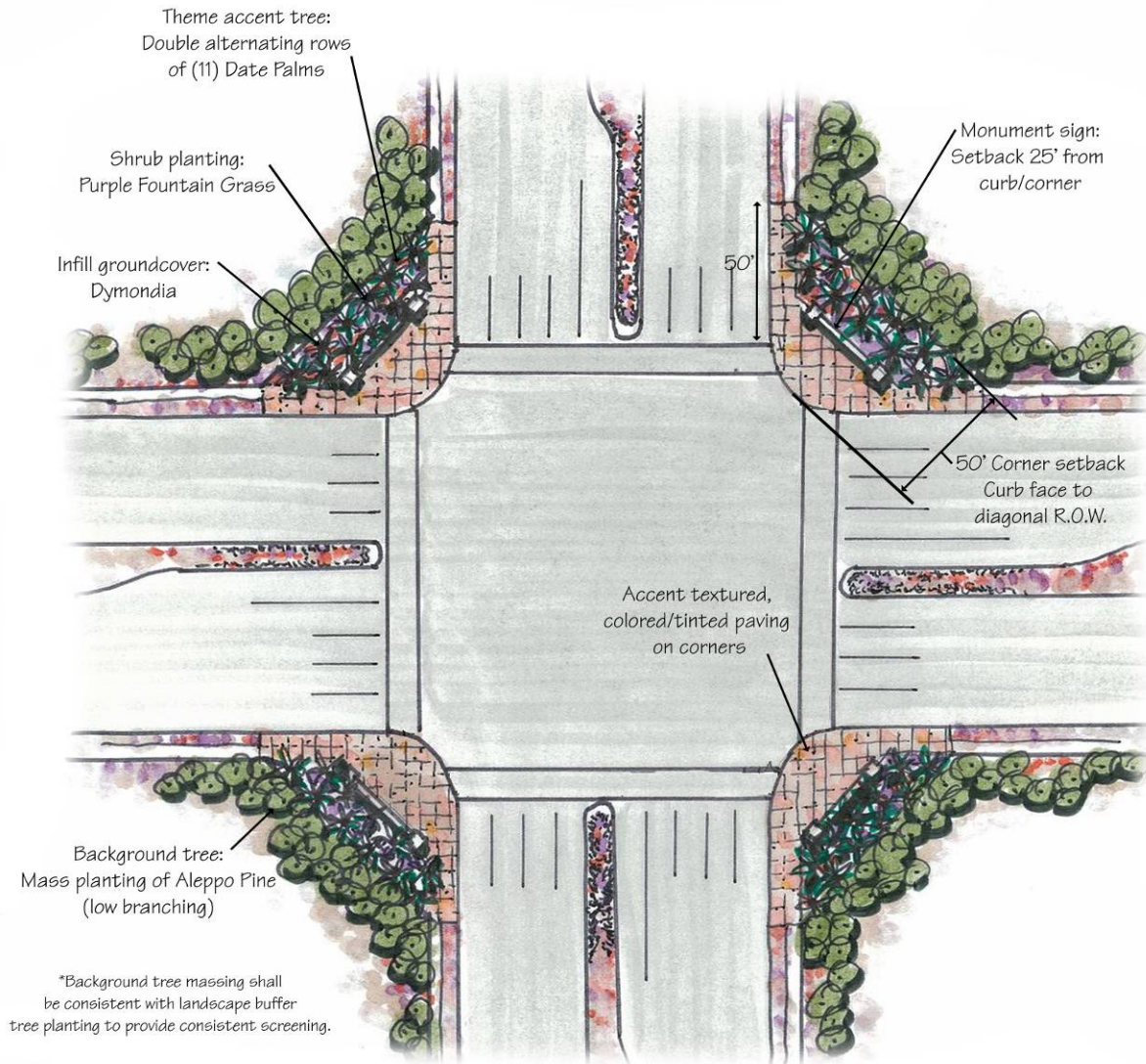


Exhibit 8-9 – Primary Gateway Intersection  
Enhancement Concept

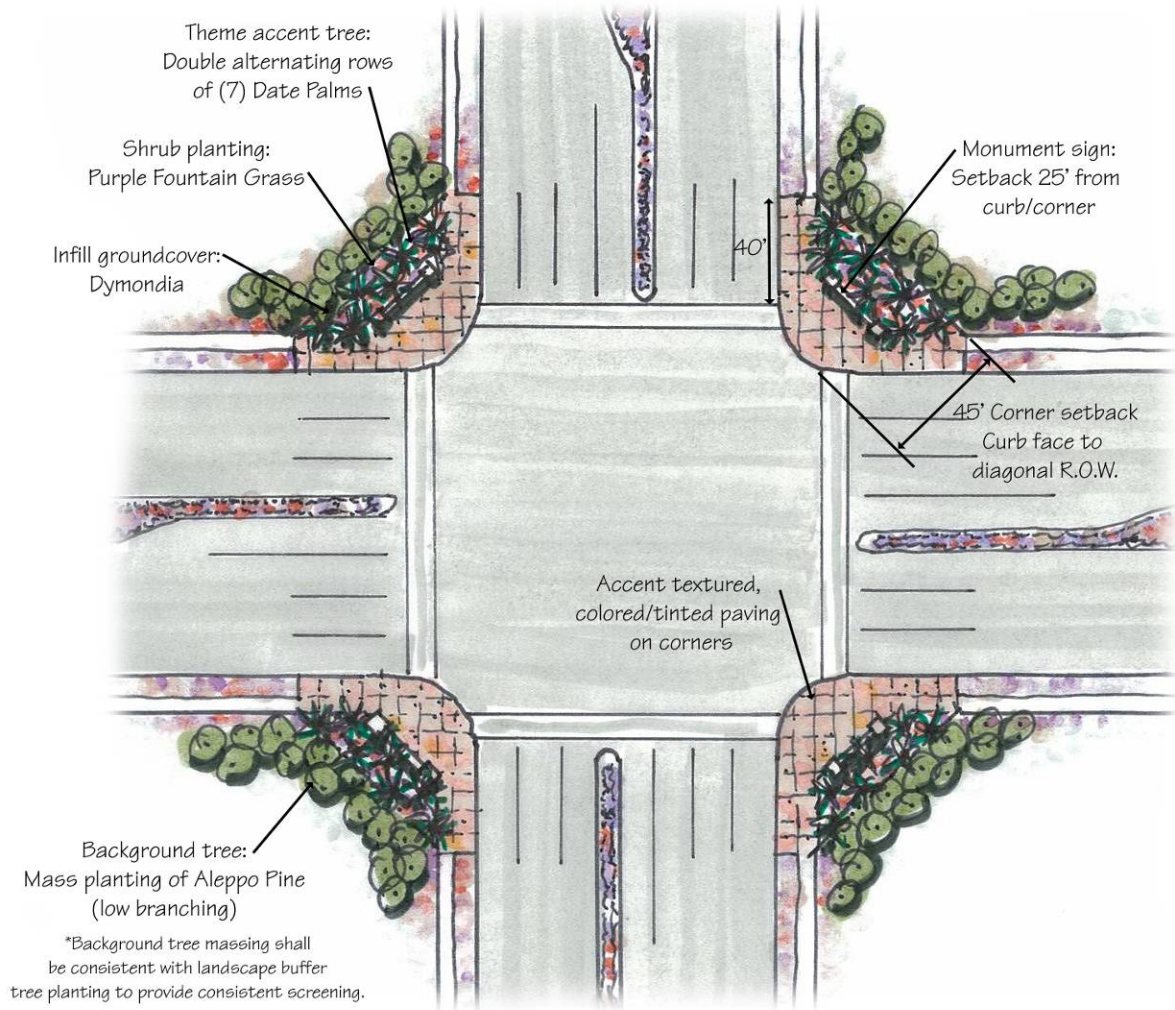


Exhibit 8-10 – Secondary Gateway Intersection Enhancement Concept

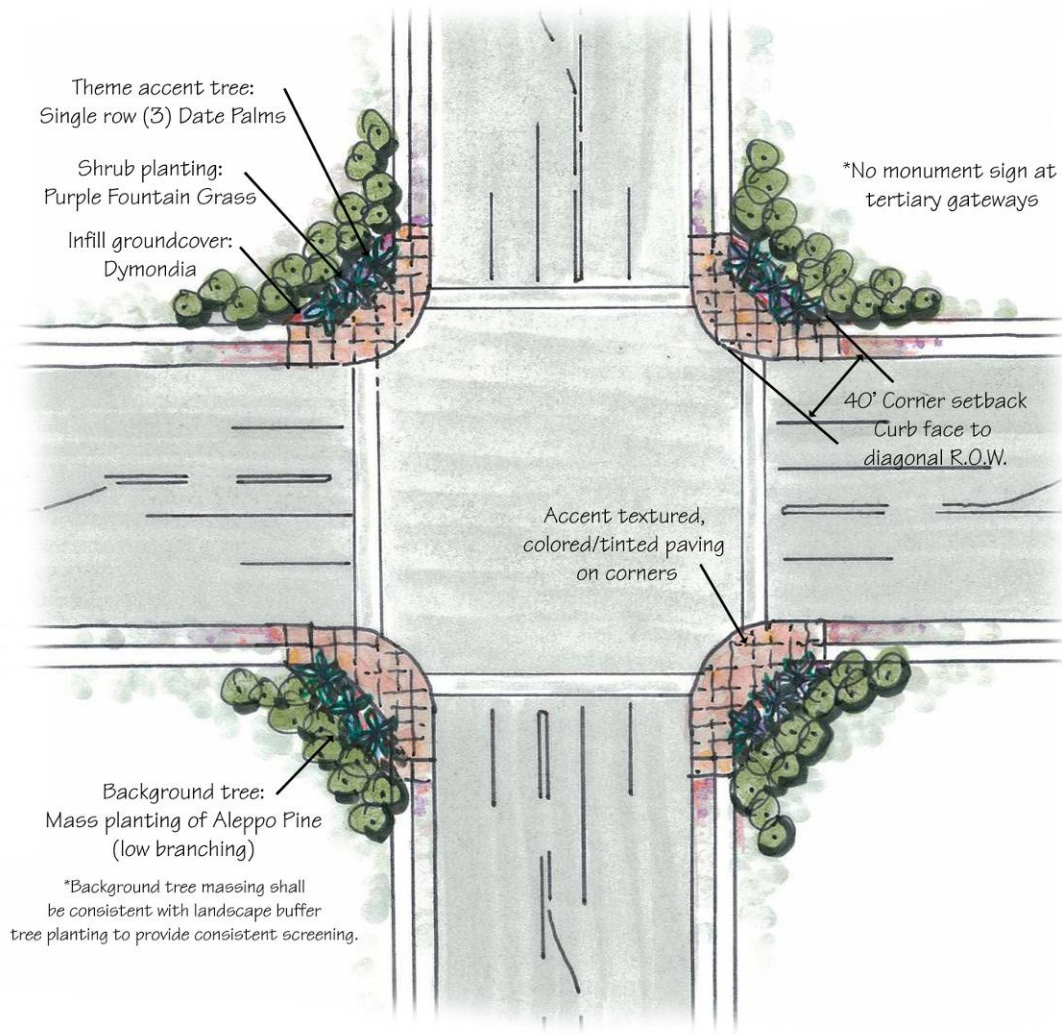
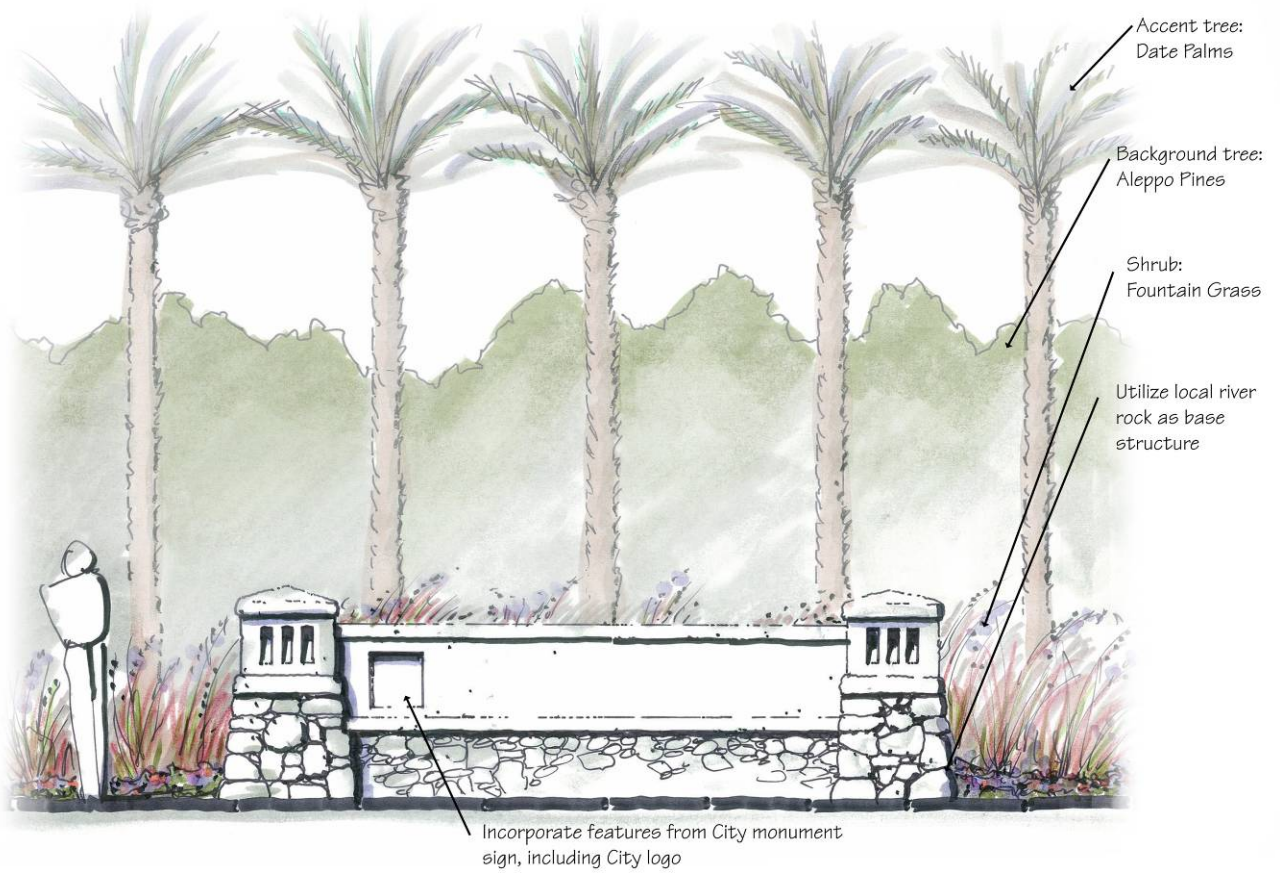


Exhibit 8-11 – Tertiary Gateway Intersection Enhancement Concept





*See Section 8.7.D.12 for dimension*

Exhibit 8-12 – Monument Sign Concept

#### 4. **Street Furniture**

Exhibit 8-12 – Street Furniture Palette identifies recommended street furniture components, including lighting, trash receptacles, and benches, for the district. The palette is intended to ensure a unified visual identity for the district, which is distinct from the other districts within the Specific Plan area.



Wall/building lighting  
Domus Series Lighting  
by Phillips Lumec  
DMS 55 - SG



Pole/pedestrian and parking lot lighting



Trash receptacle TEF31P  
and Bench DE1113C  
by Urbanscape



Exhibit 8-13 – Street Furniture Palette.

## **8.9 Design Guidelines**

### **A. Design Objectives**

The Design Guidelines will promote and reinforce the City's commitment to high quality development. In general, the guidelines are intended to ensure that development preserves or improves the positive characteristics of the City's image. The objectives of these guidelines are to:

- Promote orderly development by implementing the SWIP Specific Plan objectives, policies, and principles found in Chapter 2.0 Policy Framework.
- Protect and enhance property values by ensuring that development fits properly within the context of its surroundings and does not negatively impact adjacent uses.
- Encourage individual creativity and innovative solutions by allowing flexibility in how a particular guideline is met as long as the intent of the guideline is achieved.
- Ensure functional pedestrian and motor vehicle circulation within a project and convenient pedestrian linkages to and from adjacent residential, commercial, industrial, and school areas.

### **B. Design Intent**

The design intent of the JSD is to provide for high quality design of large-scale development including industrial, manufacturing, and logistics-oriented distribution and warehousing. The design guidelines encourage innovative site design and architecture which accommodate large spaces necessary for the function of the building while relating to the context of the surrounding districts.

### **C. Industrial, Distribution, and Business Park Uses**

The design guidelines in this Subsection shall apply to industrial, distribution, and business park development within this land use district.

### 1. Site Design

#### Site Layout

- The arrangement of multiple buildings and associated circulation, and parking areas should reflect a well-organized site plan that emphasizes pedestrian connectivity and landscaped areas responsive to the public.
- Site development may utilize variations on building placement and landscaping adjacent to the public street. Appropriate configurations may include, but are not limited to the following:
  - Fully landscaped setback between building and street.
  - Parking in front of building with a landscape buffer between parking and street. **See Figure 1.**



Figure 1. Appropriate building and landscape placement adjacent to public street.

- Visitor parking may be located at the front of the building adjacent to the main entry while employee parking and service areas are located at the sides and rear of the building. **See Figure 2.**

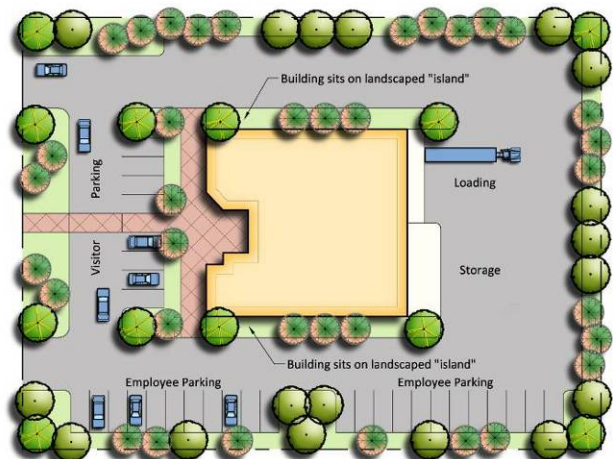


Figure 2. Parking layout.



- Service and loading should not be located on building side(s) adjacent to a public street.
- The design and location of accessory buildings (e.g., security kiosks, maintenance buildings, and outdoor equipment enclosures) shall be incorporated into and be compatible with the overall design of the project and the main buildings on the site.
- With the exception of security kiosks, accessory buildings shall be located as far back from the front and street side setback area as possible.
- Sea/train-type metal is prohibited.
- Outdoor storage, work, and loading areas shall be incorporated within the building design and located to the rear or side of buildings and screened from view from adjacent public streets. **See Figure 3.**

#### Courtyards and Plazas

- Buildings should be arranged to create opportunities for open space amenities (e.g., plazas, courtyards, outdoor eating areas, recreation areas, etc.). **See Figure 4.**
- Business park development should provide recreational facilities (e.g., bicycle paths, tennis courts, volleyball courts, gymnasiums, etc.).

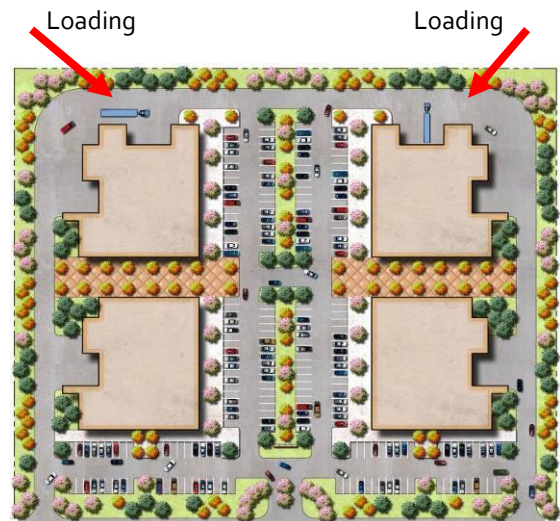


Figure 3. Appropriate location of loading areas.



Figure4. Open space amenities.

## 2. Building Orientation

- Multiple building developments should be oriented in a manner that will form gateways through facade enhancement, maximize public view, and capture public interest along adjacent major streets. **See Figure 5.**
- The organization of buildings, parking areas, and landscaping shall recognize the existing characteristics of the site and shall relate to the surrounding development in scale and character.
- Buildings should generally be placed at or near setback lines with development oriented in a manner that will provide visual interest. **See Figure 6.**
- Buildings should be oriented in a manner that takes advantage of passive solar design.
- Buildings shall be oriented to provide a buffer between sensitive uses (i.e. schools, residential, parks, and medical facilities) and outdoor work areas, loading and storage.

## 3. Site Elements

### Fences and Walls

- Walls and fencing materials shall consist of wrought iron, tubular steel, stone, stucco, or brick, and shall be compatible with the overall design character/style of the development. The use of chain-link fence material is not allowed. **See Figure 7.**
- Walls and fences shall be integrated with landscaping along the base of the wall or fence.
- Wall heights and surfaces shall be articulated with varying facade depths or pilasters to promote architectural interest, and shall include a cap along the top of the wall.



Figure 5. Buildings are oriented to create gateway into development.



Figure 6. Buildings are oriented to provide architectural features visible from public rights-of-way.



Figure 7. Tubular steel and stone pillars are appropriate fencing materials.

- Landscaping shall be used in combination with walls and fences to visually soften blank surfaces and to deter graffiti. **See Figure 8.**

### Screening

- Loading bays and service areas shall be screened by building placement, decorative walls or landscaping to the fullest extent feasible so that views of loading areas are minimized from adjacent public streets. **See Figure 9.**
- Trash storage enclosures and outdoor mechanical equipment shall be screened from public view.
- Roof-mounted equipment shall be screened from public view through use of parapet walls or other screening devices. Special consideration shall be given to the screening of roof-mounted equipment on building rooftops that are visible from public view. **See Figure 10.**

### Trash Enclosures

- Trash enclosures shall be incorporated as part of the building design.
- If trash enclosures cannot be located out of public view, the design of trash storage areas shall incorporate architectural screening elements and landscaping compatible with the design of buildings and landscaping on the site. **See Figure 11.**
- Trash enclosures shall integrate horizontal screening such as trellises. **See Figure 11.**



Figure 8. Wall is articulated with pillars and incorporates landscaping at the base and vines to deter graffiti.

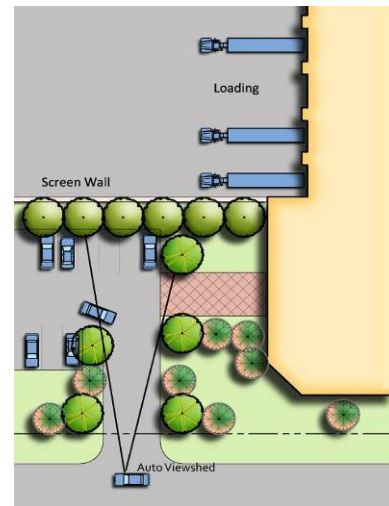


Figure 9. Appropriate placement, orientation and screening of service areas.

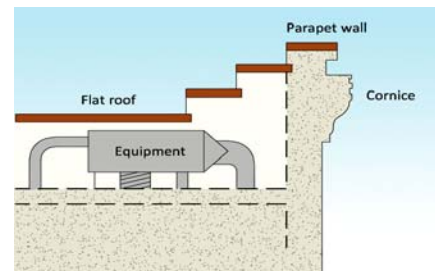


Figure 10. Screening of roof mounted equipment.



Figure 11. Trash enclosures with architectural screening elements.

## Lighting

- Outdoor lighting plans shall take into consideration the location and potential growth pattern of nearby trees (existing and planned) so that appropriate lighting levels are maintained over time.
- Energy efficiency shall be considered through use of proper light location and placement, as well as use of energy-efficient bulbs or fixtures.
- Lighting fixtures shall include hoods or other design techniques to reduce glare and light pollution, especially along major streets, and to prevent light spillover onto adjacent properties. **See Figure 12.**
- Lighting shall be provided in project entryways, walkways, parking lots, and plazas or courtyards to promote safety. **See Figure 13.**
- Lighting may be mounted on poles or bollards, affixed to building walls, or placed within paved or landscaped areas. Appropriate materials and construction methods shall be used to ensure proper function of project lighting fixtures.
- Decorative light fixtures shall be consistent with the architectural design of the building. **See Figure 14.**
- Truck and truck trailer storage areas shall incorporate lighting to increase real and perceived security.



Figure 12. Hooded light fixture directs light downward.



Figure 13. Bollard lighting along pedestrian walkway.



Figure 14. Decorative light fixtures.



#### 4. Parking and Access

##### Parking

- Parking lots shall not be the dominant visual element on the site.
- Parking lots adjacent to and visible from public streets shall be appropriately screened to minimize undesirable visual impacts. **See Figure 15.**
- Surface parking areas shall integrate trees and landscape improvements to reduce the heat island effect. **See Figure 15.**
- Large parking lots (usually over 100 spaces) shall be divided into multiple, smaller areas and provided with canopy trees located throughout the parking area to reduce the effects of heat and the visual impacts of large parking areas.
- Employee parking areas should be located behind the building or alongside of the building so as not to be visible from adjacent streets.
- Internal vehicular and pedestrian circulation within a development involving multiple buildings or lots shall interconnect in an obvious and consistent manner. **See Figure 16.**
- Parking shall be provided within walking distance of all tenants and public sidewalks.
- Parking lot design shall include water quality stormwater facilities consistent with City standards. **See Figure 17.**

##### Access

- The use of common (shared) access points and driveways is encouraged; placement of vehicle access points close to building entries shall be avoided to minimize pedestrian and vehicular conflicts. **See Figure 18 (following page).**

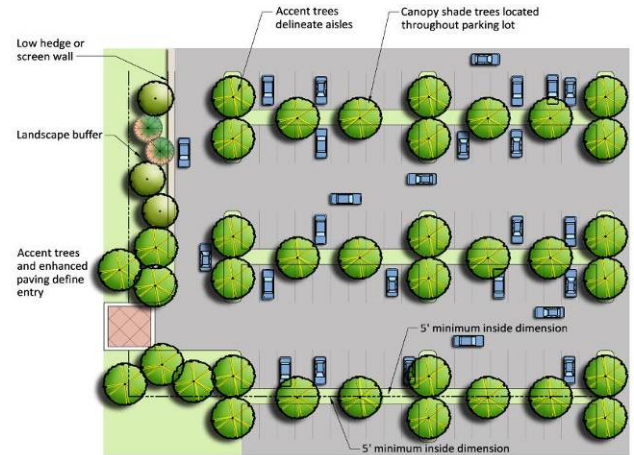


Figure 15. Parking lot landscaping.

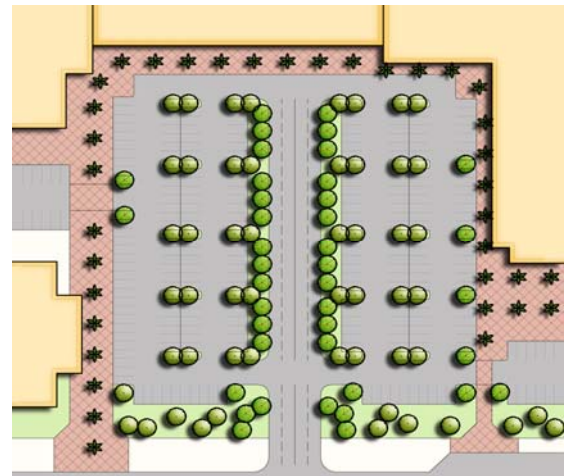


Figure 16. Pedestrian circulation is consistent along perimeter of parking lot.



Figure 17. On-site storm water capture system.



Figure 18. Shared parking access.

- Entry drives shall be clearly marked by special features, (e.g., enhanced paving, prominent landscape features, low-level decorative walls, and well-designed monument-type signs). **See Figure 19.**
- Access to each development site shall be clearly visible to pedestrians and motorists.
- Service and loading areas should take access from shared access points to reduce curb cuts along streets.



Enhance project entries with landscaping and special paving for visual impact.

Figure 19. Entry drive.

## 5. Architecture

### Mass and Scale

- The mass and scale of the buildings shall respect the visual and physical relationship to the adjacent buildings and surrounding sensitive uses. Taller building elements should be placed towards the center of the site, with lower elements adjacent to surrounding properties.
- Buildings should be stepped back when adjacent to or in close proximity to sensitive uses (e.g. schools, etc.).
- Vertical and horizontal offsets shall be provided to reduce the visual bulk of the building. **See Figure 20.**



Figure 20. Incorporation of vertical offsets and material changes.

## Building Facades

- Building facades shall incorporate architectural elements such as windows, pillars, wall plane breaks to minimize blank walls and to create visual interest. **See Figure 21.**
- All building elevations, whether front, side, or rear shall be architecturally detailed.
- Architectural accents (e.g., cornices, tiles, trim around windows, grooves in building faces, accent band details, bulkheads, etc.) shall be used to create variation along building facades. **See Figure 22.**
- Higher facades and rooftops should be incorporated at corners and intersections, and appropriate massing and scale shall be considered for the remainder of the building spanning public street frontage. **See Figure 23.**
- Primary building entries shall be easily identified through the use of prominent architectural elements, signage, landscaping, lighting, canopies, roof form, hardscape, architectural projections, columns, vertical elements, or other design features that help emphasize a building's entry. **See Figure 24.**



Figure 21. Façade articulation.



Figure 22. Use of cornices, window trim and grooves.



Figure 23. Enhanced corner elements.

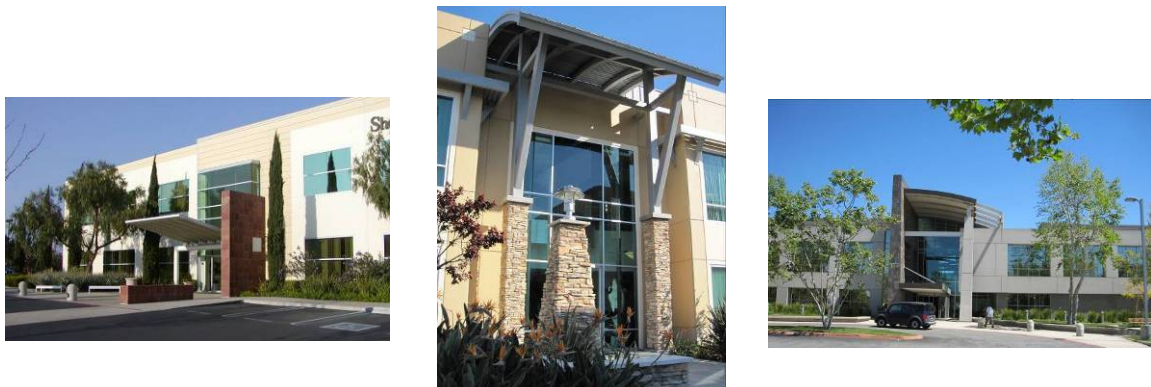


Figure 24. Articulated Entries.



- Roofs shall be designed as an integral component of building form, mass, and facade. Building form should be enhanced by sloped or offset roof planes, eave heights, and rooflines. **See Figure 25.**
- Locate and/or screen rooftop equipment so that it is not visible from the street. Rooftop screening shall be integral to the building's form.

### Color and Materials

- Colors and materials for all structures on-site should consist of earth tones. Use of at least two to three different colors, materials or textures is encouraged.
- Building materials shall be durable and able to withstand long-term exposure to the elements.
- Large expanses of smooth material (e.g., concrete) shall be broken up with expansion joints, reveals, or changes in texture and color. **See Figure 26.**
- To the fullest extent feasible, buildings should use large windows along walls and skylights in rooftop designs to capture natural light during working hours.

### 6. Landscaping

- Landscaping shall be in scale with adjacent structures, streets, and public spaces, and be sized appropriately when fully grown.
- Landscaped areas should incorporate a three-tiered planting system:
  - 1) ground cover and flowering plants;
  - 2) shrubs and vines; and
  - 3) trees.**See Figure 27.** See Recommended Plant Palette in Section 8.5.



Figure 25. Offset roof planes.



Figure 26. Use of expansion joints.



Figure 27. Three-tiered planting system: trees, shrubs, and ground covers.

- Special landscape features, such as specimen trees, shall be provided at major focal points (e.g., project entries, building entries, and pedestrian gathering areas).
- Entry and exit points shall be highlighted through a combination of distinctive landscape and hardscape features. Incorporation of public art is highly encouraged.
- Development on corner lots shall be enhanced with a combination of specimen trees, accent plantings, upgraded perimeter wall surfaces, hardscape treatments and landscape lighting adjacent to the street intersection .
- Drought-tolerant and low-maintenance trees, vines, and groundcovers shall be used on-site. Drip irrigation systems shall be installed where feasible to ensure the highest possible level of water conservation.
- Planting materials shall be used in plaza areas to provide shade and soften the appearance of hard walls. Water features and public art are also encouraged. **See Figure 28.**
- The use of vines on walls to soften the appearance of buildings and screen walls, and to help deter graffiti. **See Figure 29.**



Figure 28. Plaza area.



Figure 29. Wall incorporates landscaping to soften appearance and deter graffiti.

- Planting materials shall be installed to provide a buffer against noise and should be integrated with walls or fences to achieve desired sound reduction. **See Figure 30.**

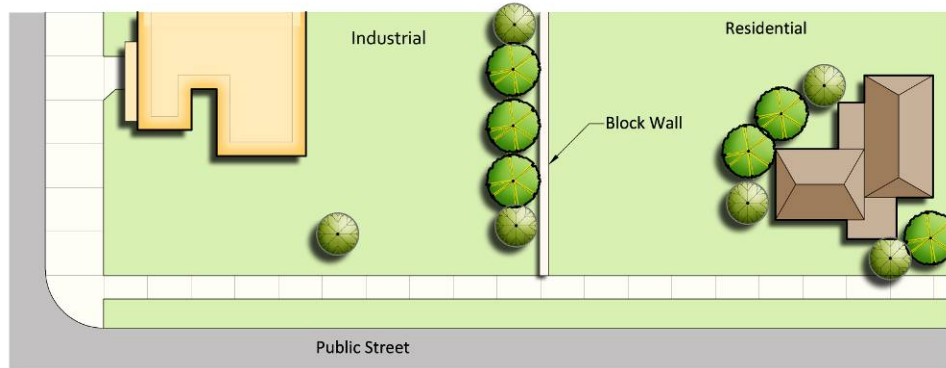


Figure 30. Plant material along buffer wall.

- Landscaping and trellises with vines are encouraged be used for screening trash storage areas, service areas and mechanical equipment.
- Setbacks adjacent to sensitive uses shall include dense landscaping to provide visual screening and noise abatement.
- Landscaped berms along site edges may be used to screen parking, loading and service areas and to serve as a sound reduction measure. **See Figure 31.**
- Surface parking lots shall be well-landscaped to reduce heat island effect and visually reduce the expanse of paved area. **See Figure 32.**



Wall, landscaping and berms screen industrial buildings and storage

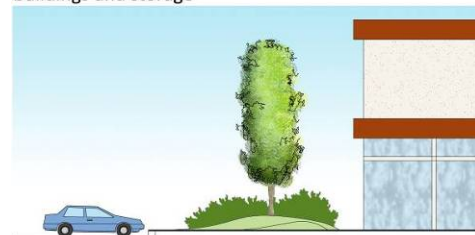


Figure 31. Landscaped berms.



Figure 32. Landscaped parking lot.

- Pervious paving materials are strongly encouraged for sidewalks, pathways, parking lots, plazas or gathering areas or other paved surfaces on-site.
- An automatic irrigation system using current equipment and technology shall be provided for planted areas.
- Run-off retention and on-site water filtration/stormwater treatment features and bioswales should be a part of the overall landscape design, and can also serve as buffering methods for adjacent businesses. **See Figure 33.**
- Trees shall be selected and placed to provide canopy and shade for walkways, pedestrian open spaces, and parking areas.
- Landscape material in the setback and visible from the public right-of-way shall blend with and seem a part of the public right-of-way landscaping.
- Tree and shrub planting shall be in large masses.
- Plant material selected shall be suited to the specific soil and micro climatic conditions.
- Trees shall be healthy and have a uniform branching pattern.
- All ground cover shall be healthy and densely foliated and comprised of well rooted cuttings or container plants.
- Availability and specific site conditions should be considered in final selection. Ground cover shall achieve 100% coverage in one year.
- Informal tree masses should be planted in a mix of sizes.



Figure 33. On-site water filtration.



## D. Commercial Uses

### 1. Site Design

#### Site Layout

- The arrangement of multiple buildings and associated circulation and parking shall reflect a well-organized site plan that emphasizes pedestrian connectivity and landscaped areas that enhance publicly-accessible spaces. **See Figure 34.**
- Loading areas, access and circulation driveways, trash enclosures, storage areas, and rooftop equipment shall be located as far as possible from sensitive uses.
- Buildings may be located adjacent to the street with a fully landscaped setback or buildings may be set back with limited parking in front. **See Figure 35.**

#### Courtyards and Plazas

- The organization and design of buildings shall encourage and facilitate pedestrian activity.
- Buildings should be organized to create usable open space, courtyards, plazas and dining areas. **See Figure 36.**

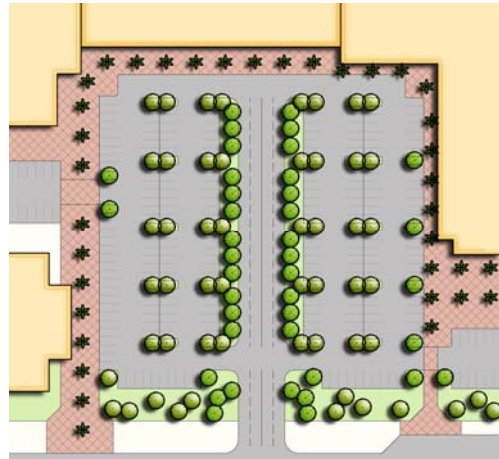


Figure 34. Site plan emphasizes pedestrian connectivity.



Figure 35. Limited parking adjacent to street with landscape setback.



Figure 36. Buildings create courtyard.

- Pedestrian-oriented open spaces, courtyards and plazas shall include a focal element such as a sculpture and/or water feature and sitting areas. **See Figure 37.**

## 2. Building Orientation

- The organization of buildings, parking areas, and landscaping shall recognize the existing characteristics of the site and shall relate to the surrounding development in scale and character.
- Commercial buildings on corner parcels shall establish a strong tie to both streets and should encourage pedestrian activity at corner locations. **See Figure 38.**
- Buildings associated with service retail and restaurant uses shall be pedestrian-scaled, with entries fronting onto streets, plazas or courtyards to reinforce pedestrian orientation.
- Buildings adjacent to sensitive uses (e.g. schools) shall be buffered. This may be accomplished by providing masonry walls, landscaped berms, appropriate building orientation, building height stepbacks and limitations on activities adjacent to sensitive uses. **See Figure 39.**



Figure 37. Open plaza areas with seating.



Figure 38. Commercial/retail buildings on corners should establish strong tie to the street.

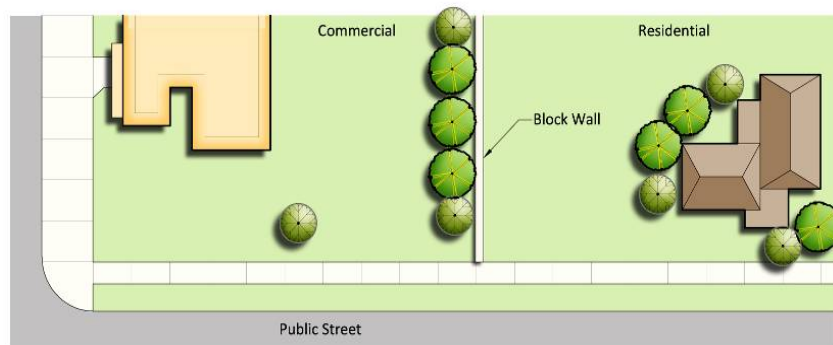


Figure 39. Masonry wall and landscaping separates uses.

- Commercial and retail buildings should generally be placed at or near setback lines with developments oriented in a manner that will provide visual interest.
- Buildings should be oriented in a manner that takes advantage of passive solar design to the maximum extent feasible.

### 3. Site Elements

#### Fences and Walls

- Wall heights and surfaces shall be articulated with varying façade depths or pilasters to promote architectural interest, and may include a cap along the top of the wall. **See Figure 40.**
- Walls visible from public streets shall be decorative and complement the design of on-site buildings.
- Wall and fencing materials may consist of brick, stone, stucco, wrought iron or tubular steel. Wall and fencing colors should match building colors, with neutral earth tones. **See Figure 41.**
- Walls and fences shall be integrated with landscaping along the base of the wall or fence.
- Electric fences, barbed wire, concertina wire, or other security wire is prohibited.



Figure 40. Wall incorporates pilasters and cap.



Figure 41. Stone wall.



## Screening

- Service and delivery areas shall be screened by building placement, decorative walls or landscaping to the fullest extent feasible so that views of loading areas are minimized from adjacent public streets. **See Figure 42.**
- Outdoor mechanical equipment should be screened from public view.
- Roof-mounted equipment shall be screened from public view through use of parapet walls or other screening devices. **See Figure 43.**

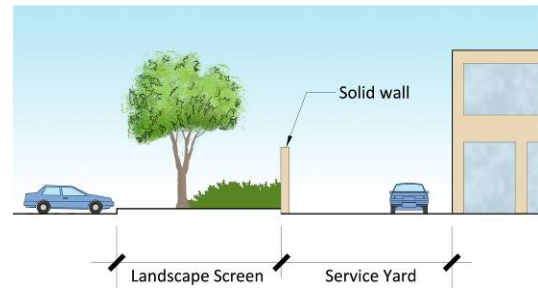


Figure 42. Screened delivery area.

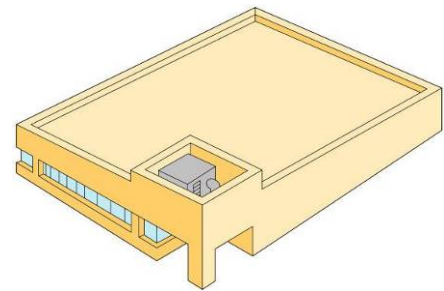


Figure 43. Screening of roof-mounted equipment.

## Trash Enclosures

- Trash enclosures shall be incorporated as part of the building design.
- If trash enclosures cannot be located out of public view, the design of trash storage areas shall incorporate architectural screening elements and landscaping compatible with the design of buildings and landscaping on the site.
- Trash enclosures visible from the public view shall integrate horizontal screening such as trellises.

## Lighting

- Outdoor lighting plans shall take into consideration the location and potential growth pattern of nearby trees (existing and planned) so that appropriate lighting levels are maintained over time.
- Energy efficiency shall be considered through use of proper light location and placement, as well as use of energy-efficient bulbs or fixtures.

- Lighting fixtures shall include hoods or other design techniques to reduce glare and light pollution, especially along major streets, and to prevent light spillover into adjacent properties. **See Figure 44.**
- Lighting shall be provided in project entryways, walkways, parking lots, and plazas or courtyards to promote safety. **See Figure 45.**
- Lighting may be mounted on poles or bollards, affixed to building walls, or placed within paved or landscaped areas. Appropriate materials and construction methods shall be used to ensure proper function of project lighting fixtures. **See Figure 46.**
- Decorative light fixtures are encouraged, as long as fixtures are consistent with the architectural design of the building. **See Figure 47.**



Figure 44. Hooded light fixture directs light downward.



Figure 45. Bollard lighting along pedestrian walkway.

### 4. Parking and Access

#### Parking

- Parking lots should be designed with a clear hierarchy of circulation: major access drives with no direct access to parking spaces; major circulation drives with little or no parking; and parking aisles for direct access to parking.
- Large commercial and retail parking areas should be located behind building facades so as not to be visible from major streets.
- Parking lots shall not be the dominant visual element on the site.



Figure 46. Pole mounted light.



Figure 47. Decorative light fixtures.

- Surface parking areas shall integrate trees and landscape improvements to reduce the heat island effect. **See Figure 48.**
- Large parking lots (usually over 100 spaces) shall be divided into multiple, smaller areas and provided with canopy trees located throughout the parking area to reduce the effects of heat gain and the visual impacts of large parking areas.
- Internal vehicular and pedestrian circulation within a development involving multiple buildings or lots shall interconnect in an obvious and consistent manner. **See Figure 49.**
- Parking lot design shall include water quality stormwater facilities consistent with City standards. **See Figure 50.**

#### Access - Vehicular

- Site access shall promote safety by providing an adequate stacking distance for vehicles between the back of the sidewalk and the first parking stall or circulation aisle.
- Conflict between vehicles and pedestrians shall be avoided at access driveways by providing a walkway on at least one side of the driveway.
- The number of access driveways shall be minimized and located as far as possible from street intersections.
- Site access locations shall be coordinated with existing or planned median openings and driveways on the opposite side of the roadway.



Figure 48. Landscaped parking lot.

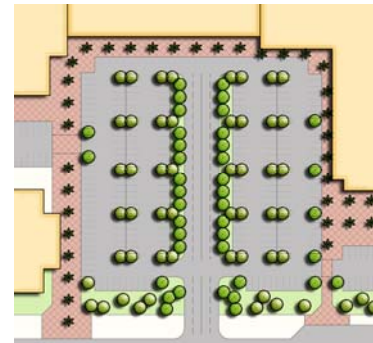


Figure 49. Pedestrian circulation is consistent along perimeter of parking lot.



Figure 50. On-site storm water capture.

- Unobstructed line of sight at corners and driveways shall be provided to reduce vehicular conflicts. **See Figure 51.**
- Avoid placing primary vehicle access in close proximity to major building entrances in order to minimize pedestrian and vehicular conflicts. **See Figure 52.**

### Access - Pedestrian

- Clearly defined pedestrian walkways or paths should be provided from parking areas to primary building entrances. Clear and convenient pedestrian access shall be provided between the public sidewalk and the pedestrian areas of the development. **See Figure 53.**
- Raised walkways, decorative paving, landscaping and/or bollards shall be used to separate pedestrian paths from vehicular circulation areas. **See Figure 54.**

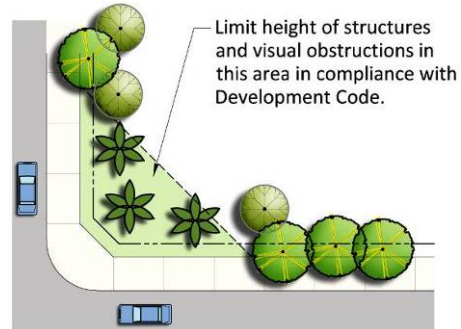


Figure 51. Unobstructed sight lines.



Figure 52. Vehicle access is placed away from building entrances.

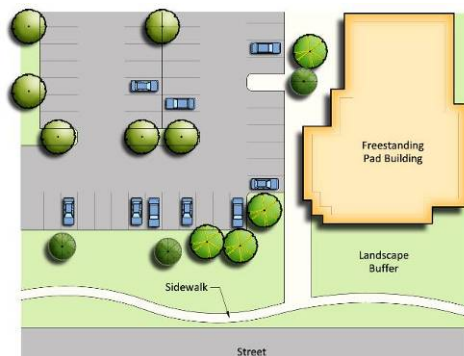


Figure 53. Clearly defined pedestrian walkways.



Figure 54. Raised walkway and landscaping in parking lot.



- Parking areas should be designed so that pedestrians walk parallel to moving cars. **See Figure 55.**

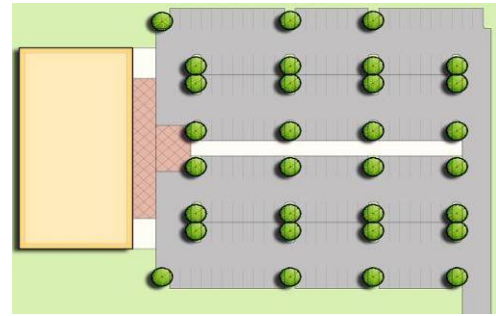
### Loading and Delivery

- Loading and delivery service areas shall be located and designed to minimize their visibility, circulation conflicts, and adverse noise impacts to the maximum extent feasible.
- Loading and delivery service areas shall be screened with portions of the building, architectural wing walls, freestanding walls or landscape planting.
- Loading areas shall be designed to not interfere with circulation or parking, and to permit trucks to fully maneuver on the property without backing from or onto a public street. **See Figure 56.**
- Service, loading and delivery areas should take access from planned shared access points to reduce curb cuts along project frontages.

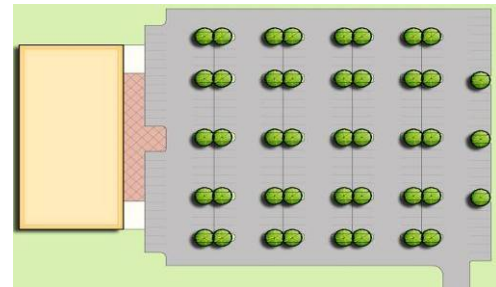
## 5. Architecture

### Mass and Scale

- The mass and scale of new infill developments shall be compatible with the existing, adjacent structures. This can be accomplished by transitioning from the height of adjacent buildings to the tallest elements of the new development by stepping back the upper portions of taller buildings.
- Human-scale elements, such as pedestrian-scaled doors, windows and building modules shall be used to emphasize pedestrian orientation.



Appropriate



Inappropriate

Figure 55. Pedestrian circulation.



Figure 56. Loading area placed behind building outside of circulation lanes.

- The size and location of various building elements (e.g., roofs, parapet walls, wing walls, etc.) shall be in scale to the building as a whole and provide visual interest. **See Figure 57.**

### Building Facades

- Buildings shall include enhanced and articulated facades along public streets.
- Design details shall be continued or repeated upon all building elevations.
- Building entrances should be readily identifiable. The use of recesses, projections, columns, and other design elements to articulate entrances are encouraged. **See Figure 58.**
- Facades shall provide visual interest with vertical and horizontal variations in wall and roof planes, building projections, door and window bays, arcades, and similar elements/techniques. **See Figure 59.**
- Buildings shall undergo a break in façade approximately every 40 feet, to create a varied wall surface along public areas. Higher facades and rooftops should be incorporated at corners and intersections, and appropriate massing and scale should be considered for the remainder of the building spanning public right-of-way frontage.
- Buildings should include vertical elements (e.g., clock tower, building articulation) that create points of visual interest when viewed from the public right-of-way.
- Roof designs that are visually interesting and designed to completely screen all rooftop equipment from public street view are required. **See Figure 60.**



Figure 57. Building elements add visual interest.



Figure 58. Building Entry.



Figure 59. Horizontal and vertical articulation.



Figure 60. Full roof screens all equipment and provides visual interest.

- Buildings should use large windows along walls and skylights in rooftop designs to capture natural light during operating hours.
- The interior areas of commercial development should have shaded or covered walkways.

### Storefronts

- Storefronts shall be comprised predominantly of transparent surfaces (windows). **See Figure 61.**
- The use of clear glass (on the first floor) is strongly encouraged.
- Storefront windows shall be large and a minimum of 24 inches off the ground. The maximum bulkhead (wall plane between the ground and the bottom of the windows) height should be approximately 36 inches.
- Storefront entries should promote a sense of entry into the structure as well as provide a sense of shelter by incorporating elements such as overhangs, canopies, awnings, and recesses. **See Figure 62.**
- If security grilles are necessary, they shall be placed inside the building behind the window display area at a minimum distance of two feet behind the window.
- Product storage racks shall not block views through storefront windows.

### Colors and Materials

- The use of a coordinated three-color palette for the base color and major and minor trim accents is encouraged.
- Colors for all structures on-site should be varied and should consist of neutral, earthy tones. **See Figure 63.**



Figure 61. Storefront windows.



Figure 62. Storefront overhangs provide a sense of shelter and entry.



Figure 63. Use of neutral earth tones.



- Exterior finish materials shall be appropriate for the architectural style and/or theme of the entire development and should contribute towards a high quality image. **See Figure 64.**
- Changes in materials shall occur at inside corners to make building volumes appear substantial. **See Figure 65.**
- Materials shall be varied to provide architectural interest, however, the number of materials shall be limited and not exceed what is required for contrast and accent of architectural features.
- Exterior materials and architectural details shall relate to each other in ways that are traditional and logical. For example, heavy materials should appear to support lighter ones. **See Figure 65.**

## 6. Landscaping

### Plants and Irrigation

- Landscaping should help complete the design of the site and enhance the quality of commercial developments by framing and softening the appearance of buildings, screening undesirable views, and buffering incompatible uses.
- Landscaped areas should generally incorporate planting utilizing a three tiered system:
  - 1) ground covers (including flowering plants—annuals and perennials),
  - 2) shrubs and vines, and
  - 3) trees.**See Figure 66.**



Figure 64. Exterior finish materials



Figure 65. Heavy materials at base of building with lighter materials above.



Figure 66. Example of three tier landscape system.

- Entry and exit points shall be highlighted through a combination of distinctive landscape and hardscape features. **See Figure 67.**
- Planting materials shall be used in plazas or gathering areas to provide shade and soften the appearance of hard surfaces. Water features and public art are also encouraged in these places. **See Figure 68.**
- Trees located along street frontages shall be selected to match or complement existing or proposed street trees in the public right-of-way.
- A minimum five-foot landscape strip shall be used along circulation aisles in parking lots, and along building side/rear elevations if a walkway is not used. A landscape strip is also encouraged in nonpublic areas and service areas between pavement and buildings.
- On-site water filtration features and bioswales are strongly encouraged, and can also be used as buffering methods for adjacent businesses.
- Drought tolerant and low-water trees, vines, and groundcovers shall be used on-site. When feasible, drip irrigation systems shall be installed to provide on-site vegetation with appropriate irrigation and ensure the highest possible volume of water conservation.
- Planting materials shall be used to provide a buffer against noise, and may be integrated with walls or fences to achieve desired sound reduction and appearance.
- Tree and shrub planting shall be in large masses.
- Plant material selected shall be suited to the specific soil and micro climatic conditions.
- Trees shall be healthy and have a uniform branching pattern.



Figure 67. Highlighting entry points.



Figure 68. Public plaza area within commercial development incorporates water feature.

- All ground cover shall be healthy and densely foliated and comprised of well rooted cuttings or container plants.
- Availability and specific site conditions should be considered in final selection. Ground cover shall achieve 100% coverage in one year.
- Informal tree masses should be planted in a mix of sizes.

### Site Furniture

- Outdoor furniture and fixtures (e.g., lighting, directional signs, trellises, raised planters, works of art, benches, trash receptacles, fencing, etc.) shall be integral elements of the building and landscape design. **See Figure 69.**
- Outdoor furniture shall be of a sturdy construction to withstand daily use. Wood should be avoided.
- Outdoor furniture shall be located so it will not conflict with the pedestrian and motor vehicle circulation patterns. **See Figure 70.**
- Outdoor seating should be shaded.



Figure 69. Trellis.



Figure 70. Outdoor furniture outside of pedestrian walkway.

### Paving

- Decorative paving shall be incorporated into courtyards, plazas, pedestrian walkways, and crosswalks. **See Figure 71.**
- Paving materials shall complement the architectural design of the building and landscape design of the project. The use of stamped concrete, stone, brick, permeable pavers, exposed aggregate, or colored concrete is encouraged. The use of slippery materials (e.g., polished marble or granite) is prohibited.



Figure 71. Enhanced paving in pedestrian areas.

### ***E. Flex-Tech Multi-Use Facility***

The design guidelines in this Subsection shall apply to all flex-tech projects within this land use district.

#### **1. Site Design**

##### **Site Layout**

- The arrangement of multiple buildings and associated circulation, and parking areas should reflect a well-organized site plan that emphasizes pedestrian connectivity and landscaped areas responsive to the public realm.
- Site development may utilize variations on building placement and landscaping adjacent to the public street. Appropriate configurations may include, but are not limited to the following:
  - Fully landscaped setback between building and street.
  - Parking in front of building with a landscape buffer between parking and street.
- Visitor parking may be located at located near the front/visitor entries to the businesses, while employee parking and service areas are located at the sides and rear of the building.
- Service and loading area should not be located on building side(s) adjacent to a public street. Service and loading areas should be located to the rear of the buildings or in the interior of a multiple building complex. **See Figure 72.**



Figure 72. Loading and service areas accessed between buildings in a multiple building complex.



- Outdoor storage, work, and loading areas shall be incorporated within the building design and located to the rear or side of buildings and screened from view from adjacent public streets. Accessory buildings such as equipment enclosures or storage buildings should be minimized. These service areas should be incorporated into the building design to the greatest extent feasible. **See Figure 73.**
- The design and location of accessory buildings (e.g., security kiosks, maintenance buildings, and outdoor equipment enclosures) shall be incorporated into and be compatible with the overall design of the project and the main buildings on the site.
- With the exception of security kiosks, accessory buildings shall be located as far back from the front and street side setback area as possible.
- Sea/train-type metal containers are prohibited.
- Noise-generating activities and storage areas shall be located as far as possible from adjacent properties. Sound attenuation walls shall be used where appropriate to reduce noise.

### Courtyards and Plazas

- Buildings should be arranged to create opportunities for open space amenities (e.g., plazas, courtyards, outdoor eating areas, recreation areas, etc.). **See Figure 74.**
- Larger developments should provide recreational facilities (e.g., bicycle paths, tennis courts, volleyball courts, gymnasiums, etc.).



Figure 73. Appropriate location of loading areas.

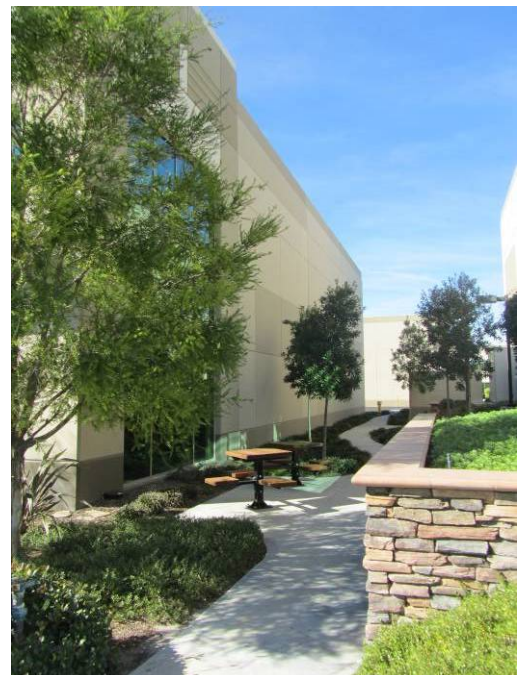


Figure 74. Outdoor seating area provided between buildings.

## **2. Building Orientation**

- Multiple building developments should be oriented in a manner that will form gateways through facade enhancement, maximize public view, and capture public interest along adjacent major streets.
- Retail and office space should be located on the front of the building, visible from the public realm and adjacent to visitor parking. Flex areas used for warehousing, distribution, light manufacturing, research and development and other uses without a visitor component should be located to the sides or rear of the building.
- The organization of buildings, parking areas, and landscaping shall recognize the existing characteristics of the site and shall relate to the surrounding development in scale and character.
- Buildings should generally be placed at or near setback lines with development oriented in a manner that will provide visual interest.
- Buildings should be oriented in a manner that takes advantage of passive solar design.
- Buildings shall be oriented to provide a buffer between surrounding properties and outdoor work areas, loading, and storage.

## **3. Site Elements**

### **Fences and Walls**

- Walls and fencing materials shall consist of wrought iron, tubular steel, stone, stucco, or brick, and shall be compatible with the overall design character/style of the development. The use of chain-link fence material is not allowed if visible from the public right-of-way.
- Walls and fences shall be integrated with landscaping along the base of the wall or fence.

- Wall heights and surfaces shall be articulated with varying facade depths or pilasters to promote architectural interest, and shall include a cap along the top of the wall.
- Landscaping shall be used in combination with walls and fences to visually soften blank surfaces and to deter graffiti.

### Screening

- Loading bays and service areas shall be screened by building placement, decorative walls or landscaping to the fullest extent feasible so that views of loading areas are minimized from visitor areas and adjacent public streets.
- Trash storage enclosures and outdoor mechanical equipment shall be screened from public view.
- Roof-mounted equipment shall be screened from public view through use of parapet walls or other screening devices. **See Figure 75.**

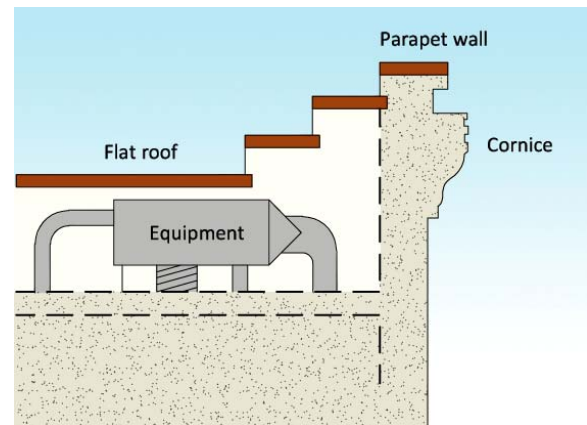


Figure 75. Screening of roof mounted equipment.

### Trash Enclosures

- Trash enclosures shall be incorporated as part of the building design.
- If trash enclosures cannot be located out of public view, the design of trash storage areas shall incorporate architectural screening elements and landscaping compatible with the design of buildings and landscaping on the site. **See Figure 76.**
- Trash enclosures shall integrate horizontal screening such as trellises.



Figure 76. Trash enclosures with architectural screening elements.

### Lighting

- Outdoor lighting plans shall take into consideration the location and potential growth pattern of nearby trees (existing



and planned) so that appropriate lighting levels are maintained over time.

- Energy efficiency shall be considered through use of proper light location and placement, as well as use of energy-efficient bulbs or fixtures.
- Lighting fixtures shall include hoods or other design techniques to reduce glare and light pollution, especially along major streets and adjacent to residential zones, and to prevent light spillover onto adjacent properties.
- Lighting shall be provided in project entryways, walkways, parking lots, and plazas or courtyards to promote safety.  
**See Figure 77.**



Figure 77. Lighting along pedestrian walkway.

- Lighting may be mounted on poles or bollards, affixed to building walls, or placed within paved or landscaped areas. Appropriate materials and construction methods shall be used to ensure proper function of project lighting fixtures.
- Decorative light fixtures shall be consistent with the architectural design of the building.

#### **4. Parking and Access**

##### **Parking**

- Parking lots shall not be the dominant visual element on the site.
- Parking lots adjacent to and visible from public streets shall be appropriately screened to minimize undesirable visual impacts.
- Surface parking areas shall integrate trees and landscape improvements to reduce the heat island effect.

- Large parking lots (usually over 100 spaces) shall be divided into multiple, smaller areas and provided with canopy trees located throughout the parking area to reduce the effects of heat and the visual impacts of large parking areas.
- Employee parking areas should be located behind the building or alongside of the building so as not to be visible from adjacent streets.
- Internal vehicular and pedestrian circulation within a development involving multiple buildings or lots shall interconnect in an obvious and consistent manner. **See Figure 78.**
- Parking shall be provided within walking distance of all tenants and public sidewalks.
- Parking lot design shall include water quality stormwater facilities consistent with City standards. **See Figure 79.**

### Access

- The use of common (shared) access points and driveways is encouraged; placement of vehicle access points close to building entries shall be avoided to minimize pedestrian and vehicular conflicts.
- Entry drives shall be clearly marked by special features, (e.g., enhanced paving, prominent landscape features, low-level decorative walls, and well-designed monument-type signs). **See Figure 80.**
- Access to each development site shall be clearly visible to pedestrians and motorists.
- Service and loading areas should take access from shared access points to reduce curb cuts along streets.

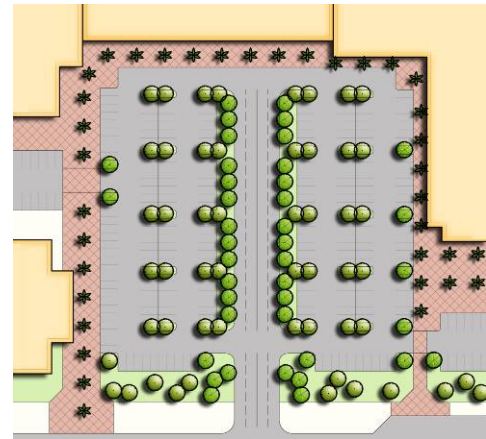


Figure 78. Pedestrian circulation is consistent along perimeter of parking lot.



Figure 79. On-site stormwater capture system.



Figure 80. Entry drive.

## 5. Architecture

### Mass and Scale

- The mass and scale of the buildings shall respect the visual and physical relationship to the adjacent buildings and surrounding sensitive uses. Taller building elements should be placed towards the center of the site, with lower elements adjacent to surrounding properties.
- Buildings should be stepped back when adjacent to or in close proximity to sensitive uses (e.g., residential, schools, etc.).
- Vertical and horizontal offsets shall be provided to reduce the visual bulk of the building. **See Figure 81.**
- Buildings should be designed to accommodate a wide range of uses, from office to small scale retail and service to light manufacturing. Interior spaces should allow for a variety of configurations, combining and dividing spaces as needed based on the uses.



Figure 81. Façade articulation.

### Building Facades

- Building facades shall incorporate architectural elements such as windows, pillars, wall plane breaks to minimize blank walls and to create visual interest.
- All building elevations, whether front, side, or rear shall be architecturally detailed.

- Architectural accents (e.g., cornices, tiles, trim around windows, grooves in building faces, accent band details, bulkheads, etc.) shall be used to create variation along building facades. **See Figure 82.**
- Higher facades and rooftops should be incorporated at corners and intersections, and appropriate massing and scale shall be considered for the remainder of the building spanning public street frontage. **See Figure 82.**
- The orientation of windows in buildings adjacent to a residential zone shall preclude a direct line of sight into residential properties.
- Visitor entries to retail and office uses shall be easily identified through the use of prominent architectural elements, signage, landscaping, lighting, canopies, roof form, hardscape, architectural projections, columns, vertical elements, or other design features that help emphasize a space's entry. **See Figure 83.**
- Roofs shall be designed as an integral component of building form, mass, and facade. Building form should be enhanced by sloped or offset roof planes, eave heights, and rooflines. **See Figure 84.**

### Color and Materials

- Colors and materials for all structures on-site should consist of earth tones. Use of at least two to three different colors, materials or textures is encouraged.
- Building materials shall be durable and able to withstand long-term exposure to the elements.
- Large expanses of smooth material (e.g., concrete) shall be broken up with expansion joints, reveals, or changes in texture and color.



Figure 82. Enhanced corner elements.



Figure 83. Awnings articulate entries to tenant spaces.



Figure 84. Offset roof planes.

- To the fullest extent feasible, buildings should use large windows along walls and skylights in rooftop designs to capture natural light during working hours.

## 6. Landscaping

- Landscaping shall be in scale with adjacent structures, streets, and public spaces, and shall be sized appropriately when fully grown.
- Landscaped areas should incorporate a three-tiered planting system:
  - 1) trees;
  - 2) shrubs and vines; and
  - 3) ground covers

See suggested Plant Palette in Table 6-6.

- Special landscape features, such as specimen trees, shall be provided at major focal points (e.g., project entries, building entries, and pedestrian gathering areas).
- Entry and exit points shall be highlighted through a combination of distinctive landscape and hardscape features.
- Development on corner lots shall be enhanced with a combination of specimen trees, accent plantings, upgraded perimeter wall surfaces, hardscape treatments and landscape lighting adjacent to the street intersection.
- Drought-tolerant and low-maintenance trees, vines, and groundcovers shall be used on-site. Drip irrigation systems shall be installed where feasible to ensure the highest possible level of water conservation.
- Planting materials shall be used in plaza areas to provide shade and soften the appearance of hard walls.



- The use of vines is encouraged on walls to soften the appearance of buildings and screen walls, and to help deter graffiti. **See Figure 85.**
- Planting materials shall be installed to provide a buffer against noise and should be integrated with walls or fences to achieve desired sound reduction.
- Landscaping and trellises with vines are encouraged for screening trash storage areas, service areas and mechanical equipment.
- Setbacks adjacent to residential zones shall include dense landscaping to provide visual screening and noise abatement.
- Landscaped berms along site edges may be used to screen parking, loading and service areas and to serve as a sound reduction measure. **See Figure 86.**
- Surface parking lots shall be well-landscaped to reduce heat island effect and visually reduce the expanse of paved area.
- Pervious paving materials are strongly encouraged for sidewalks, pathways, parking lots, plazas or gathering areas or other paved surfaces on-site.
- An automatic irrigation system using current equipment and technology shall be provided for planted areas.



Figure 85. Wall incorporates landscaping at the base.



Figure 86. Landscaped berm buffers parking.

- Run-off retention and on-site water filtration/stormwater treatment features and bioswales should be a part of the overall landscape design, and can also serve as buffering methods for adjacent businesses. **See Figure 87.**
- Trees shall be selected and placed to provide canopy and shade for walkways, pedestrian open spaces, and parking areas.
- Landscape material in the setback and visible from the public right-of-way shall blend with and seem a part of the public right-of-way landscaping.
- Tree and shrub planting shall be in large masses.
- Plant material selected shall be suited to the specific soil and micro climatic conditions.
- Trees shall be healthy and have a uniform branching pattern.
- All ground cover shall be healthy and densely foliated and comprised of well rooted cuttings or container plants.
- Availability and specific site conditions should be considered in final selection.
- Ground cover shall achieve 100% coverage in one year.
- Informal tree masses should be planted in a mix of sizes.



Figure 87. One site water filtration.



## F. Special Commercial Uses

### 1. Drive-Through Businesses

#### Site Design

- The predominant feature along the street frontage should be the building, not parking lots or the drive-through aisle.
- The building shall be located to maximize the distance for vehicle queuing while screening the drive-through operations. **See Figure 88.**
- Drive-through aisles shall be located in the rear of the building away from the street frontage whenever possible. If the drive-through aisle is located between the building and the street, dense landscaping and landscaped berms or a screen wall (42 inches high or less) shall be provided to screen the drive-through aisle from street view. **See Figure 89.**

#### Building Design

- All building elevations shall receive the same level of architectural detailing.
- Buildings shall incorporate roof designs with built-in equipment wells or other built-in screening methods, so that screening devices do not appear added-on.
- If the drive-through facility is a pad building within a shopping center, the architecture shall relate to and be compatible with the design of the center. The only feature that identifies the franchise shall be the company's logo and signs.

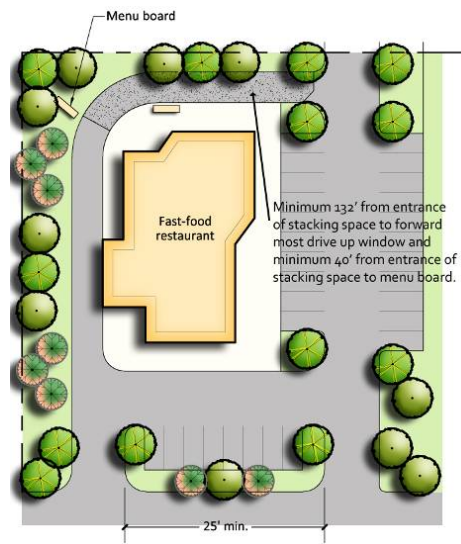


Figure 88. Vehicle queuing.



Figure 89. Example of appropriately landscaped and screened drive-through aisle.

## 2. Mini-Storage Facilities

### Site Design

- Offices and customer service areas shall be located adjacent to the street frontage to provide convenient access and help visually break up the front façade.

### Building Design

- Long, flat, unarticulated walls shall be avoided along street frontages. **See Figure 90.**
- Building walls and screen walls shall incorporate substantial articulation, and changes in plane and height to add visual interest.
- A minimum of two different building materials shall be used on building walls and screen walls adjacent to street frontages (e.g., stucco, brick, stone).
- Building materials, textures and landscaping shall be chosen to deter graffiti.

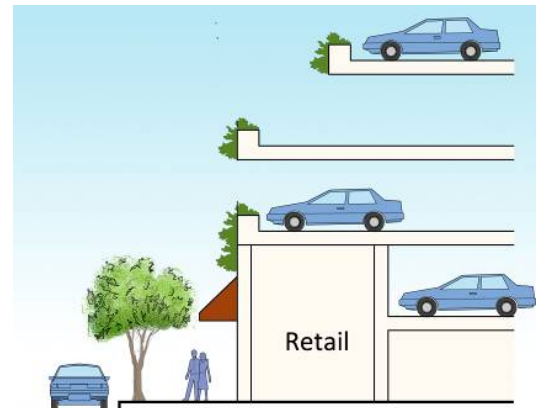


Figure 90. Articulated wall of mini-storage facility.

## 3. Parking Garages

### Site Design

- Where appropriate, parking garages should incorporate ground floor retail adjacent to the public sidewalk. **See Figure 91.**
- A minimum 5-foot wide landscaped strip shall be provided on all sides of the parking structure except where ground floor retail space is provided.



Incorporate retail or other compatible uses on ground floor whenever possible.

Figure 91. Liner shops.

### Building Design

- Parking garages shall be designed to help reduce the mass and scale of the garage and to ensure their compatibility with surrounding uses.

- Conceal view of vehicles in the garage through a combination of screen walls and plantings. **See Figure 92.**
- Avoid a monolithic appearance. This can be accomplished as follows:
  - Minimize horizontal and vertical banding by balancing both horizontal and vertical elements.
  - Use simple, clean geometric forms, and coordinated massing.
  - Step back upper levels of the garage 5 to 10 feet above the first floor. **See Figure 93.**
- Coordinate openings in the parking garage with the size and modulation of adjacent windows, structural bays, and storefronts if the parking garage contains other uses.
- Size openings in the parking garage to resemble large windows as in an office building.
- Use masonry materials that are predominantly light in color, but avoid unpainted concrete.
- Avoid a sloping ramp appearance by providing level and uniform wall planes between floors.
- Visually define and differentiate between pedestrian and vehicular entrances through appropriate architectural detailing. **See Figure 94.**

### Access and Circulation

- Vehicle stacking areas for entering and exiting traffic shall be sufficient in length to minimize traffic backup into surrounding streets or within the garage. A minimum of two vehicle lengths of stacking distance shall be provided between the back of the sidewalk and the control gate.



Figure 92. Parking structure with landscaping.



Figure 93. Horizontal and vertical articulation breaks up parking structure elevation.



Figure 94. Paving differentiates between pedestrian and vehicular entries.

- One inbound lane shall be provided for a garage with a capacity of up to 500 vehicles. At least two inbound lanes shall be provided for garages with a capacity of more than 500 vehicles.
- The maximum aisle length shall not exceed 400 feet without providing a cross aisle.
- Ramp grades shall not exceed 10 percent and parking areas should not exceed a slope of four to five percent.

### **Security and Lighting**

- The design of the garage shall eliminate possible hiding places and openings that could allow random pedestrian access.
- During periods when parking activity is substantially less than the garage capacity (i.e., during night operations), there shall be a means of securing unused parking levels from use, including stairwells and elevators. If the garage is not operated on a 24-hour basis the entire facility shall be secured from access during hours when the facility is closed.
- For security reasons, at least one or two sides of the stair tower shall include glass running vertically the height of the tower. Elevators shall be provided with glass-back cabs and shafts. **See Figure 95.**
- Stairs and elevators shall be located adjacent to a street on the exterior of the structure where lobbies can be exposed to outside view.
- The use of security cameras is required.
- A minimum of five foot-candles shall be provided inside the structure and a minimum of three foot-candles for exterior parking areas. Higher levels are recommended for remote areas subject to security problems such as stairways, elevators, and other pedestrian access points.



Figure 95. Glass-back elevator cab and shaft.

- Lighting levels shall be equally distributed to provide uniform illumination over all parking areas.
- Light sources shall be shielded so that the source of the illumination is not seen from outside the structure.

### 4. Shopping Centers

#### Site Design

- Portions of primary buildings and/or freestanding satellite buildings shall be located at the street setback lines to enclose the site and help frame the street. **See Figure 96.**
- Buildings within the center shall have a logical spatial and functional relationship to each other and shall provide for convenient pedestrian circulation throughout the center.
- Parking shall be provided within convenient walking distances of all tenants. Walking paths to buildings from the public street shall be provided. **See Figure 97.**
- To reduce the visual impact of large paved areas, parking lots shall be broken up into smaller areas separated by landscaping, pedestrian circulation areas and drive aisles.
- Storage areas and loading facilities shall be limited in number and shall be designed, located, and screened to minimize their visibility from outside public areas and surrounding streets.



Figure 96. Buildings placed at street setback lines.



Figure 97. Walking paths.



## Building Design

- Buildings, hardscape, landscape, site furnishings and signage should reflect a unified theme. **See Figure 98.**
- Long, linear buildings shall be avoided. Where such buildings are unavoidable, their length shall be mitigated by changes in building height, wall plane, and spatial volumes and by varied use of window areas, arcades, roof elements, and building materials. **See Figure 99.**
- If the shopping center contains a large scale building, integration of smaller-scale shops along the exterior of the building with entrances from the exterior of the building are desirable in order to create a more human scale and pedestrian-oriented character.
- Side and rear elevations of commercial buildings that are visible from public rights-of-way shall be architecturally consistent with the front elevations of the building.
- Blank walls adjacent to main pedestrian areas shall be avoided.
- Flat roofs, mansard roofs, and veneer parapets are strongly discouraged in favor of full, pitched roof treatments. In large centers, a combination of flat roofs with decorative cornices and full, pitched roofs may be acceptable if the design presents a balanced appearance. **See Figure 100.**



Figure 98. Unified theme.

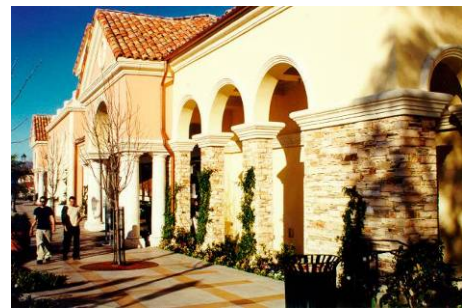


Figure 99. Articulation along wall plane.



Figure 100. Appropriate roofing.

- All roof-top and ground-mounted equipment shall be screened from view.
- Outdoor sales and storage areas shall be designed to blend with the architecture of the main building. The height of the screening elements shall be tall enough to screen all stored materials. **See Figure 101.**



Figure 101. Outdoor sales area.



### **8.10 Development Incentives**

This Section offers development incentives to produce greater land use efficiencies and reduce incremental costs for new development.

#### **A. Applicability**

The incentives in this Section shall apply to all new development that meet(s) the applicable eligibility criteria.

#### **B. Definitions**

For the purposes of this Section, lot consolidation shall have the following meaning:

1. Lot consolidation. A legal action in which a lot line is removed or abandoned; a lot line is adjusted; lots are merged; or other equivalent action is taken, for the purpose of allowing a structure or development to be built so that it extends over what were previously two or more separate lots. A lot consolidation cannot create additional lots and cannot make existing lots nonconforming. All lots must be identical in ownership.

#### **C. Lot Consolidation and Lot Integration Incentives**

1. Eligibility requirements. In order to be eligible for the by-right development incentives indicated in Subparagraph 2, below, the minimum consolidated or integrated lot size for a development shall be 97,500 gross square feet.
2. By-right incentives. Eligible projects shall receive one or more of the following incentives:
  - a. Expedited application processing. Applications for eligible projects shall receive expedited project processing (i.e., projects will move to front of line for assignment to a planner for review), irrespective of the number of lots involved.
  - b. Parking Reduction. Required parking standards may be reduced up to a maximum of 20 percent, provided that the adequacy of proposed parking can be demonstrated in a parking study prepared in compliance with Section 8.6 Parking and Loading Standards, as approved by the Director of Community Development.
  - c. Allowable Bonuses. Allowable increases in intensity (i.e., floor area ratio [FAR]) and in maximum height shall be in the amounts listed in Table 8-10 – Allowable Bonuses for Lot Consolidation or Integration. The intensity and height bonus incentives shall apply to the total gross square footage of the consolidated lots or integrated lots.

|                   |
|-------------------|
| <b>Table 8-10</b> |
|-------------------|

| Allowable Bonuses for Lot Consolidation or Integration |                                  |                    |                               |
|--------------------------------------------------------|----------------------------------|--------------------|-------------------------------|
| <i>Base Intensity (FAR)</i>                            | <i>Allowable Intensity Bonus</i> | <i>Base Height</i> | <i>Allowable Height Bonus</i> |
| 0.5                                                    | 10%                              | 60 ft              | 15 ft                         |

#### **D. Green Building Incentives**

1. **Eligibility requirements.** Projects that are seeking green building certification by a third-party entity (e.g., LEED, etc.) shall be eligible for the by-right development incentives indicated in Subparagraph 2.
2. **By-right incentives.**
  - a. Expedited application processing. Applications for eligible projects shall receive expedited project processing (i.e., projects will move to front of line for assignment to a planner for review).
  - b. Parking Reduction. Required parking standards may be reduced up to a maximum of 20 percent, provided that the adequacy of proposed parking can be demonstrated in a parking study prepared in compliance with Section 8.6 Off-Street Parking and Loading, as approved by the Director of Community Development.
  - c. Allowable Bonuses. Allowable increases in intensity (i.e., floor area ratio (FAR) and in maximum height shall be in the amounts listed in Table 8-11 – Allowable Bonuses for Green Building. The intensity and height bonus incentives shall apply to the total gross square footage of the project site.

| Table 8-11<br>Allowable Bonuses for Green Building |                                  |                    |                               |
|----------------------------------------------------|----------------------------------|--------------------|-------------------------------|
| <i>Base Intensity (FAR)</i>                        | <i>Allowable Intensity Bonus</i> | <i>Base Height</i> | <i>Allowable Height Bonus</i> |
| 0.5                                                | 10%                              | 60 ft              | 15 ft                         |

#### **E. Application and Review Process for Incentives.**

1. Written submittal. Interested parties shall submit a written request for approval of incentives to the Director of Community Development on forms provided by the Community Development Department.
2. Determination. The Director of Community Development shall determine whether the proposed new development meets the eligibility criteria in Paragraphs C.1. or D.1. Additional factors to be considered when reviewing applications for incentives shall include the following:
  - a. Detriment. The proposal will not detrimentally affect access, design, or other public safety and welfare concerns.

- b. Covenants or conditions. The proposal will not violate restrictive covenants contained on the face of the final plat or conditions of plat approval.
  - c. Right-of-way easements. The proposal will not invalidate any easement(s) unless the adjustment establishes replacement easement(s) that is properly filed with the city.
- 4. Conditions. Conditions may be imposed in connection with the granting of any incentive where the Director of Community Development deems that conditions are necessary to protect the public health, safety, and welfare.

### **8.11 Entitlement Procedures**

#### **A. Purpose**

These administrative procedures have two major purposes:

1. Ensure that development conforms to the SWIP Specific Plan ("Plan").
2. Ensure that the City's review is as expedited as possible while remaining legal and proper.

#### **B. Summary of Processing Procedures**

1. Conformity with the Plan. The Director of Community Development shall review each application for conformity with the development regulations in this Chapter. *Conformity* has two components:
  - a. Standards. Compliance with the Standards is mandatory and the City may not approve a project that fails to comply with the Standards.
  - b. Guidelines. The City may exercise discretion in evaluating the project's compliance with the Guidelines.
2. Project Review. Applications for development approvals shall be filed with the Department and will be returned for revision. Applications must strive to meet the "Guidelines," but applicants may propose alternate ways to achieve the goals of the Guidelines.
3. Timing of Permits and Approvals. Required planning approvals shall be obtained before the issuance of any grading, building, or other construction permit, and before the proposed use is constructed, otherwise established, or put into operation.
4. Processing Requirements. Applications for planning permits shall be processed in compliance with Table 8-12 – Hearing Bodies.
5. Timing of Project Review. Project review shall be required before the issuance of a Building or Grading Permit, Business License, or Certificate of Occupancy for any new structure (not including fences or walls) and/or existing structures to be reconstructed or remodeled (including facade improvements).

Table 8-12 – Hearing Bodies

| Reviewing Bodies                       |        |      |    |    |     | Appeal Body |    |
|----------------------------------------|--------|------|----|----|-----|-------------|----|
|                                        | D.A.B. | CD   | PC | CC | PR  | PC          | CC |
| Administrative site plan               | X*     | X    |    |    |     | X           |    |
| Administrative site plan, amendment    | X*     | X    |    |    |     | X           |    |
| Building relocation                    |        | X    |    |    |     |             | X  |
| Certificate of appropriateness         |        |      |    |    |     |             | X  |
| Code of the City of Fontana, Amendment | X      |      | Xf | X  |     |             |    |
| Conditional Use Permit                 | X      |      | X  |    |     |             | X  |
| Density bonus                          | X      | X    | Xf | X  |     |             |    |
| Design review                          | X      |      | X  |    |     |             | X  |
| Design review, amendment               | X      | X    | X  |    |     |             | X  |
| Design review, signs                   |        | X    |    |    |     | X           |    |
| Development agreements                 | X      | X    | Xf | X  |     |             |    |
| Development agreements, amendment      | X      | X    | Xf | X  |     |             |    |
| General plan amendments                | X      | X    | Xf | X  |     |             |    |
| Home occupation                        |        | X    |    |    |     | X           |    |
| Interpretation                         | X*     |      | X  |    |     |             | X  |
| Lot line adjustment                    |        | X*** |    |    |     |             |    |
| Parcel maps, tentative                 | X      | X    | X  |    |     |             | X  |
| Parcel maps, final                     |        | X*** |    |    |     |             |    |
| Pre-Annexation Agreement               |        |      | Xf | X  |     |             |    |
| Specific Plan                          |        |      | Xf | X  | X** |             |    |
| Specific plan, amendment               |        |      | Xf | X  | X** |             |    |
| Tract maps, tentative                  | X      |      | X  |    |     |             | X  |
| Tract maps, final                      |        |      |    | X  |     |             |    |
| Variances                              | X      |      | X  |    |     |             | X  |
| Zone changes                           | X      |      | Xf | X  |     |             |    |
| Administrative Variance                | X      | X    |    |    |     | X           |    |
| Minor Use Permit                       | X      | X    |    |    |     | X           |    |

**Notes:**

Decisions of any "Reviewing Body" may be appealed to the City Council, except where State law limits such appeal to the City Engineer. If the Planning Commission is listed above as the "Appeal Body", the Commission must first review an Appeal before it may be forwarded to the City Council for consideration.

DAB—Development Advisory Board

CD—Community Development Director

PC—Planning Commission

CC—City Council

PR—Parks and Recreation Commission

X\*—At the discretion of the Director of Community Development or his/her designee

X\*\*—If Public Park(s) are considered

X\*\*\*—City Engineer has final approval

f—Recommending body to the City Council

**C. Administration and Enforcement**

The Director of Community Development shall enforce the provisions in this Specific Plan. All officers, employees, and officials of the City of Fontana, who are vested with the duty or authority to issue permits or licenses shall conform with this Specific Plan and shall not issue any permit or license, or approve any use or building, which would be in conflict with this Specific Plan. Any permit, license or approval issued that is in conflict with the requirements of this Specific Plan shall be considered null and void.

**D. Amendments to the Specific Plan**

The SWIP Specific Plan may be amended utilizing the same procedures by which it was originally adopted. In addition, subsequent amendments to this Specific Plan shall demonstrate the amendment meets the intent of the Specific Plan's existing policy framework, or specific findings to demonstrate the amendment enhances the Plan or is necessary to more effectively implement the Specific Plan. All sections or portions of the Specific Plan proposed to be amended or that may be affected by the amendment must be identified during the amendment process. A concurrent amendment to the General Plan would not be required provided that the Director of Community Development determines that substantive changes would not influence the goals, objectives, policies, or programs of the General Plan.

Allowing flexibility in the administration of the Specific Plan enhances the effectiveness of the Specific Plan as a comprehensive, "living" planning document. The following minor modifications to the Specific Plan qualify for processing as an administrative amendment to the Specific Plan subject to the review and approval of the Director of Community Development:

- Changes in the location of infrastructure and public facilities (e.g., internal roads, drainage facilities, etc.).
- Minor change in roadway alignment.

**E. Similar Use Determination**

1. **Applicability and Authority.** Unlisted uses in Table 8-2 are prohibited uses, unless the Director of Community Development finds a proposed use to be similar to an expressly allowed use in compliance with this Section. A Similar Use Determination is a process for determining when an unlisted use is similar in nature to a permitted or conditionally permitted use and may be permitted. As specified by Municipal Code Section 30-4 Other Uses to be Determined by the Director of Community Development, the Director of Community Development shall have the responsibility and authority to make Similar Use Determinations.
2. **Ministerial Action.** A Similar Use Determination shall constitute a ministerial action.
3. **Application Contents and Filing.** An application for similar use shall be in writing on forms provided by the Director of Community Development.
4. **Determination Findings.** In determining "similarity," the Director of Community Development shall make all of the following findings:

- a. The characteristics of and activities associated with the proposed use are equivalent to one or more of the listed uses and will not involve a higher level of activity or environmental impacts than the uses listed in the land use district;
  - b. The proposed use will be consistent with the purposes of the applicable land use district; and
  - c. The proposed use will be consistent with the General Plan and this SWIP Specific Plan.
5. Notice. A Similar Use Determination shall be made in writing and shall contain the facts that support the determination. The Community Development Department shall maintain all determinations on record for review by the general public upon request. The notice shall include:
  - a. A brief statement explaining the criteria and standards considered relevant to the decision;
  - b. A statement of the standards and facts relied upon in rendering the decision; and
  - c. An explanation of appeal rights and appeal deadlines. The determination of similar use by the Director of Community Development shall be subject to appeal to the Planning Commission.

***F. Nonconforming Lots, Structures, and Uses***

1. Nonconformance provisions are established to:
  - a. Bring all uses, structures, sites and signs into conformance with the developmental requirements and design guidelines in the Code;
  - b. Limit the occurrences and extent of nonconformance by prohibiting expansion, intensification, reinstatement, alteration, restoration after destruction, and reestablishment after abandonment; and
  - c. Gradually phase out nonconforming uses, structures, lots, and signs.
2. Applicability
  - a. Nonconforming uses, structures, signs and lots may be maintained, expanded, altered and/or abated only in accordance with the provisions of this Specific Plan.
  - b. Any Designated Historic Landmark, or any property listed on the California Register of Historical Resources or National Register of Historic Places, shall be exempt from the provisions of this Section with respect to the restoration and maintenance of structures, provided that any construction plans are approved through a Certificate of Appropriateness by the Historic Preservation Commission/Planning Commission.



3. Nonconforming Uses. A use that lawfully occupied a building or land at the time this Specific Plan became effective, and that does not conform to the use regulations of the land use district in which it is located, is deemed a "legal nonconforming use." A legal nonconforming use may continue, subject to the following:
  - a. Discontinuation of Use
    - i. Loss of legal nonconforming status. If a legal nonconforming use is discontinued for a period of 90 or more days, regardless of the owner's intent, it shall lose its legal nonconforming status and the continued use of the property shall be required to conform to all provisions of this Specific Plan.
    - ii. Extension of legal nonconforming status. Wherein special circumstances exist, the Director of Community Development may extend the legal nonconforming status of a use, for up to an additional 90-day period. Furthermore, an additional extension may be granted by the Planning Commission, for up to an additional 90-day period. The total time period of all time extensions shall not exceed 180 days.
    - iii. Extension of legal nonconforming use.
      - (1) An application for a Minor Use Permit shall be filed with the Community Development Department on a City application form, together with all required fees, plans, maps, reports, special studies, exhibits, and any other information deemed necessary by the Director of Community Development to process the application. The application shall be filed prior to the expiration of the 90-day period.
      - (2) The application shall be reviewed by the Director of Community Development within 30 days following application filing. The Director of Community Development shall notify the applicant, in writing, as to whether the application is complete. If the application is not complete, the Director of Community Development shall specify those parts of the application that are not complete and shall identify the manner by which it can be made complete. If written notification is not provided to the applicant within 30 days following application filing, the application shall be deemed complete.
      - (3) The Director of Community Development shall investigate the facts bearing on the application and provide the information necessary for action on the application, consistent with this Specific Plan and the General Plan. The applicant shall have made a good faith effort through the submittal of documentation and has diligently pursued compliance with this Specific Plan.
      - (4) The application shall be reviewed by the Director of Community Development at a duly noticed public hearing, whom shall then approve, modify or deny such application. The decision of the Director of Community Development shall be final and conclusive in the absence

of a timely filed appeal to the Planning Commission. An appeal of the Director of Community Development's decision shall be filed within 10 days from the date of the decision of the Director of Community Development. An appeal of the Director of Community Development's decision shall be reviewed by the Planning Commission. The decision of the Planning Commission shall be final and conclusive in the absence of a timely filed appeal to the City Council.

- (5) The applicant may appeal the decision of the Planning Commission to the final deciding body, the City Council. The City Council decision shall be final and conclusive. If the application to extend the legal nonconforming use is approved by the City Council, the extension shall be granted for 90 days from the date of approval.
- (6) If the Director of Community Development or appointed designee has determined that the applicant has failed to show a good faith effort towards continually processing the extension of legal nonconforming use application (i.e., revising plans, withdrawing the application, placing the project on hold, etc.), the legal nonconforming use shall cease within 60 days from the application submittal date.
- (7) In granting an extension of the legal nonconforming status, the Director of Community Development may attach reasonable conditions and restrictions to the request, in addition to those required by this Specific Plan, which will ensure that the use:
  - Will not endanger the public health, safety or general welfare;
  - Will not injure the value of adjoining or abutting property;
  - Will not result in any significant environmental impacts; and
  - Will be in harmony with the area in which it is located.
- (8) In approving an extension of the legal nonconforming status, the Director of Community Development or Planning Commission shall consider and clearly establish the following findings of fact:
  - The non-conforming use has been discontinued within the 90-day period.
  - A physical and/or economic hardship has prevented the nonconforming use from being in compliance prior to the expiration of the 90 day period;
  - Approving the extension will not adversely affect the health, safety or general welfare.

- b. Change in Ownership, Tenancy or Management. A change in ownership, tenancy or management of a nonconforming use shall not affect its legal nonconforming status, provided that the use did not discontinue pursuant to Section (3.a.i) "Loss of legal nonconforming status" or the type of use and/or intensity of use do not change.

- c. New Development. New development on any lot or parcel upon which a legal non conforming use exists shall require that all uses on the property conform to the provisions of this Specific Plan.
  - d. Alterations and Expansion of Use
    - i. A nonconforming use shall not be enlarged or extended in such a way as to occupy any part of any structure or property that it did not occupy prior to the creation of the nonconformity.
    - ii. A structure fully or partially occupied by any nonconforming use shall not be moved, altered or enlarged, unless required by law, or unless the moving, alteration or enlargement will result in the elimination of the nonconforming use.
  - e. Intensification of Use. A nonconforming use shall not be intensified in such a way as to increase the discrepancy between existing conditions and the standards set forth in this Specific Plan.
4. Nonconforming Structures. A structure lawfully existing at the time this Specific Plan became effective, any portion of which does not comply with the requirements of the land use district in which it is located, including setbacks, separations, height and design, is deemed a "legal nonconforming structure." A legal nonconforming structure may continue to exist, subject to the following:
- a. Damage or Destruction
    - i. A legal nonconforming structure that is damaged or partially destroyed by fire, flood, wind, earthquake or other calamity, or the public enemy, or other cause which is beyond the control of the property owner, and which could not otherwise have been prevented by reasonable care and maintenance of the structure, may be reconstructed up to the original size, placement and density, provided that total cost of such reconstruction does not exceed more than 50 percent of the structure's current fair market value. The structure may be restored and the nonconforming use may be resumed, provided that restoration is started within six months, unless extended by the Director of Community Development, and diligently pursued.
    - ii. In the event that the cost of repairing such damage exceeds 50 percent of the current fair market value of the structure prior to such damage occurring, the structure may be reconstructed up to the original size, placement and density, subject to all of the following:
      - The Planning Commission, at a duly noticed public hearing, must find that continuing the nonconforming structure will not result in an annoyance to and/or reduction of any surrounding property; and

- The extent of damage or partial destruction shall be based upon a comparison of the estimated cost of restoring the structure to its condition prior to such damage or partial destruction with its value at the time the structure was damaged or partially destroyed. Estimates for such purpose shall be made by or reviewed by the Building Official; and
- The restoration is commenced within six months and diligently pursued to completion.
- An application for a Nonconforming Structure shall be filed with the Community Development Department on a City application form, together with all required fees, plans, maps, reports, special studies, exhibits, and any other information deemed necessary by the Director of Community Development to process the application. The application shall be filed prior to the expiration of the 90-day period.
- A structure or development that has been damaged or destroyed by fire, flood, wind, earthquake, or other calamity, or by public enemy, or other cause which is beyond the control of the property owner, and which could not otherwise have been prevented may be reconstructed up to the original size, placement and density, except a multiple family dwelling or development which has been abandoned for a period of 90 or more days prior to being involuntarily damaged or destroyed, or a multiple family dwelling or development constituting a public nuisance prior to being involuntarily damaged or destroyed may not be reconstructed unless the structure is made to comply to all provisions of this Specific Plan.

b. Alterations and Expansion

- i. A nonconforming structure shall not be moved, altered or enlarged so as to increase the discrepancy between existing conditions and the most current standard as prescribed by the land use district in which the structure is located, except alteration and/or enlargement to a single family dwelling conducted pursuant to section ("e") Nonconforming Single-Family Residential Structures".
- ii. Within land use districts, reasonable repairs and alterations may be made to legal nonconforming structures, provided that no structural alterations shall be made which would prolong the life of supporting members of a structure, such as bearing walls, columns, beams or girders. Structural elements may be modified only if such modification or repair is immediately necessary to protect the public health and safety, occupants of the legal nonconforming structure, or adjacent property, as determined by the Building Official. The total cost of such repairs or alterations may not exceed 50 percent of the replacement cost of the nonconforming structure.

- c. **New Structures.** Any new structure constructed on a lot or parcel with an existing legal nonconforming structure shall be constructed in conformance with all applicable provisions of this Specific Plan. However, in no case may a new nonresidential structure be constructed on the same lot as an existing legal nonconforming residential structure.
- d. **Abatement of Nonconforming Structures Posing a Threat to the Public Health, Safety and General Welfare.** A structure which is nonconforming because of a violation or deficiency that poses a threat to the public health, safety or general welfare, as determined by the Building Official, and which fails to resolve, repair or improve such, or to fully mitigate the hazard involved, shall be abated, condemned or demolished upon the issuance by the City of a nuisance abatement, condemnations or demolition order.
- e. **Nonconforming Single-Family Residential Structures.** In addition to the requirements of subsections a and d, above, a nonconforming single family residential lot and/or structure that was lawfully established and maintained before the adoption of this Specific Plan, but which under the provisions of this Specific Plan does not conform with the regulations of the land use district in which it is located with respect to use, design and/or development standards, and which is continuously used and maintained for single family residential purposes, shall be subject to the following:
  - i. **Alterations and expansions to structures within nonresidential zones.**
    - Necessary repairs and desirable alterations, as deemed appropriate by the Director of Community Development, may be made to a legal nonconforming single family residential structure that is nonconforming as to use.
    - A single family dwelling that is nonconforming as to its location within a land use district that does not permit single family dwellings, and in which the residential use was lawfully established and continuously maintained, shall be subject to the development regulations of the Municipal Code Chapter 30 Zoning and Development Code that pertain to the R1 zoning district and off-street parking and loading regulations.
- 5. **Nonconforming Signs.** A sign lawfully existing at the time this Specific Plan became effective, any portion of which does not comply with the requirements of Section 8.7 Sign Standards, is deemed a "legal nonconforming sign." A sign that presents a hazard to public safety, as determined by the City, shall be removed upon the issuance of a notice by the City. A legal nonconforming sign may continue to exist, subject to the following:
  - a. A nonconforming sign may not be altered, enlarged, extended, or moved, except in conformity with the requirements of Section 8.7 Sign Standards, or as otherwise required by law;

- b. Where a use or a structure associated with a nonconforming sign is abandoned or discontinued, any sign associated with a new use of the site shall be in full conformity with the requirements of Section 8.7 Sign Standards.
- 6. Nonconforming to Development Standards. The development that is not in compliance with the site development standards prescribed by the regulations of the land use district in which the lot or parcel is located, including area, coverage, configuration, dimensions, parking, landscaping, screen walls, fences and enclosure trash receptacles, is deemed "legal nonconforming," provided such development was lawfully created and existing at the time this Specific Plan, which created the nonconformity, became effective.
  - a. A development that is nonconforming as to landscaping, screen walls, fences and enclosure of trash receptacles, shall be altered to comply with the district regulations covering the following standards, or as a condition of any subsequent Development Plan or Conditional Use Permit approval:
- 7. Nonconforming Lots. A lot or parcel that is not in compliance with the site development standards prescribed by the regulations of the land use district in which the lot or parcel is located, including area and configuration is deemed a "legal nonconforming lot," provided such lot or parcel was lawfully created and existing at the time this Specific Plan, which created the nonconformity, became effective.
  - a. A lot or parcel that is nonconforming as to minimum area or dimension shall be granted all development rights and uses of the land use district within which it is located.
    - i. The landscaping of setback areas insofar as a setback exists;
    - ii. The landscaping of parking areas, provided fulfilling the requirement does not reduce off-street parking or loading spaces to fewer than prescribed in this Specific Plan;
    - iii. The screening of storage areas; and
    - iv. The enclosure of trash receptacles.
- 8. Elimination of Nonconforming Adult Business Uses. Nonconforming adult business uses shall be eliminated in compliance with Municipal Code Chapter 30 Zoning and Development Code.
- 9. Abatement of Nonconforming Uses, Structures, Lots and Signs. Whenever a use, structure, site or sign becomes nonconforming because of a change of land use district boundaries or a change of the regulations prescribed for the district in which the site is located, the period of time prescribed in Municipal Code Chapter 30 Zoning and this Specific Plan for the abatement period for the elimination of the use, the removal of the structure or sign, or the improvement of the lot or parcel shall begin on the effective date of the change of district boundaries or regulations.

## Chapter 9.0 – Slover Central Manufacturing District





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### **9.1 Purpose**

The Slover Central Manufacturing District (SCD) is intended to provide opportunities for light and heavy manufacturing activities that are supported by trucking routes and the existing rail spur.

## **9.2 Applicability**

### **A. Projects Subject to Development Regulations**

This Chapter contains the development regulations that govern all future private development actions in the SCD, including new construction, additions or renovations to existing structures and/or new land uses proposed for existing facilities

### **B. Right of Continued Use**

This Chapter shall not require any change in any existing building or structure for which a building permit has been previously issued, or for approved plans on file in the Community Development Department before the effective date of this Specific Plan. Changes in the property's ownership or tenants of legal existing uses shall likewise require no change in any existing building or structure. Nonconforming standards and provisions shall be governed by Section 9.11 Entitlement Procedures.

### **C. Other Requirements**

This Chapter does not eliminate the need for obtaining any other permits required by the City, or any permit, approval or entitlement required by any other applicable special district or agency, and/or the regulations of any State or Federal agency.

### **D. Types of Development Regulations**

The Development Regulations are of two types – Standards and Guidelines – as follows:

1. Standards address those aspects of development that are essential to achieve the goals of the Specific Plan. They include specifications for allowable land uses and site development (e.g., building height, setbacks, etc.). Conformance with Standards is mandatory. Standards are indicated by use of the words "shall," "must," or "is / is not permitted."
2. Guidelines provide guidance for new development in terms of aesthetics and design details. They are intended to direct building and site design in a way that results in the desired character for the SCD. Whereas conformance with the Standards is mandatory, conformance with the Guidelines is preferred and/or recommended. Provisions that fall into this category are indicated by the use of the words "should," "may" or "are encouraged to." In various cases, the Guidelines provide a choice of treatments that will achieve the desired effect. Developers are permitted to propose alternative design details if they are able to show that such details implement the overall Specific Plan objectives with respect to the desired character of the SCD.

### **E. Minimum Requirements**

The provisions in this Chapter shall be minimum requirements. When this Chapter provides for discretionary authority on the part of the Director of Community Development, Planning Commission, or City Council, that discretion may be exercised to impose more stringent requirements if deemed necessary to accomplish the goals and objectives of the SCD.

### **F. Overview of Development Regulations**

1. Relationship of Land Use Districts. The development regulations in this Chapter apply to properties in the SCD. Exhibit 9-1 – Land Use Plan indicates the location of the SCD and its relationship to the other land use districts in the Specific Plan area.
2. Standards, Guidelines, and Procedures. The development regulations are divided into the following sections: 11.3 Allowable Land Uses and Permit Requirements; 11.4 Development Standards; 11.5 Landscape Standards; 11.6 Off-Street Parking and Loading Standards; 11.7 Sign Standards; 11.8 Public Right-of-Way Streetscape; 11.9 Design Guidelines; 11.10 Development Incentives, and 11.11 Entitlement Procedures. Projects must meet all development standards in order to achieve approval in the development review process. Projects are encouraged to adhere to the guidelines contained in 11.9 Design Guidelines.
3. Steps for Using Chapter. Table 9-1 – Process Procedures illustrates the steps for using this Chapter.

| Table 9-1 – Process Procedures                                                                                              |                                                        |                                      |
|-----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|--------------------------------------|
| <i>Instructions</i>                                                                                                         | <i>Information Source</i>                              | <i>Where to Find in this Chapter</i> |
| Locate property and its street frontage                                                                                     | Land Use Plan                                          | Exhibit 9-1                          |
| Identify the allowable uses and refer to the definitions of the uses                                                        | Allowable Land Uses & Permit Requirements Definitions  | Table 9-2<br>Appendix A              |
| Comply with the requirements for intensity, lot dimensions, height limits, and setbacks                                     | Intensity and Dimensional Standards                    | Table 9-3                            |
| Comply with fence, wall, and screening requirements                                                                         | Fence, Wall, and Screening Standards                   | Table 8-4                            |
| Comply with landscaping requirements                                                                                        | Landscape Standards<br>Public Right-of-Way Streetscape | Section 9.5<br>Section 9.8           |
| Comply with parking requirements                                                                                            | Off-Street Parking and Loading Standards               | Section 9.6                          |
| Comply with sign design requirements                                                                                        | Sign Standards and Guidelines                          | Section 9.7                          |
| Review the design guidelines for preferred site layout, building orientation and architectural detail, fencing, and parking | Design Guidelines                                      | Section 9.9                          |
| Determine if development is eligible for incentives                                                                         | Development Incentives                                 | Section 9.10                         |
| Submit project application and proceed through project approval process                                                     | Entitlement Procedures                                 | Section 9.11                         |

# Southwest Industrial Park Specific Plan

Slover Central Manufacturing District

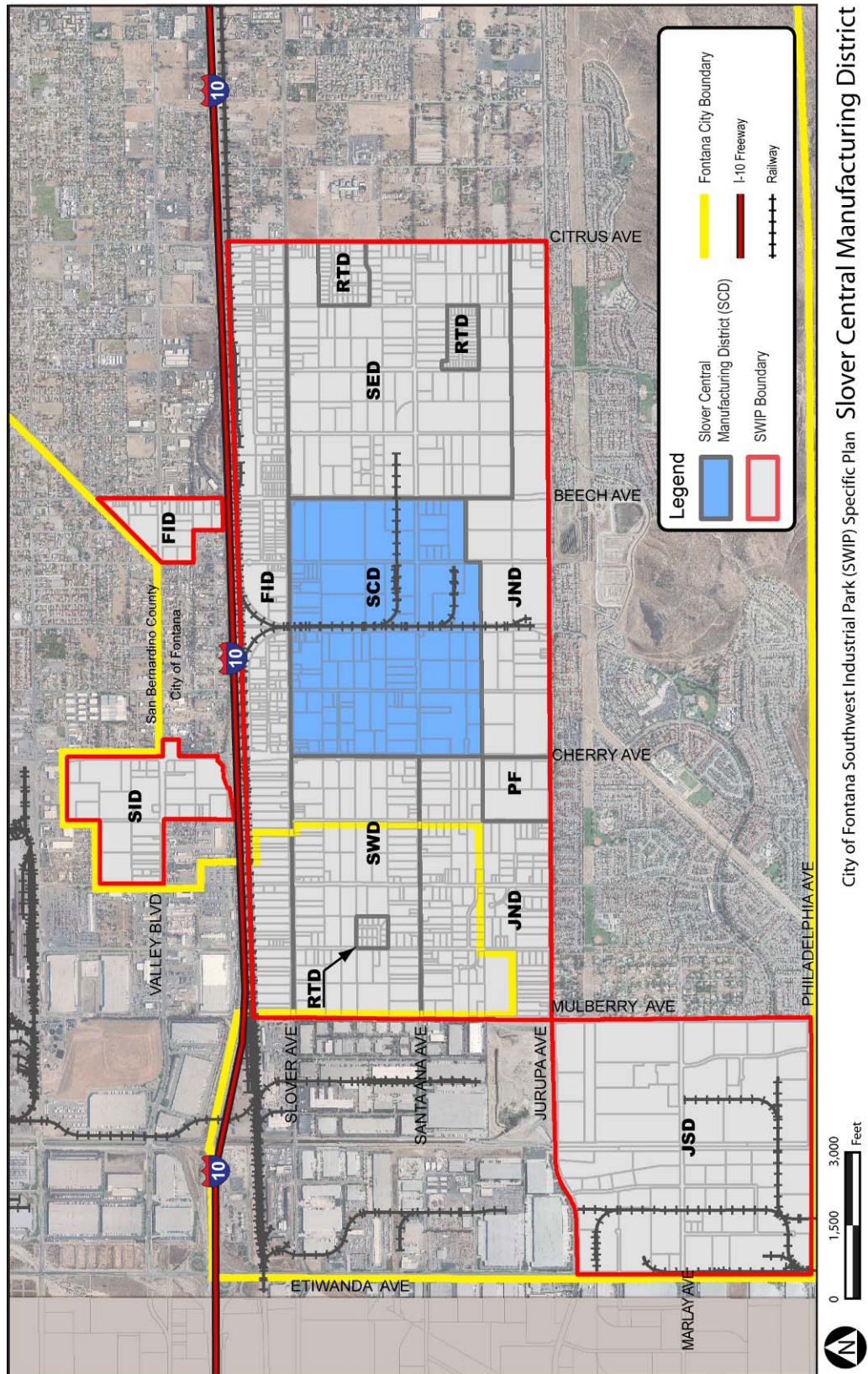


Exhibit 9.1 – Land Use Plan



### **9.3 Allowable Land Uses and Permit Requirements**

This Section identifies allowable land uses and their permit requirements.

#### **A. Allowed Uses**

Table 9-2 – Allowable Land Uses and Permit Requirements SCD identifies the types of land uses allowed in the SCD and the permit required to establish each use.

#### **B. Uses Not Listed**

Uses not listed in Table 9-2 are prohibited land uses, until and unless the Director of Community Development makes a similar use determination in compliance with Subsection 9.11.C Entitlement Procedures--Similar Use Determination.

#### **C. Other Applicable Regulations**

The provisions contained in this SWIP Specific Plan constitute the primary land use and development standards for the Specific Plan area. These regulations are in addition to the provisions in the City of Fontana Municipal Code.

This Specific Plan provides all development standards and guidelines necessary to approve subsequent project applications, unless otherwise noted. Permit processing procedures (e.g., noticing, hearing, appeals, and expiration procedures) and enforcement procedures are provided in Municipal Code Chapter 30 (Zoning and Development Code) shall apply, unless otherwise noted. Where there is a conflict between the provisions in this Specific Plan and those in the Zoning and Development Code, the Specific Plan provisions shall prevail to the extent allowable under Federal or State law. Where there is no conflict, both shall be applied concurrently.

#### **D. Definitions**

Definitions for land uses are provided in Appendix A Definitions. If a definition is not provided, the definitions in the Municipal Code shall apply. The Director of Community Development shall interpret the definitions; make a similar use determination in compliance with Subsection 9.11.C Entitlement Procedures – Similar Use Determination; and/or refer any questions to the Planning Commission for its determination. For the purposes of this Specific Plan, the following definitions shall apply:

1. Commercial Use: Activity involving the sale of goods or services carried out for profit.
2. Industrial Use: Those fields of economic activity including construction; manufacturing; transportation, communication, electric, gas, and sanitary services; and wholesale trade.

**Table 9-2 – Allowable Land Uses and Permit Requirements**

| <i>Land Use</i>                                           | <i>Permit Requirement</i>                                        |
|-----------------------------------------------------------|------------------------------------------------------------------|
|                                                           | "P" = Use Permitted by Right                                     |
|                                                           | "C" = Conditional Use Permit Required                            |
|                                                           | "M" = Minor Use Permit Required                                  |
| <b>Slover Central Manufacturing District</b>              |                                                                  |
| <b>Entertainment, Recreation and Public Assembly Uses</b> |                                                                  |
| Adult Businesses                                          | Municipal Code §30-11 & Municipal Code Chapter 15, Article XVIII |
| Open Space / Park                                         | P                                                                |
| Public Assembly Facilities                                | C                                                                |
| Recreational Facilities                                   | C                                                                |
| <b>Industry, Manufacturing, and Processing Uses</b>       |                                                                  |
| Manufacturing, Light                                      |                                                                  |
| • Appliance Manufacturing                                 | P                                                                |
| • Electronics & Equipment                                 | P                                                                |
| • Furniture and Fixture Manufacturing                     | P                                                                |
| • Glass Product Fabrication                               | P                                                                |
| • Machinery Manufacturing                                 | P                                                                |
| • Paper Product Manufacturing                             | P                                                                |
| • Product Assembly and Distribution                       | P                                                                |
| General Manufacturing                                     |                                                                  |
| • Concrete, Gypsum, and Plaster Product Manufacturing     | P                                                                |
| • Food Products Manufacturing                             | P                                                                |
| • Glass Product                                           | P                                                                |
| • Plastics, Synthetics, and Rubber Product Manufacturing  | P                                                                |
| • Pulp and Pulp Product Industries                        | P                                                                |
| • Stone and Cut Stone Product Manufacturing               | P                                                                |
| • Structural Clay and Pottery Product Manufacturing       | P                                                                |
| • Textile and Leather Product Manufacturing               | P                                                                |
| • Transportation Product Assembly                         | P                                                                |
| Research and Development                                  | P                                                                |
| <b>Residential Uses</b>                                   |                                                                  |
| Caretaker Housing (2)                                     | C                                                                |
| <b>Retail Uses</b>                                        |                                                                  |
| Factory/Warehouse Outlet Store                            | P                                                                |
| Retail Sales, General (1)                                 | C                                                                |

Table 9-2 – Allowable Land Uses and Permit Requirements (continued)

| <i>Land Use</i>                                                              | <i>Permit Requirement</i>                                                                                |
|------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
|                                                                              | "P" = Use Permitted by Right<br>"C" = Conditional Use Permit Required<br>"M" = Minor Use Permit Required |
|                                                                              | Slover Central Manufacturing District                                                                    |
| <b>Service Uses</b>                                                          |                                                                                                          |
| Animal Kennel Services                                                       | P                                                                                                        |
| Industrial Repair                                                            | P                                                                                                        |
| Mini Storage Facility (1)                                                    | P                                                                                                        |
| <b>Motor Vehicle</b>                                                         |                                                                                                          |
| <ul style="list-style-type: none"> <li>Registered vehicle storage</li> </ul> | C                                                                                                        |
| <ul style="list-style-type: none"> <li>Service Stations (1)</li> </ul>       | P                                                                                                        |
| <b>Distribution, Wholesaling and Warehousing Uses</b>                        |                                                                                                          |
| Industrial Equipment, Materials, and Supplies, Truck, Truck Trailer Storage  | C                                                                                                        |
| Logistics and Distribution Facilities                                        | P                                                                                                        |
| Petroleum/Hazardous Material Storage                                         | C                                                                                                        |
| Warehousing Facilities                                                       | P                                                                                                        |
| <b>Transportation, Communications and Infrastructure Uses</b>                |                                                                                                          |
| Antennas                                                                     | M                                                                                                        |
| Parking Facilities (1)                                                       | P                                                                                                        |
| Recycling Facilities                                                         | C                                                                                                        |
| <b>Other Uses</b>                                                            |                                                                                                          |
| Outdoor Display & Sales                                                      | M                                                                                                        |
| Public Facilities                                                            | P                                                                                                        |
| Temporary Uses                                                               | Municipal Code Chapter 30, Division 14 (Temporary Use).                                                  |

(1) See Section 9.9E

(2) See Section 9.4D

## 9.4 Development Standards

New land uses and structures and alterations to existing land uses and structures in the SCD shall be designed, constructed, and established in compliance with the requirements in this Section.

### A. Intensity and Dimensional Standards

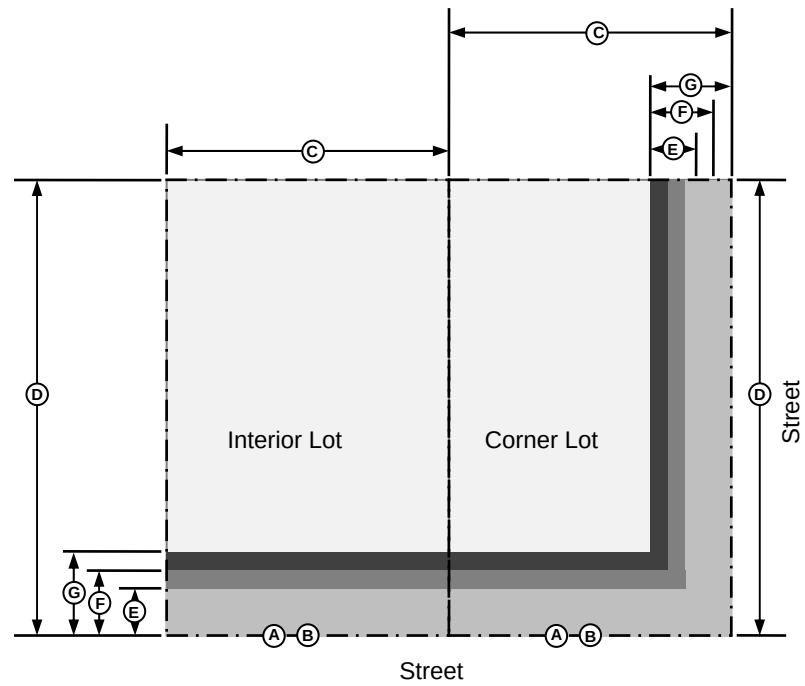
Table 9-3 – Intensity and Dimensional Standards provides the required intensity and dimensional standards for proposed development. The Director of Community Development is authorized to approve modifications of 10 percent or less of any land use district setback, lot width, lot depth, building coverage, building height, or wall height standard in compliance with the administrative variance procedures in Municipal Code Section 30-51.6 (Findings necessary for granting a variance). See Exhibit 6-2 – Dimensional Standards.

The Director of Community Development may grant an administrative variance from the requirements of this chapter where practical difficulties, unnecessary hardships, or results contrary to the intent of this chapter would occur from the strict and literal interpretation and enforcement of the Code. An administrative variance may be granted upon conditions which will ensure the protection of the public safety, health and welfare. To grant an administrative variance, the Director of Community Development must find from the facts presented that the following conditions exist.

- (1) That because of circumstances applicable to the property including size, shape, topography, location or surroundings, the strict application of this chapter will deprive the property of privileges enjoyed by other property in the vicinity and under identical zoning classification;
- (2) That the granting of such an administrative variance will be subject to conditions assuring that the variance shall not constitute a grant of special privileges inconsistent with the limitations upon other properties in the vicinity and zoning district in which the property is located;
- (3) That the administrative variance does not authorize a use or activity which is not a specifically allowed use in the zoning district in which the property is located; and
- (4) That the granting of one administrative variance will not be contrary to the general plan.

Table 9-3 – Intensity and Dimensional Standards

| Lot Size and Building Placement                        |                                                      |
|--------------------------------------------------------|------------------------------------------------------|
| <b>INTENSITY</b>                                       |                                                      |
| Floor Area Ratio (3)                                   | 1.0 max. FAR                                         |
| <b>LOT DIMENSIONS</b>                                  |                                                      |
| Lot Size                                               | 40,000 sq ft min.                                    |
| Lot Width (C)                                          | 200 ft min.                                          |
| Lot Depth (D)                                          | 175 ft min.                                          |
| <b>BUILDING SETBACKS</b>                               |                                                      |
| Front Setback (1)                                      |                                                      |
| Major Highway (Cherry) (G)                             | 30 ft min. (4)                                       |
| Primary Highway (Beech and Slover) (F)                 | 25 ft min. (4)                                       |
| Secondary Highway/Collector Street (Santa Ana) (E)     | 20 ft min (4)                                        |
| Side (Street) Setback (1)                              |                                                      |
| Major Highway (Cherry) (G)                             | 30 ft min. (4)                                       |
| Primary Highway (Beech and Slover) (F)                 | 25 ft. min. (4)                                      |
| Secondary Highway/Collector Street (Santa Ana) (E)     | 20 ft. min. (4)                                      |
| Side (Interior) Setback (2)                            | None                                                 |
| Rear Setback (2)                                       | None                                                 |
| Railroad Setback (1)                                   | Comply with Public Utilities Commission Regulations  |
| Accessory Buildings Setbacks                           | Comply with setbacks applicable to primary structure |
| Building Height and Mass                               |                                                      |
| <b>HEIGHT</b>                                          |                                                      |
| Primary Building                                       | 100 ft max                                           |
| Accessory Building                                     | 1-story or 14 ft max. to eave/parapet line           |
| Interior (Floor-to-Floor, excluding parking levels)    | Ground floor – 12 ft min                             |
| <b>UPPER STORY STEPBACKS</b>                           |                                                      |
| All buildings regardless of street frontage            | Allowed                                              |
| Notes:                                                 |                                                      |
| (1) Setback is measured from public right-of-way line. |                                                      |
| (2) Setback is measured from property line.            |                                                      |
| (3) See Section 9.10 Development Incentives.           |                                                      |
| (4) Corner cut-off setbacks per Specific Plan.         |                                                      |



- Ⓐ = Public Right-of-Way Line
- Ⓑ = Property Line
- Ⓒ = Lot Width
- Ⓓ = Lot Depth
- Ⓔ = Front/Side Setbacks – Secondary Highway/Collector Street
- Ⓕ = Front/Side Setback – Primary Highway
- Ⓖ = Front/Side Setback – Major Highway

Exhibit 9-2 – Dimensional Standards.

**B. Fences, Walls, and Screening**

1. Standards and Guidelines. Table 9-4 contains standards for fences, walls, and screening. Refer to Section 9.9 Design Guidelines for guidelines about the design, materials, and construction of fences, walls, and screening.

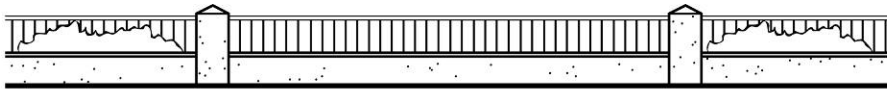
**Table 9-4 – Standards for Fences, Walls, and Screening**

| <i>Location</i>                                    | <i>Materials<br/>See Section 9.9 Design Guidelines</i>                                                                                                         | <i>Maximum Height</i>                                                                                     |
|----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| Within front setback area                          | Solid fencing/wall                                                                                                                                             | 36 inches                                                                                                 |
|                                                    | Open fencing/wall                                                                                                                                              | 6 ft                                                                                                      |
| Within street side setback area                    | Tubular steel construction allowed in required setback area if set back at least 15 ft from lot line. Solid masonry wall not allowed in required setback area. | 8 ft if necessary for security purposes, with 18-inch maximum width pilasters a minimum of 8 ft on center |
| Within interior side setback area                  | Any type of fence, hedge, or wall allowed                                                                                                                      | 8 ft                                                                                                      |
| Within rear setback area                           | Any type of fence, hedge, or wall allowed                                                                                                                      | 8 ft                                                                                                      |
| Outside of a required setback area                 | Solid or open fencing/wall                                                                                                                                     | No height limit                                                                                           |
| At intersections of alleys, streets, and driveways | Solid or open fencing/wall                                                                                                                                     | 30 inches                                                                                                 |
| Within Railroad setback area                       | Open fencing/wall                                                                                                                                              | 8 ft                                                                                                      |

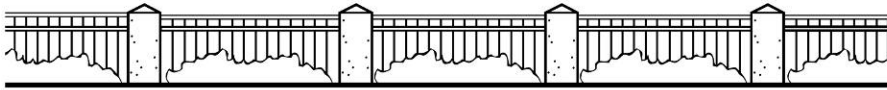
Note: (1) All fences and walls shall meet the City's line of sight regulations, as determined by the City Engineer.

2. Materials.
  - a. Open fencing shall mean fencing with over 50 percent of the surface area open for free passage of light and air and through which the area behind the fence is visible to public view. See Exhibit 9-3 – Open and Solid Fencing.
  - b. Solid fencing shall mean fencing with 50 percent or less of the surface area open for free passage of light and air and designed to conceal the area behind the fence from public view. See Exhibit 9-3 – Open and Solid Fencing.
  - c. Barbed wire fence, electric fences, or similar fencing material is prohibited.
  - d. Chain link fencing is allowed on interior property lines that are not visible from public rights-of-way.



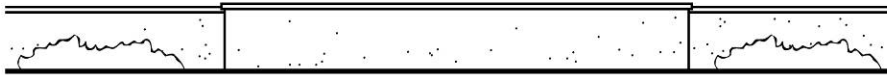


Elevation of Wall / Wrought Iron Combination

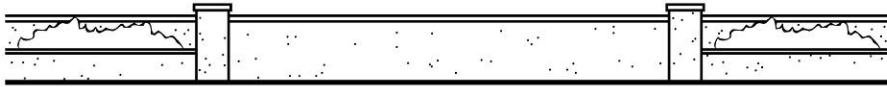


Elevation of Wrought Iron with Pilasters

### *Examples of Open Fencing*



Elevation of Staggered Wall



Elevation of Planters / Wall



Elevation of Wall with Breaks

### *Examples of Solid Fencing*

Exhibit 9-3 – Open and Solid Fencing.

3. Screening and buffering.

- a. Roof-mounted and ground-mounted mechanical equipment, utilities, storage, and solid waste storage areas shall be screened from adjoining properties and public right-of-ways by a visual barrier (e.g., wall, fence, landscape material, etc.) to the satisfaction of the Director of Community Development. Where only landscaping is used for screening, it shall be planted with five-gallon (minimum size) shrubs spaced to provide a continuous dense screen.
- b. Parking lot perimeters shall be screened and planted in compliance with Section 9.6 Parking and Loading Standards.

**C. Outdoor Activities and Storage**

- 1. Storage in Setback Areas. Material or equipment shall not be stored anywhere in the front yard. Temporary storage of construction materials during construction on the same site is allowed. Boats, campers, motor vehicles, trailers, equipment, materials, or antenna that may be stored in side and rear yards, provided that they are outside the required side and rear setback areas identified in Table 9-3 – Intensity and Dimensional Standards.
- 2. Limitations on Outdoor Uses.
  - a. All uses shall be conducted entirely within a completely enclosed building that is attached to a permanent foundation, except approved outdoor dining areas, parking areas, industrial activities, truck trailer storage, and other approved uses that require outdoor activities.
  - b. Areas used for the approved outdoor storage of vehicles, equipment and/or building materials (raw or finished) may use compacted slag, gravel, or other similar material deemed suitable by the Director of Community Development.
- 3. Outdoor uses. Outdoor uses shall comply with the following:
  - a. A building shall be provided on the same parcel or on an adjacent parcel associated with the same business.
  - b. All display materials, including vehicles, shall be set back five feet from any landscaped area and shall not be located on required parking areas.
  - c. The entire area used for display purposes shall be surfaced with asphalt or an equally serviceable hard pavement surface. The surface shall be maintained in good condition.
  - d. Storage of equipment or materials, with the exception of the display of vehicles for sale or rent, shall be screened by a visually solid masonry wall of minimum height six feet. The approving authority may determine through the design review process that the subject use requires a solid masonry wall higher than six feet.
  - e. Outdoor display areas shall be maintained in a neat and orderly condition.

**D. Caretaker Housing**

Caretaker housing shall be:

1. Accessory to a principal use;
2. A maximum of 1,500 square feet total floor area unless otherwise approved by the planning commission;
3. Limited to one unit per lot; and
4. Subject to the setback requirements applicable to the principal structure with which it is associated.

**E. Solar Access**

A structure, fence, or wall shall not be constructed or modified, and vegetation shall not be placed or allowed to grow so as to obstruct more than 10 percent of the absorption area of a solar energy system on an abutting or adjacent lot at any time.

**F. Undergrounding of Utilities**

1. Utility service laterals to new development shall be installed underground.
2. Temporary overhead power and telephone facilities are permitted only during construction.
3. Placement, location and screening of utilities of any kind, which cannot be installed underground and must be placed above ground for function and safety reasons, require written approval by the Director of Community Development or the Planning Commission prior to any administrative or discretionary approval.
4. Transformer enclosures shall be designed of durable materials with finishes and colors used that are compatible and harmonious with the overall architectural theme.
5. All utilities including, but not limited to drainage systems, sewers, gas lines, water lines, and electrical, telephone, and communications wires and equipment shall be installed and maintained underground. Placement, location, and screening of utilities of any kind, which cannot be installed underground and must be placed above ground for function and safety reasons, require written approval by the Director of Community Development or the Planning Commission before any administrative or discretionary approval.

**G. Registered Vehicle Storage**

Registered vehicle storage will be defined as follows:

Registered Vehicle Storage means an off-street, ground level open area that allows parking for the purpose of storage of vehicles, including but not limited to, truck, truck-trailer, buses, boats, construction equipment, recreational vehicles, and automobile

storage. These vehicles are to be stored and are not for sale, rental, or leasing. Maintenance or vehicle repair is not permitted at the premises unless otherwise separately allowed and approved under a separate conditional use permit.

Special use regulations are proposed to be applied to Registered Vehicles Storage. All businesses with registered vehicle storage shall comply with the following provisions:

1. The entire storage area shall be surfaced with asphalt, cement or an equivalent material. For specified and delineated storage areas, excluding required drive aisles and required non-storage parking, slag or gravel shall be considered as an equivalent paving material on a case-by-case basis. The surface material shall be striped as required (when feasible) and shall be maintained in good condition.
2. All storage areas shall clearly be identified on the site plan for the property and shall be screened from view from the public right-of-way by one or more decorative block screening walls. All screening walls adjacent to a public right-of-way shall have a minimum height of eight (8) feet and shall not be located in a required landscape setback area. Additional wall height and/or berming may be added as needed to satisfy screening requirements.
3. A line-of-sight analysis clearly demonstrating that all registered vehicles proposed to be located in the storage area(s) are screened from view from all adjacent public rights-of-way at all times shall be required with all proposals and/or applications. For the purpose of the line-of-sight analysis, the assumed height of the vehicles to be stored shall be fourteen feet and six inches (14'6"). To meet this requirement, storage areas shall be set back from required screening walls to provide the required line-of-sight clearance for screening. Storage areas which have been set back to provide the required line-of-sight clearance for screening shall be identified on the site plan and shall be marked and maintained at all times in a manner consistent with the site plan.
4. All vehicles stored on the premises shall have a valid vehicle registration from the State of California or other similar government entity and shall be maintained in an operable condition at all times.
5. Fire access lanes of a minimum twenty-six feet (26') in width shall be required along the interior perimeter of any required decorative block screening wall adjacent to a public right-of-way. Additional fire access lanes shall be provided as required by the Fire District. This required fire access lane may be used to meet the line-of-sight clearance set back requirement above.
6. All on-site fire access lanes, drive aisles, required parking, etc., (but not including identified and marked vehicle storage areas) shall be paved with asphalt, cement or an equivalent material; gravel or slag in these lanes is specifically prohibited.
7. A guard station or similar structure shall be required near the primary access to the premises. The minimum size of such structure shall be sixteen square feet.
8. A residence for a caretaker may be permitted and incorporated into the project subject to the approval of a Conditional Use Permit application.

9. Permanent on-site security lighting shall be required to be designed and installed to the standards and satisfaction of the Police Chief or his/her designee.
10. Fire hydrants shall be required to the satisfaction of the Fire District.
11. Vehicles stored on the premises shall not themselves be used as storage containers to store materials in them. With prior 72 hour written notice to the property and/or business owner, any and all stored vehicles shall be open to inspection for the purpose of enforcing this provision.
12. To provide adequate space dimensions to accommodate the movement off large vehicles on the site, the minimum lot size shall be two (2) acres with a minimum lot width of 300 feet and a minimum lot depth of 300 feet. Irregular or unusually shaped lots may require additional minimums to meet the intent of this regulation, as shall lots with unusual, irregular, or severe topographic features or changes.
13. Landscaping adjacent to the public right-of-way is required per the Code. Interior lot landscaping shall not be required for any internal area (wall perimeter, parking area, storage area, etc.) enclosed by the required screening walls. Incidental landscaping may be required as needed to satisfy screening and other requirements in interface area(s) open to public view (entry gate, guard station, etc.)

## 9.5 Landscape Standards

### A. Required landscaping

This section provides the required minimum standards for all landscaped areas within any new and rehabilitated private development.

1. Landscaped area means the entire parcel less the building footprint, driveways, nonirrigated portions of parking lots, and hardscapes (such as driveways, approaches and sidewalks). Decorative hardscapes used to enhance the landscape will be considered as part of the landscape area; this would include such things as cobble rock, decomposed granite, brickwork, stamped concrete, gravel, pavers, and water features.
2. Landscape setbacks along public right-of-ways shall incorporate landscape buffers with undulating and variable height earth-mounding (berms), and/or low walls, and required plant materials as shown in Table 9-5 (Landscaping Standards).
3. Block wall and wrought iron fencing shall be located behind landscape setback area(s).
4. The developer shall submit to the City's Department of Engineering, a Landscape Documentation Package that conforms to the requirements of the Water Efficient Landscape Ordinance in Municipal Code, Chapter 28Vegetation.
5. All new development landscaping shall comply with the standards shown in Table 9-5 – Landscape Standards. Additional guidelines that should be considered are addressed in Section 9.9 Design Guidelines.
6. The Recommended Plant Materials Palette, Table 9-6, can be found immediately after this section. The plant materials palette is provided to ensure the installation of drought-tolerant, water efficient landscaping that will provide wind breaks and thrive in the local climate conditions. In an effort to provide visual elements that distinguish this district from others, please note that turf (grass) does not appear in the Plant Materials Palette, and shall be prohibited, in lieu of drought-tolerant ground covers.
7. Public right-of-way improvements, including street improvements, streetscape/landscape (parkway) improvements, and street tree requirements, are in Section 9.8 Public Right-of-Way Streetscape.

**Table 9-5 – Landscape Standards**

*Note: The Director of Community Development Director may require additional setbacks.*

|                                                                                                      |                                                                                                                                                                                                                                                                                                                        |
|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Minimum Landscaped Area<br>Mixture of ground cover, shrubs, trees, and decorative hardscape features | 15% of total site area, not including areas covered by buildings, structures, or areas used for approved outside storage, loading, or other activities.<br><br>25% of total site area, for hotels, not including areas covered by buildings, or areas used for approved outside storage, loading, or other activities. |
| Decorative hardscape features<br>Brick, stone, art, fountains, ponds, etc.                           | Maximum 15 % of the total required landscaping of site area                                                                                                                                                                                                                                                            |
| Minimum plant sizes in landscaped areas                                                              | Minimum Ratio 1 tree/500 SF of landscape area                                                                                                                                                                                                                                                                          |
| Trees                                                                                                | 50% - 15-gallon<br>40% - 24-inch box<br>10% - 30-inch box or greater                                                                                                                                                                                                                                                   |
| Shrubs                                                                                               | 50% - 5-gallon<br>50% - 1-gallon                                                                                                                                                                                                                                                                                       |
| Groundcover                                                                                          | 12-inch maximum on center spacing that will cover area within one year of initial planting                                                                                                                                                                                                                             |
| Street trees in parkways per Master Plan of Parkway Trees                                            | 1 tree of not less than 24-inch box size for each 30 linear feet of street frontage<br><br>In parkways of inadequate width, street trees shall be planted in abutting setback/yard, in addition to the required buffer landscaping in setback area                                                                     |
| Landscape buffer in front setback area                                                               | 1 tree for each 20 linear feet minimum of street frontage and three 5-gallon shrubs for each tree<br><br>Undulating earth berms with informal tree and shrub massing and/or low decorative walls may be utilized<br><br>Maximum slope: 3:1 for berms                                                                   |
| Additional landscape requirements                                                                    | 1 tree for each 800 square feet minimum of other required landscaped area and 8 shrubs for each tree.                                                                                                                                                                                                                  |
| Landscape Buffer<br>Front setback area and street-side setback area                                  | Major Highway: 30 ft minimum width<br>Primary Highway: 25 ft minimum width<br>Collector/Local Streets: 20 ft minimum width                                                                                                                                                                                             |



**B. Recommended Plant Materials Palette**

Table 9-6 – Recommended Plant Materials Palette provides a listing of primarily drought-tolerant trees, shrubs, and ground covers to provide water efficient landscaping in new projects. The limited selection of landscape material in the palette is envisioned to assist the user in incorporating sustainable landscaping into the project, while including enough variety of size, form, and density, to meet the requirements within buffer setbacks and screening techniques. . Final selection shall be approved by the City. The Director of Community Development shall approve artificial turf.

**Table 9-6 (a) – Recommended Plant Materials Palette  
Recommended Trees**



**African Sumac**  
*Rhus lancea*



**Desert Willow**  
*Chilopsis linearis*



**Arizona Sycamore**  
*Platanus wrightii*



**Golden Rain Tree**  
*Koelreutaria paniculata*



**Bottle Tree**  
*Brachychiton populneus*



**Honey Locust**  
*Gleditsia triacanthos*

Table 9-6 (a) – Recommended Plant Materials Palette  
Recommended Trees (continued)



**Canyon Live Oak**  
*Quercus chrysolepis*

Table 9-6 (b) – Recommended Plant Materials Palette  
Recommended Shrubs



**Agave**  
*Agave species*



**Gray-Leaved Euryops**  
*Euryops pectinatus*



**Bougainvillea**  
*Bougainvillea species*



**Kangaroo Paw**  
*Anigozanthus hybrids*



**Coffeeberry**  
*Rhamnus californicus*



**Purple Fountain Grass**  
*Pennisetum setaceum 'Cupreum'*



Table 9-6 (b) – Recommended Plant Materials Palette  
Recommended Shrubs (continued)



**Coyote Brush**  
*Baccharis pilularis*



**Redberry**  
*Rhamnus croceus*



**Desert Spoon**  
*Dasylirion species*



**Red Hot Poker**  
*Kniphofia uvaria*



**Rosemary**  
*Rosmarinus officinalis*  
cultivars



**Yaupon**  
*Ilex vomitoria*



**Texas Ranger**  
*Leucophyllum species*



**Yucca**  
*Yucca species*

Table 9-6 (c) – Recommended Plant Materials Palette  
Recommended Groundcover



**Moss Verbena**  
*Verbena tenuisecta*



**Prostrate Myoporum**  
*Myoporum parvifolium*



**Peruvian Verbena**  
*Verbena peruviana*



**Rosea Ice Plant**  
*Drosanthemum floribundum*



**Poverty Weed**  
*Iva hayesiana*



**Trailing Lantana**  
*Lantana montevidensis*

## 9.6 Off-Street Parking and Loading Standards

### A. Applicability

This section contains regulations for off-street parking and loading. Regulations identify required number of parking and loading spaces for all new development projects and those proposing substantial modification to existing buildings. Refer to Municipal Code Chapter 30 (Zoning and Development Code) for all parking and loading-related information or regulations not specifically addressed in this section.

### B. General Parking and Loading Regulations

1. Methods of Calculation.
  - a. Multiple Uses. If more than one use is located on a site, the total number of required off-street parking and loading spaces shall be the sum of the requirements for the various uses computed separately. If individual uses on the same site have a floor area less than that for which loading spaces would be required, then the total gross floor area of all uses on the site or lot shall be used in determining the required number of loading spaces.
  - b. Fractional Number. Whenever the computation of the required number of off-street parking or loading spaces results in a fractional number, one additional space shall be required for a fraction of more than one-half, but shall not be required for a fraction of one-half or less.
2. Off-Site Location. Required off-street parking spaces shall be located on the same property as the use that they are intended to serve. Where the required parking spaces cannot be accommodated on the same property, they may be located in a separate off-site parking facility that is not more than 300 feet from the use(s) they serve.
3. Shared Use. Required off-street parking and loading spaces shall not be considered as providing parking or loading spaces for any other use, except where shared use facilities are approved in compliance with Subparagraph 5 Adjustments to Parking Requirements, below.
4. Uses Not Specified. For uses not specified, the Director of Community Development shall determine parking requirements based upon the requirements of the most similar use. See SubSection 9.11.C Entitlement Procedures -- Similar Use Determination.
5. Adjustments to Parking Requirements.
  - a. Administrative Variance. The Director of Community Development is authorized to approve alternate parking plans involving a modification of 10 percent or less of any of the off-street parking and loading standards in compliance with Section 30-51.5 of Municipal Code Chapter 30.
  - b. Parking Study Option. An applicant may submit a separate parking and loading study for new development to the Director of Community Development for review.

A parking and loading study shall provide sufficient data and information to justify the need for adjustments to the parking and loading requirements and shall analyze whether:

- i. Adequate off-street parking will be provided for the project;
  - ii. The project demonstrates the use of creative design concepts, including but not limited to shared parking facilities, transit accessibility, pedestrian amenities, and bicycle amenities;
  - iii. Environmental impacts associated with the project will not be increased by the modification of standards; and
  - iv. Traffic safety and pedestrian safety will be enhanced by the modifications.
- c. **Shared Use Facility.** Required off-street parking and loading spaces may be considered as providing parking or loading spaces for another use where joint facilities serving more than one use contain no less than the total number of spaces deemed necessary for each individual use added together with other uses. Where adjoining uses on the same site have different hours of operation with minimal conflict, the Director of Community Development may determine that some or all of the same spaces may be counted as satisfying the requirements for both uses, provided that the number of spaces shall not be less than the prescribed for the use requiring the greater number.

***C. Required Number of Parking Spaces***

Each land use shall provide the number of off-street parking spaces indicated in Table 9-7 – Parking Requirements by Land Use, except where adjustment has been granted in compliance with Subparagraph 9.6.B.5 Adjustments to Parking Requirements, above. For the purposes of this Section, the following definitions shall apply:

- 1. **Commercial Use:** Activity involving the sale of goods or services carried out for profit.
- 2. **Industrial Use:** Those fields of economic activity including construction; manufacturing; transportation, communication, electric, gas, and sanitary services; and wholesale trade.

**Table 9-7 – Parking Requirements by Land Use**

| <i>Land Use</i>                                                                  | <i>Vehicle Spaces (Minimum #)<br/>GFA—Gross Floor Area</i>                                                                                                                                                                                                                                                              | <i>Bicycle Spaces<br/>Minimum #</i>                                    |
|----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|
| <b>Entertainment, Recreation and Public Assembly Uses</b>                        |                                                                                                                                                                                                                                                                                                                         |                                                                        |
| Adult Businesses                                                                 | Subject to Parking Plan required by Municipal Code §15-918                                                                                                                                                                                                                                                              |                                                                        |
| Open Space / Park                                                                | Public - Determined by Parks and Recreation Department<br>Private - .25 spaces/1,000 sq ft of total park area                                                                                                                                                                                                           | 1 space/ 33 vehicle parking spaces                                     |
| Public Assembly Facilities                                                       | With fixed seats – 1 space/3 fixed seats;<br>Without fixed seats – 25 spaces/1,000 sq ft of seating area;<br>and<br>4 spaces/1,000 sq ft GFA outside assembly area                                                                                                                                                      | 1 space/33 vehicle parking spaces                                      |
| Recreational Facilities – Indoor, except for the following:                      | 1 space/each 4 persons of the facility's allowed maximum capacity, unless otherwise modified in compliance with Section 9.6.B.5. –Adjustments to Parking Requirements                                                                                                                                                   |                                                                        |
| Amusement Arcade                                                                 | 1 space/each 4 persons of the facility's allowed maximum capacity                                                                                                                                                                                                                                                       | 1 space/ 3 games up to 20 games; and 1 space/5 games for over 20 games |
| Athletic Club/Gym                                                                | 4 spaces/1,000 sq ft GFA;<br>20 spaces/1,000 sq ft of exercise floor area;<br>3 spaces/outdoor ball court                                                                                                                                                                                                               | .4 spaces/1,000 sq ft GFA                                              |
| Bowling Alley                                                                    | 4 spaces/lane, and<br>additional spaces required for restaurant and other accessory uses                                                                                                                                                                                                                                | 1 space/33 vehicle parking spaces                                      |
| Dancing                                                                          | 14 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                               |                                                                        |
| Pool/Billiard Hall                                                               | 2 spaces/table                                                                                                                                                                                                                                                                                                          | 1 space/5 tables                                                       |
| Skating Rink                                                                     | 14 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                               | 1 space/33 vehicle parking spaces                                      |
| Recreational Facilities – Outdoor, except for the following:                     | 1 space/each 4 persons of the facility's allowed maximum capacity, unless otherwise modified in compliance with Section 9.6.B.5 –Adjustments to Parking Requirements                                                                                                                                                    |                                                                        |
| • Golf driving range, batting cage                                               | 1 space/tee, cage, or similar; and<br>1 space/employee at maximum shift                                                                                                                                                                                                                                                 | 1 space/33 vehicle parking spaces                                      |
| • Swimming pools                                                                 | 14 spaces/1,000 sq ft of water surface area                                                                                                                                                                                                                                                                             | 1 space/33 vehicle parking spaces                                      |
| <b>Industry, Manufacturing, and Processing Uses</b>                              |                                                                                                                                                                                                                                                                                                                         |                                                                        |
| Light Manufacturing<br>All uses listed under "Manufacturing, Light" in Table 9-2 | 1.85 spaces/1,000 sq ft GFA;<br>4 spaces/1,000 sq ft GFA of office space, sales, or similar use where those uses exceed 10% GFA; and<br>1 space/1 facility vehicle<br>Where multiple tenants and or uses occupy the same building, the parking shall be calculated based upon the floor area used by each tenant or use | 1 space/33 vehicle parking spaces                                      |



## Southwest Industrial Park Specific Plan

Slover Central Manufacturing District

**Table 9-7 – Parking Requirements by Land Use (continued)**

| <b>Land Use</b>                                                                           | <b>Vehicle Spaces (Minimum #)<br/>GFA—Gross Floor Area</b>                                                                                                                                                                                                                                                                                                              | <b>Bicycle Spaces<br/>Minimum #</b>  |
|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| General Manufacturing<br>All uses listed under<br>“General Manufacturing” in<br>Table 9-2 | 1.85 spaces/1,000 sq ft GFA;<br>4 spaces/1,000 sq ft GFA of office space, sales, or similar use<br>where those uses exceed 10% GFA; and<br>1 space/1 facility vehicle<br>Where multiple tenants and or uses occupy the same building,<br>the parking shall be calculated based upon the floor area used<br>by each tenant or use.                                       | 1 space/50 vehicle<br>parking spaces |
| Research and Development                                                                  | 2 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                                                                                | 1 space/33 vehicle<br>parking spaces |
| <b>Residential Uses</b>                                                                   |                                                                                                                                                                                                                                                                                                                                                                         |                                      |
| Caretaker Housing                                                                         | 2 spaces in an enclosed garage                                                                                                                                                                                                                                                                                                                                          | None                                 |
| <b>Retail Uses</b>                                                                        |                                                                                                                                                                                                                                                                                                                                                                         |                                      |
| Factory/Warehouse<br>Outlet Store                                                         | 5 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                                                                                | None                                 |
| Retail Sales, General                                                                     |                                                                                                                                                                                                                                                                                                                                                                         |                                      |
| Not in shopping<br>center or<br>factory/warehouse<br>outlet mall)                         | 4 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                                                                                | 1 space/33 vehicle<br>parking spaces |
| Shopping Center                                                                           | 5 spaces/1,000 sq ft GFA for the initial 10,000 sq ft; and<br>4 spaces/1,000 sq ft GFA for over 10,000 sq ft                                                                                                                                                                                                                                                            | 1 space/33 vehicle<br>parking spaces |
| <b>Service Uses</b>                                                                       |                                                                                                                                                                                                                                                                                                                                                                         |                                      |
| Animal Kennel<br>Services                                                                 | 4 spaces/1,000 sq ft GFA; and<br>1.25 spaces/1,000 sq ft of boarding area                                                                                                                                                                                                                                                                                               | None                                 |
| Industrial Repair                                                                         | 2 spaces/1,000 sq ft GFA for the initial 40,000 sq ft<br>1.3 spaces/1,000 sq ft additional GFA greater than 40,000 sq ft<br>4 spaces/1,000 sq ft GFA of office space, where those uses<br>exceed 10% of GFA<br><b>OR</b><br>1 space for each employee on the maximum shift as<br>determined by Director of Community Development                                        | None                                 |
| Mini-Storage Facility                                                                     | 1.75 spaces/100 units; and<br>1 space/employee                                                                                                                                                                                                                                                                                                                          | None                                 |
| <b>Motor Vehicle</b>                                                                      |                                                                                                                                                                                                                                                                                                                                                                         |                                      |
| • Service Stations                                                                        |                                                                                                                                                                                                                                                                                                                                                                         |                                      |
| With<br>convenience<br>market                                                             | 5 spaces/1,000 sq ft GFA; and 5 spaces/service bay                                                                                                                                                                                                                                                                                                                      | 1 space/10 vehicle<br>parking spaces |
| Without<br>convenience<br>market                                                          | 3.3 spaces/1,000 sq ft or 5 spaces/service bay, whichever is<br>more; minimum of 4 spaces                                                                                                                                                                                                                                                                               | None                                 |
| • Vehicle Auctions                                                                        | <b>Automobile or boar sales (new/used/auction)</b><br>1 space/300 sq ft of indoor display, sales, or service area;<br>1 space/2,500 sq ft of outdoor sales display area; and<br>1 space/employee<br><b>Truck sales/services (new/used/auction)</b><br>1 space/250 sq ft of sales area;<br>1 space/3,000 sq ft of outdoor sales or display area; and<br>1 space/employee | None                                 |
| <b>Distribution, Wholesaling and Warehousing Uses</b>                                     |                                                                                                                                                                                                                                                                                                                                                                         |                                      |
| Industrial Equipment,<br>Materials, and                                                   | 2 spaces/3 employees on maximum working shift;<br>1 space for visitor parking on the basis of each 10 employees                                                                                                                                                                                                                                                         | None                                 |

**Table 9-7 – Parking Requirements by Land Use (continued)**

| <i>Land Use</i>                           | <i>Vehicle Spaces (Minimum #)<br/>GFA—Gross Floor Area</i>                                                                                  | <i>Bicycle Spaces<br/>Minimum #</i> |
|-------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| Supplies, Truck,<br>Truck Trailer Storage | on maximum working shift, or a minimum of 3 spaces,<br>whichever is greater; and<br>1 truck/trailer storage space/ every truck to be stored |                                     |

**Table 9-7 – Parking Requirements by Land Use**

| <i>Land Use</i>                                                | <i>Vehicle Spaces (Minimum #)<br/>GFA—Gross Floor Area</i>                                                                                                                                                                                                                                                                                                                                                                                       | <i>Bicycle Spaces<br/>Minimum #</i> |
|----------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| Logistics and<br>Distribution Facilities<br>(High Cube)        | <b>Vehicle Parking:</b><br>1 space/1,000 sq ft GFA for the first 20,000 sq ft;<br>1 space/2,000 sq ft for the second 20,000 sq ft;<br>1 space/5,000 sq ft for that portion over 40,000 sq ft.<br>No add'l spaces if office area less than 10% GFA.<br>Office space rate if office area over 10% GFA.<br><b>Truck and Trailer Parking:</b><br>1 oversized truck space/5,000 sq ft GFA*<br>*Truck docks shall not be included in this calculation. | None                                |
| Petroleum/Hazardous<br>Material Storage                        | 1 space/employee on maximum shift                                                                                                                                                                                                                                                                                                                                                                                                                | None                                |
| Warehousing<br>Facilities                                      | 2 spaces/3 employees on maximum working shift;<br>No additional spaces if office area is less than 10% GFA.<br>Office space rate if office area over 10% GFA.<br>Space to accommodate all trucks and other vehicles used in<br>connection with use                                                                                                                                                                                               | None                                |
| <b>Transportation, Communications, and Infrastructure Uses</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                     |
| Antennas                                                       | 1 space                                                                                                                                                                                                                                                                                                                                                                                                                                          | None                                |
| Recycling Facilities                                           | 1 space/employee;<br>1 space/facility vehicle; and<br>Sufficient spaces to accommodate all visitors to<br>establishment at any one time under normal operating<br>conditions                                                                                                                                                                                                                                                                     | None                                |
| <b>Other Uses</b>                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                     |
| Outdoor Display &<br>Sales                                     | 1 space/1,000 sq ft of outdoor merchandise areas                                                                                                                                                                                                                                                                                                                                                                                                 | None                                |
| Public Facilities                                              | Per Public Agency                                                                                                                                                                                                                                                                                                                                                                                                                                |                                     |
| Temporary Uses                                                 | Per Temporary Use Permit                                                                                                                                                                                                                                                                                                                                                                                                                         |                                     |

*Note: Sources consulted to compile the table entries include the Municipal Code; The Dimensions of Parking, ULI and National Parking Association, 5th Edition, 2010; Recommended Zoning Ordinance Provisions, National Parking Association, December 2006; and Parking Standards, APA Planning Advisory Service Report 510/511; November 2002.*

**D. Required Number of Loading Spaces**

Each land use shall provide the number of off-street loading spaces indicated in Table 9-8 – Loading Space Requirements by Land Use. Requirements for uses not specifically listed shall be determined by the Director of Community Development based upon the requirements for comparable uses and upon the particular characteristics of the proposed use. For other standards (e.g., size of loading spaces, location, turning radius, etc.), refer to Article XI (Off-Street Parking and Loading Standards), Division 4 (Loading Area Regulations), in Municipal Code Chapter 30 (Zoning and Development Code)

| Table 9-8 – Loading Space Requirements by Land Use                           |                                                                                                                                                                                         |                 |
|------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| Land Use                                                                     | Loading Spaces (Minimum #)                                                                                                                                                              | Type (1)        |
| Entertainment, Recreation and Public Assembly Uses                           |                                                                                                                                                                                         |                 |
| Public Assembly Facilities                                                   | 1 space; and<br>Additional spaces as required by design review                                                                                                                          | Van             |
| Recreational Facilities                                                      | 0 - 29,999 sq ft: 1 space<br>30,000 - 99,999 sq ft: 2 spaces<br>Over 100,000 sq ft: 3 spaces                                                                                            | Truck           |
| Industry, Manufacturing, and Processing Uses                                 |                                                                                                                                                                                         |                 |
| All uses listed under “Light Manufacturing” in Table 9-2                     | 5,000 - 30,000 sq ft: 1 space; and<br>1 additional space for each additional 30,000 sq ft                                                                                               | Truck           |
| All uses listed under “General Manufacturing” in Table 9-2                   |                                                                                                                                                                                         |                 |
| Research and Development                                                     |                                                                                                                                                                                         |                 |
| Retail Uses                                                                  |                                                                                                                                                                                         |                 |
| Retail Sales, General and Factory/Warehouse Outlet Store                     | Up to 10,000 sq ft: 1 space                                                                                                                                                             | Truck           |
|                                                                              | 10,001 - 30,000 sq ft: 1 space<br>30,001 - 90,000 sq ft: 2 spaces<br>Over 90,000 sq ft: 2 spaces; and 1 additional space for each additional 50,000 sq ft over the initial 90,000 sq ft | Tractor Trailer |
| Service Uses                                                                 |                                                                                                                                                                                         |                 |
| All uses listed under “Service Uses” in Table 9-2; except for the following: | Up to 10,000 sq ft: 1 space                                                                                                                                                             | Truck           |
|                                                                              | 10,001 - 30,000 sq ft: 1 space<br>30,001 - 90,000 sq ft: 2 spaces<br>Over 90,000 sq ft: 2 spaces; and 1 additional space for each additional 50,000 sq ft over the initial 90,000 sq ft | Tractor Trailer |

**Table 9-8 – Loading Space Requirements by Land Use (continued)**

| <b>Land Use</b>                                       | <b>Loading Spaces (Minimum #)</b>                                                         | <b>Type (1)</b> |
|-------------------------------------------------------|-------------------------------------------------------------------------------------------|-----------------|
| Industrial Repair                                     | 5,000 - 30,000 sq ft: 1 space; and<br>1 additional space for each additional 30,000 sq ft | Truck           |
| Motor Vehicle                                         |                                                                                           |                 |
| • Service Stations                                    | 1 space                                                                                   | Tractor Trailer |
| <b>Distribution, Wholesaling and Warehousing Uses</b> |                                                                                           |                 |
| Warehousing Facilities                                | 5,000 - 30,000 sq ft: 1 space; and<br>1 additional space for each additional 30,000 sq ft | Tractor Trailer |

**Notes:**

- (1) A van loading space shall be a minimum of 12 ft wide by 19 ft long with a minimum 10 ft overhead clearance.  
A truck loading space shall be a minimum of 12 ft wide by 45 ft long with a minimum 14 ft overhead clearance.  
A tractor trailer loading space shall be a minimum of 12 ft wide by 70 ft long with a minimum 14 ft overhead clearance.

**E. Landscaping Standards for Parking Areas**

Within any parking area, one tree shall be planted for every five single-row parking stalls or 10 double-row parking stalls. Eighty percent of these shall be 15 gallons in size and the remaining 20 percent shall be 24-inch box or larger in size. If for some reason the contractor is unable to distribute trees in the interior of the parking area in compliance with these standards, the Director of Community Development may approve the placement of no more than 40 percent of the trees within the perimeter of the parking area. Planters shall not have a dimension less than four feet, excluding the thickness of the curbing. These requirements may be reduced for industrial parking areas that are screened from public view.

1. Parking areas shall contain a minimum landscape area equivalent to 30 percent of the total required 15 percent landscaping for the total site area.
2. Parking area perimeter landscaping.
  - a. Parking areas for nonresidential uses abutting or adjacent to residentially zoned property shall provide a landscape strip that is a minimum of 10 feet in width, excluding overhang, curb, and walkways, between the parking area and the common property line bordering the residentially zoned property. Parking areas shall be screened from the residentially zoned property by a solid decorative masonry wall that is a minimum of six feet in height.
  - b. Parking areas for nonresidential uses abutting or adjacent to non-residentially zoned property or a street shall install a landscape strip that is a minimum of five feet in width, excluding overhang, curb, and walkways, between the parking area and the common property line or the parking area and the street right-of-way. This requirement may be reduced or modified if a joint access agreement exists that is satisfactory to the Director of Community Development. Parking areas shall be screened from streets through combinations of plant materials, earth berms, raised planters, grade separations, or low walls. Slopes shall not exceed three to one or exceed 36 inches in height measured from the parking lot surface.
  - c. Plant materials, walls, or structures within a traffic sight area shall not block sight lines from driveways to streets and shall not exceed 36 inches in height.

- d. The minimum width of a landscape finger shall be five (5) feet.
  - e. End of aisle spaces adjacent to landscape finger shall be two feet wider for step out area.
3. Parking area interior landscaping.
- a. Tree number and location. One tree shall be provided for each four parking spaces and shall be evenly spaced throughout the interior parking area at a rate of one tree for every eight parking spaces. See Exhibit 7-4 – Parking Lot Landscaping. The required number of trees in the interior area shall not include trees required around the parking area perimeter. Trees are not required for tractor-trailer parking. A minimum of one cluster of trees shall be provided for each 100 feet of a row or double row of parking spaces. Trees shall be located in planters that are bounded on at least two sides by parking area paving. Planters shall have a minimum exterior dimension of five feet.

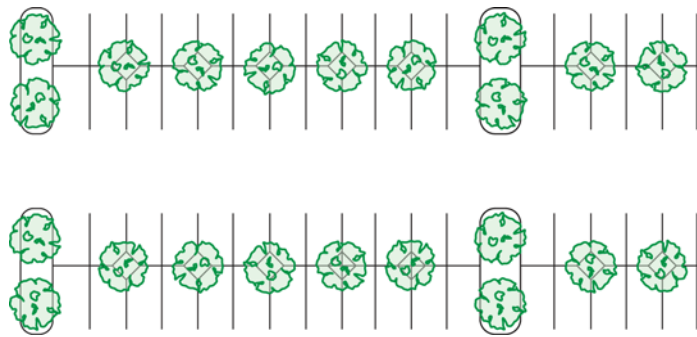


Exhibit 9-4 – Parking Lot Landscaping

- b. Tree size. All trees within the parking area shall be a minimum 24-inch box container at time of planting.
- c. Landscape protection. Landscaping shall be protected by concrete curbs of at least six inches in height. An end-of-aisle planter shall be provided at the ends of all parking aisles. Finger aisle planters shall be a minimum of nine feet wide and end-of-aisle planters shall be a minimum of seven feet wide, as measured from the inside of the curb. The parking space side of finger and end-of-aisle planters shall have a 24-inch wide concrete surface measured from the face of the curb. Planters shall be landscaped with a mixture of trees, shrubs, and ground cover. Planting areas shall have round corners instead of 90 degree corners and shall be shaped to allow vehicle movements. The Director of Community Development may approve alternative barriers designed to protect landscaped areas from vehicle damage. Wheel stops may be placed to allow for two feet of vehicle overhang area within the dimension of the parking space. To increase the parking lot landscaped area, a maximum of two feet of the parking stall depth may be landscaped with low-growth, hardy materials in-lieu of paving, allowing a bumper overhang while maintaining the required parking dimensions. However, the overhang area shall not be counted as part of the minimum landscape area required by paragraph (1)

above, and when adjacent to a required landscaping strip shall be in addition to the minimum required width. Fixtures (e.g., lights, sprinklers) that are higher than the curb are prohibited within a bumper overhang area. Curbing that creates a bumper overhang barrier shall not exceed a height of five inches.

- d. Parking areas with more than 100 spaces shall provide an appropriate entry feature consisting of a concentration of landscape elements, including trees, flowering plants, enhanced paving, and project identification.
4. Parking structures. A landscaping strip 10 feet wide shall be provided on all sides of a parking structure. One tree shall be provided for each 20 to 40 feet of perimeter of the structure, based on species selected. These trees shall be distributed evenly throughout the subject landscape area.

## 9.7 Sign Standards

### A. Applicability

This section contains standards and guidelines for signage to ensure that signs are consistent with the overall quality and character of anticipated new development. Regulations identify permitted sign types; provide standards for number of signs, size, and location; and provide design guidelines for color, materials, and illumination. Please refer to the Fontana Municipal Code for all sign-related information or regulations not specifically addressed in this section.

### B. Standards and Guidelines

1. Standards. The following standards shall apply to all signs, regardless of type:
  - a. Sign types not listed in this Section are not permitted.
  - b. Linear Frontage Ratio. For each establishment, one and one-half (1 ½) square feet of total sign area shall be allowed for each linear foot of building frontage ("Linear Frontage Ratio"). Unless otherwise noted, all signs (including temporary signs) shall count toward the total sign area permitted based on the Linear Frontage Ratio. For multi-tenant buildings, each establishment shall be calculated individually. For corner establishments, each facade shall be calculated individually. Permitted sign area based on the linear frontage of one establishment or facade shall not be placed on another establishment or facade.
  - c. Signs shall not be animated.
  - d. Commercial messages that identify, advertise, or attract attention to a business, product, service, or event or activity sold, existing, or offered elsewhere than upon the same property where the sign is displayed are expressly prohibited.
  - e. In the event of a conflict between this Section and any other City regulation, the provisions of this Section shall apply.
  - f. All issues not specifically addressed herein (e.g., signage in the public right-of-way, exempt signs, permit processing, etc.) shall be addressed pursuant to the Fontana Municipal Code.
2. Guidelines. The following guidelines shall apply to all signs, regardless of type.
  - a. Design Compatibility
    - Provide signage that is compatible with the building architecture and coordinate sign materials and colors with the building facade/storefront design.
    - Place signs in accordance with facade rhythm, scale, and proportion.
    - Ensure that signs associated with multi-tenant buildings are complementary to one another. A consistent location for tenant identification signs is recommended.



b. Location

- Signs shall be placed at or near the public entrance to a building or main parking area to indicate the most direct access to the business.
- Signs shall not be located so that they cover or interrupt the architectural details or ornamentation of a building's facade.
- Signs shall not project above the edge of the rooflines and shall not obstruct windows and/or doorways.

c. Sign Legibility

- Avoid hard-to-read, intricate typefaces. Typefaces that are difficult to read reduce the sign's ability to communicate.
- Avoid spacing letters and words too close together. Lettering shall not occupy more than 75 percent of the sign face.
- Limit the number of lettering styles in order to increase legibility. Signs shall be limited to no more than two styles for small signs (generally up to 10 square feet) and three styles for larger signs.
- Use significant contrast through incorporating light colored letters and a darker, contrasting background to provide the most visible and best-looking image.
- Incorporate business identity symbols and logos.
- Logo means any symbol or any combination thereof adopted and used by an individual or corporation to identify goods made or sold or services rendered by an individual or corporation and to distinguish them from goods made or sold or services rendered by others and that is nationally or State of California registered.

d. Color and Materials

- Bright day-glo (fluorescent) colors shall be avoided as they are distracting and do not blend well with other background colors.
- Sign colors shall relate to and complement the materials or color scheme of the buildings, including accent and trim colors.
- Sign materials shall be selected with consideration for the architectural design of the building's façade and also contribute to the legibility of the sign.
- Construct signs of durable, high-quality materials.
- Wood, paper, and cloth signs, and painted wall signs are prohibited.

e. Illumination

- Individually illuminated letters, either internally illuminated or back-lighted solid letters (reverse channel), are a preferred alternative to internally illuminated plastic-faced cabinet signs.
- Signs shall be comprised of individual letters.
- The use of backlit, individually cut letter signs is strongly encouraged for all types of business and signs, including monument-type signs.
- Whenever indirect lighting fixtures are used, care shall be taken to properly shield the light source.

f. Electrical Raceways and Conduits

- Electrical transformer boxes and raceways shall be concealed from public view.
- All exposed conduit and junction boxes shall be appropriately concealed from public view.

C. **Sign Types**

For the purposes of this plan, Table 9-9 – Sign Types indicates the signs that are allowed in the Slover Central Manufacturing District.

| Table 9-9 – Sign Types |                                                                                                              |
|------------------------|--------------------------------------------------------------------------------------------------------------|
| 1                      | <b>Grand Wall Sign</b><br>Non-residential uses with unfenestrated wall areas of 2,000 square feet or greater |
| 2                      | <b>Wall Sign</b><br>Non-residential uses with a dedicated ground floor entrance                              |
| 3                      | <b>Projecting Sign</b><br>Non-residential uses with a dedicated ground floor entrance                        |
| 5                      | <b>Awning Valance Sign</b><br>Non-residential uses with a dedicated ground floor entrance                    |
| 6                      | <b>Awning Side Sign</b><br>Non-residential uses with a dedicated ground floor entrance                       |
| 7                      | <b>Canopy Fascia Sign</b><br>Non-residential uses with a dedicated ground floor entrance                     |
| 8                      | <b>Under-Awning or Under-Canopy Sign</b><br>Non-residential uses with a dedicated ground floor entrance      |
| 9                      | <b>Recessed Entry Sign</b><br>Non-residential uses with a dedicated ground floor entrance                    |
| 10                     | <b>Window Sign</b><br>Non-residential uses with a dedicated ground floor entrance                            |
| 11                     | <b>Temporary Window Sign</b><br>Non-residential uses with a dedicated ground floor entrance                  |
| 12                     | <b>Temporary Wall Sign</b><br>Non-residential uses with a dedicated ground floor entrance                    |
| 13                     | <b>Monument Sign</b><br>Any building with continuous linear street frontage of 200 feet or greater           |
| 14                     | <b>Directional Sign</b><br>Each vehicle entrance                                                             |
| 15                     | <b>Accessory Sign</b><br>Identified specific uses                                                            |

## **D. Sign Type Standards and Guidelines**

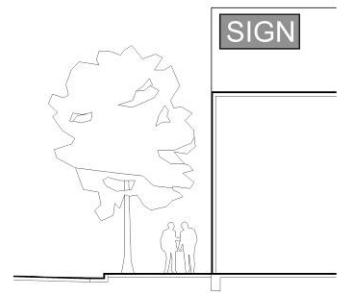
This section provides Standards and Guidelines for each Sign Type.

### **1. Grand Wall Sign**

Grand Wall Signs are large signs located on, and parallel to, large unfenestrated building wall areas.

#### **a. Standards**

- i. A Grand Wall Sign shall only be located on unfenestrated wall areas of 2,000 square feet in size or greater.
- ii. Only one (1) Grand Wall Sign shall be permitted per establishment.
- iii. The Grand Wall Sign area shall not count towards the total sign area permitted based on the Linear Frontage Ratio.
- iv. A Grand Wall Sign shall not exceed 1,000 square feet or 25 percent of the total wall area, whichever is less.
- v. Grand Wall Signs shall project no more than one (1) foot from the façade of the building.



1) Grand Wall Sign.

#### **b. Commercial Guidelines**

- i. Materials used in Grand Wall Signs shall be wood, ceramic, metal, or paint only.
- ii. Grand Wall Signs shall be illuminated by external illumination only.

#### **c. Industrial Guidelines**

- i. Materials used in Grand Wall Signs shall be ceramic or metal.
- ii. Grand Wall Signs shall be illuminated by external illumination only.

### **2. Wall Sign**

Wall Signs are signs that are located on, and parallel to, a building wall. Business Identification Wall Signs are signs that announce the name of a business within a building and Building Identification Wall Signs are signs that announce the name of a building. Both are located on, and parallel to, a building wall.

a. Standards

- i. Wall Signs shall be located below the second floor and within the middle 50 percent of the building or tenant frontage measured from lease line to lease line. Building Identification Wall Signs shall be located only on the frieze, cornice, or fascia area of storefront level; frieze, cornice, fascia, parapet of the uppermost floor; or above the entrance to main building lobby.
- ii. No Wall Sign shall exceed 150 square feet in size. Building Identification Wall Signs shall be no taller than 24 inches in height.
- iii. Wall Signs shall count towards the total sign area permitted based on the Linear Frontage Ratio, except that the area of Building Identification Wall Signs shall not count towards the total sign area permitted based on the Linear Frontage Ratio.
- iv. Wall Signs shall project no more than one (1) foot from the façade of the building.



2) Building Identification Wall Sign.



2) Business Identification Wall Sign.

b. Commercial Guidelines

- i. Materials used in wall signs shall be wood, ceramic, and/or metal. Wall signs may also be inscribed into the façade of the building. Building Identification Wall Signs shall be inscribed into the façade or constructed of individual metal letters.
- ii. Wall Signs shall be illuminated by external illumination or halo illumination only.
- iii. Where individual letters are used, letters shall be three-dimensional, created by raised letter forms mounted to the building façade or sign panel, or by incised openings cut out from the sign panel.
- iv. New wall signs for individual businesses in a shopping center shall be placed consistent with the location of signs for other businesses in the center. This will establish visual continuity among storefronts and create a unified appearance for the center.
- v. When signs that are attached to a wall are removed, holes and other disfigurements of the wall's surface shall be patched and painted to match surrounding areas.

c. Industrial Guidelines

- i. Materials used in wall signs should be ceramic, and/or metal. Wall signs may also be inscribed into the façade of the building. Building Identification Wall Signs should be inscribed into the façade or constructed of individual metal letters.
- ii. Wall signs shall be illuminated by external illumination, exposed neon tube illumination, exposed incandescent bulb illumination, or halo illumination only. Building Identification Wall Signs shall be illuminated by external illumination or halo illumination only.
- iii. Where individual letters are used, letters shall be three-dimensional, created by raised letter forms mounted to the building façade or sign panel, or by incised openings cut out from the sign panel.
- iv. When signs that are attached to a wall are removed, holes and other disfigurements of the wall's surface shall be patched and painted to match surrounding areas.

**3. Projecting Sign**

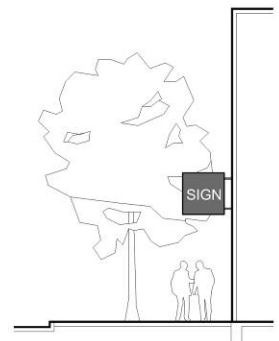
Projecting Signs are signs that are oriented perpendicularly to the building façade and are either (1) suspended under a bracket, armature, or other mounting device or (2) are cantilevered (i.e., structurally affixed to the building).

a. Standards

- i. Projecting Signs shall only be mounted on the wall area below the second floor.
- ii. No Projecting Sign shall exceed 16 square feet in size.
- iii. Projecting Signs shall project no more than four feet from the façade of the building.
- iv. No portion of a Projecting Sign shall be lower than eight feet above the level of the walkway over which it projects.

b. Commercial and Industrial Guidelines

- i. Projecting Signs that are suspended under a bracket, armature, or other mounting device shall be metal only and shall be illuminated by external illumination only.
- ii. Projecting Signs that are cantilevered signs shall be metal and paint materials only and shall be illuminated by external illumination or halo illumination only.



3) Cantilevered Projecting Sign.



3) Suspended Projecting Sign.

- iii. Sign supports and brackets shall be compatible with the design and scale of the sign and the architectural design of the building.

#### **4. Awning Valance Sign**

Awning Valance Signs are signs applied to the awning valance and are contained completely within the valance.

- a. Standards
  - i. Lettering for Awning Valance Signs shall include one (1) line of lettering not to exceed two-thirds (2/3) the height of the valance or 12 inches, whichever is less.
  - ii. Awning Valance Signs shall project no farther from the building than its associated awning.
  - iii. No portion of an Awning Valance Sign shall be less than eight feet above the level of the walkway over which it projects.
- b. Commercial and Industrial Guidelines
  - i. Awning Valance Signs shall consist of metal, or vinyl or paint applied directly to the awning.
  - ii. Awning Valance Signs shall be illuminated by external illumination only.
  - iii. The shape, design, and color of awnings shall be carefully designed to coordinate with, and not dominate, the architectural style of the building. Where multiple awnings are used on the building, the design and color of the sign awnings shall be consistent with all other awnings.
  - iv. The use of temporary signs/letters on awnings is not allowed. Only permanent signs that are an integral part of the awning or canopy shall be used.
  - v. The use of adhesive/press on lettering is not allowed. Awning signs shall be painted directly on the canvas awning.
  - vi. To avoid having to replace awnings or paint out previous tenant signs when a new tenant moves in to a building, the use of replaceable valances shall be considered.



4) Awning Valance Sign.

## 5. *Awning Side Sign*

Awning Side Signs are signs applied to the side panel of an awning.

- a. Standards
  - i. The area of Awning Side Signs shall not count towards the total sign area permitted based on the Linear Frontage Ratio.
  - ii. Lettering for Awning Side Signs shall not exceed 12 inches in height with total sign area not to exceed 20 percent of the area of the awning side area.
  - iii. Awning Side Signs shall project no farther from the building than its associated awning.
  - iv. No portion of an Awning Side Sign shall be less than eight feet above the level of the walkway over which it projects.
- b. Commercial and Industrial Guidelines
  - i. Awning Side Signs shall consist of vinyl or paint applied directly to the awning.
  - ii. Awning Side Signs shall be illuminated by external illumination only.
  - iii. The shape, design, and color of awnings shall be carefully designed to coordinate with, and not dominate, the architectural style of the building. Where multiple awnings are used on the building, the design and color of the sign awnings shall be consistent with all other awnings.
  - iv. The use of temporary signs/letters on awnings is not allowed. Only permanent signs that are an integral part of the awning or canopy shall be used.
  - v. The use of adhesive/press on lettering is not allowed. Awning signs shall be painted directly on the canvas awning.
  - vi. To avoid having to replace awnings or paint out previous tenant signs when a new tenant moves in to a building, the use of replaceable valances shall be considered.



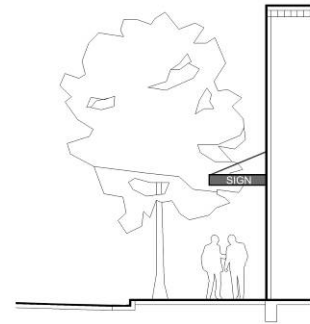
5) Awning Side Sign.



## 6. *Canopy Fascia Sign*

Canopy Fascia Signs are signs that are mounted to the front or side fascia of a canopy and contained completely within that fascia.

- a. Standards
  - i. The height of Canopy Fascia Signs shall not exceed two-thirds ( $2/3$ ) the height of the fascia or 12 inches, whichever is less.
  - ii. The width of Canopy Fascia Signs shall not exceed two-thirds ( $2/3$ ) of the canopy width.
  - iii. Canopy Fascia Signs shall project no farther from the building than its associated canopy.
  - iv. No portion of a Canopy Fascia Sign shall be less than eight feet above the level of the walkway over which it projects.
  - v. Canopy Fascia Signs shall consist of only one (1) line of lettering articulated as individual letters mounted directly to the canopy.
- b. Commercial and Industrial Guidelines
  - i. Materials used in Canopy Fascia Signs shall be metal and paint only.
  - ii. Canopy Fascia Signs shall be illuminated by external illumination only.

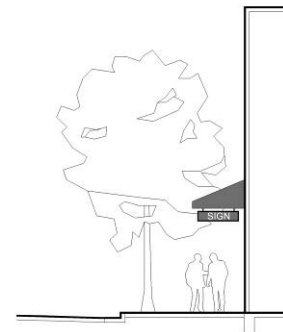


6) Canopy Fascia Sign.

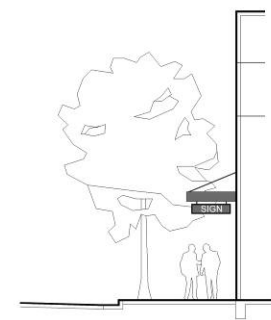
## 7. *Under-Awning or Under-Canopy Sign*

Under-Awning or Under-Canopy Signs are signs that are suspended under an awning or canopy, perpendicular to the building facade.

- a. Standards
  - i. Under-Awning or Under-Canopy Signs shall be located adjacent to a public entrance.
  - ii. No more than one (1) Under-Awning or Under-Canopy Sign shall be permitted per establishment per façade.
  - iii. The area of Under-Awning or Under-Canopy Signs shall not count towards the total sign area permitted based on the Linear Frontage Ratio.
  - iv. Under-Awning or Under-Canopy Signs shall not exceed three (3) square feet in area.



7) Under-Awning Sign.

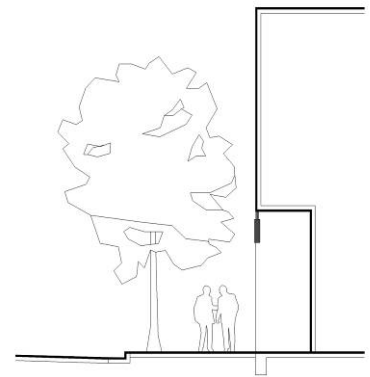


7) Under-Canopy Sign.

- v. Under-Awning or Under-Canopy Signs shall project no farther from the building than its associated awning or canopy.
- vi. No portion of an Under-Awning or Under-Canopy Sign shall be less than eight feet above the level of the walkway over which it projects.
- b. Commercial Guidelines
  - i. Materials used in Under-Awning or Under-Canopy Signs shall be wood, metal, and paint only.
  - ii. Under-Awning or Under-Canopy Signs shall be illuminated by external illumination only.
- c. Industrial Guidelines
  - i. Materials used in Under-Awning or Under-Canopy Signs shall be metal and paint only.
  - ii. Under-Awning or Under-Canopy Signs shall be illuminated by external illumination only.

## 8. ***Recessed Entry Sign***

Recessed Entry Signs are signs that are oriented parallel to the building façade and that are suspended over a recessed entry.



8) Recessed Entry Sign- Section View.

- a. Standards
  - i. No Recessed Entry Sign shall exceed twenty (20) square feet in size.
  - ii. Recessed Entry Signs shall not project beyond the façade of the building.
  - iii. No portion of a Recessed Entry Sign shall be lower than eight feet above the level of the walkway.
- b. Commercial Guidelines
  - i. Materials used in Recessed Entry Signs shall be wood, metal, and paint only.
  - ii. Recessed Entry Signs shall be illuminated by external illumination only.



8) Recessed Entry Sign- Elevation View.

c. Industrial Guidelines

- i. Materials used in Recessed Entry Signs shall be metal and paint only.
- ii. Recessed Entry Signs shall be illuminated by external illumination only.

**9. Window Sign**

Window Signs are signs that are applied directly to a window or mounted or suspended directly behind a window.

a. Standards

- i. Window Signs shall be permitted on windows below the second floor level only. A Window Sign that only identifies a building shall be located on a transom window above a primary entrance, or the glazed area of primary door.
- ii. Window signs shall count towards total sign area permitted based on the Linear Frontage Ratio, except that the area of a Window Sign that only identifies a building shall not count towards the total sign area permitted based on the Linear Frontage Ratio. One (1) Window Sign that only identifies a building shall be permitted per building per street-facing façade.
- iii. No more than 25 percent of any individual window area shall be covered or otherwise occupied by signage.
- iv. The letter height of each Window Sign shall not exceed 12 inches and shall be taller than four inches.

b. Commercial and Industrial Guidelines

- i. Ground-floor Window Signs shall consist of vinyl or paint applied to the glass, neon mounted or suspended behind the glass, or framed and mounted paper signs. Window Signs that only identify a building shall consist of vinyl or paint applied to the glass only.
- ii. Ground floor Window Signs shall not be illuminated.



g) Window Sign.



g) Building Identification Window Sign.

## 10. Temporary Window Sign

Temporary Window Signs are signs that are applied directly to a window or mounted or suspended directly behind a window and are designed, constructed, and intended for display on private property for a period of not more than 90 consecutive days per year. Examples include “grand opening”, “special sale,” and seasonal signage.

- a. Standards
  - i. Temporary Window Signs shall be located only on ground floor windows on building facades that face a public street or a parking lot.
  - ii. Temporary Window Signs shall not exceed six square feet in size.
  - iii. Temporary Window Signs shall not cause the total amount of the window area covered with signage to exceed 25 percent.
  - iv. Temporary Window Signs that satisfy the above standards and General Standards do not require a permit.



10) Temporary Window Sign.

- b. Commercial and Industrial Guidelines
  - i. Temporary Window Signs shall be constructed of paint applied directly to the glass or framed paper signs placed behind the glass.
  - ii. Temporary Window Signs shall not be illuminated.
  - iii. Temporary Window Signs that satisfy the above guidelines and General Guidelines do not require a permit.

## 11. Temporary Wall Sign

Temporary Wall Signs are signs that are located on, and parallel to, a building wall and are designed, constructed, and intended for display on private property for a period of not more than ninety (90) consecutive days per year. Examples include “grand opening”, “special sale,” and seasonal temporary banner signage.

- a. Standards
  - i. Temporary Wall Signs shall only be mounted on a wall area below the second floor level that faces a public street or a parking lot.
  - ii. A maximum of one (1) Temporary Wall Sign is allowed per establishment.



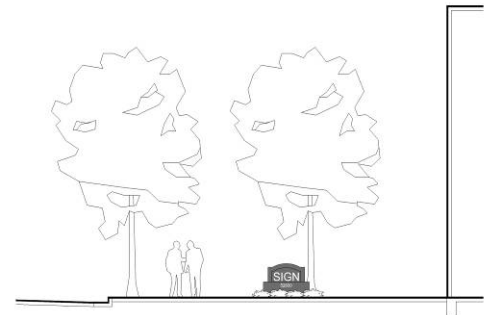
11) Temporary Wall Sign.

- iii. No Temporary Wall Signs shall exceed 32 square feet in area.
  - iv. Temporary Wall Signs shall project no more than one (1) foot from the façade of the building.
- b. Commercial and Industrial Guidelines
- i. Materials used in Temporary Wall Signs shall consist of a flexible vinyl material with grommet holes installed around the edges to accommodate attachment to a building.
  - ii. Temporary Wall Signs shall not be illuminated.

## **12. Monument Sign**

A Monument Sign is a freestanding sign supported by a solid architectural element at its base.

- a. Standards
- i. A maximum of one Monument Sign is allowed per street frontage for single-purpose buildings, multi-tenant buildings or complexes and shopping centers on a -parcel with one or more street frontages of at least 100 feet.
  - ii. A Monument Sign shall not exceed eight feet in length or six feet in height.
  - iii. Monument Signs shall be placed perpendicular or parallel to the street. The base of a Monument Sign shall be set back a minimum of five feet from any public right-of-way or interior property line; a minimum of 10 feet from the edge of a driveway; and a minimum of 50 feet and from any Monument Signs or Pylon Signs on adjoining sites. Monument Signs shall not block sight lines at entry driveways and circulation aisles.
  - iv. The sign copy for a Monument Sign shall only identify the name of the center, complex, or building and the address; however, the name of the primary tenant, if any, may be included in the copy. The minimum letter size allowed shall be six inches. Sign copy shall not be located closer than one half-letter height to the sign edge or other line of copy. Between 5 to 10 percent of the sign area should be dedicated to identification of the street address.
  - v. The area of Monument Signs shall not count towards the total sign area permitted based upon Linear Frontage.
  - vi. Monument Signs shall not project over any on-site driveway or vehicle circulation area.

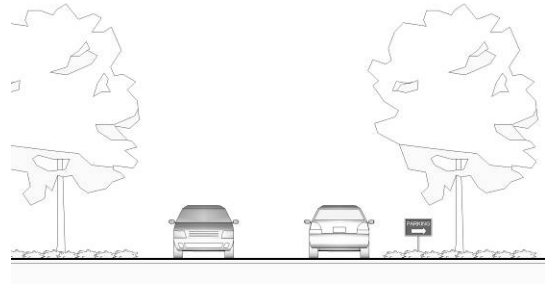


12) Monument Sign.

- vii. Landscaping with automatic irrigation shall be provided at the base of the supporting structure equal to twice the area of one face of the sign or 75 square feet, whichever is greater. For example, 40 sq. ft. of sign area = 80 sq. ft. of landscaped area.
- b. Commercial and Industrial Guidelines
  - i. Monument Signs may be illuminated, however the sign copy should be the only portion of the sign face that is illuminated. The sign background or field shall be opaque with a nonglossy, nonreflective finish.
  - ii. The sign area and height of the sign shall be in proportion to the site and surrounding buildings. Signs shall not be overly large so as to be a dominant feature of the site.
  - iii. Monument Signs shall incorporate architectural elements, details, and articulation as follows:
    - Provide a solid architectural base that supports the sign. The base shall be a minimum of one-foot in height.
    - Provide architectural elements on the sides and top to frame the sign pane(s). Use columns, pilasters, cornices, and similar details to provide design interest.
    - Incorporate materials and colors into the sign support structures to match or be compatible with materials and colors of the development the sign serves so it does not appear out of scale with its adjacent building(s).
    - Keep the overall size of the sign in proportion with the development it serves so it does not appear out of scale with its adjacent building(s).

### 13. Directional Sign

A Directional Sign is an on-premise sign giving directions, instructions, or facility information of an establishment (e.g., parking signs, exit and entrance signs, etc.).



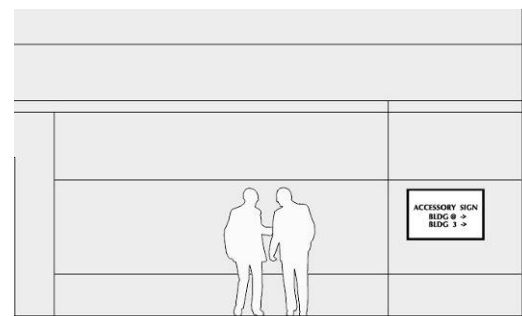
13) Directional Sign.

- a. Standards
  - i. One (1) directional sign for each vehicle entry to a site with a maximum area of three square feet per sign. Maximum sign height shall be four feet. Additional directional signs may be allowed with approval of a Comprehensive Sign Program.
- b. Commercial and Industrial Guidelines
  - i. Directional signs and their supports shall use the same color palette of the proposed building.
  - ii. Directional signs shall be located to maintain sight lines along major circulation routes and shall be illuminated for visual clarity and safety.
  - iii. Directional signs shall be designed with easy-to-read fonts, contrasting colors from the surrounding support panels, and durable materials.
  - iv. Double-sided parking directional signs shall incorporate messaging and direction arrows on both sides of sign.
  - v. Parking directional signage shall be used consistently throughout each individual development.

### 14. Accessory Signs

Accessory Signs are signs that provide incidental information about a project site or a business and its goods or services. For the purposes of this plan, Accessory Signs include:

- Directory Sign. A sign listing the tenants or occupants of a building or building complex.
- Nameplate Sign. A sign indicating the name and/or address of a building or occupant.
- Restaurant Menu Sign. Menus displayed on the exterior premises of a restaurant.



14) Accessory Sign.



- a. Standards
  - i. The area of Accessory Signs shall not count towards the total sign area permitted based upon Linear Frontage.
  - ii. Directory Signs: Limited to a total sign area of 10 square feet.
  - iii. Nameplate Sign: One non-illuminated sign not to exceed one square foot in area.
- b. Commercial and Industrial Guidelines
  - i. Materials used in Accessory Signs shall be wood and metal.
  - ii. Accessory Signs shall be illuminated by internal or external illumination as appropriate.

## **9.8 Public Right-of-Way Streetscape**

This section establishes standards for streetscape landscaping improvements within the public rights-of-way along the major highways, primary highways, and secondary highways as identified in the General Plan, Circulation Master Plan, as well as district gateway/intersection enhancements. The intent of these streetscape improvement concepts and gateway enhancements is to provide a “sense of place” or identity, while interweaving the standards and tree palettes that may be provided by any overriding City Master Street Tree Plan.

### **A. Street Classifications**

Streets within the SCD are classified as follows:

1. Major highways:
  - a. Six-lane major highway – Cherry Avenue.
  - b. Modified six-lane residential adjacent major highway – none within SCD.
  - c. Modified six-lane no median major highways – none within SCD.
  - d. Eight-lane major highways – none within SCD.
2. Primary highways – Beech Avenue and Slover Avenue.
3. Secondary highways – Santa Ana Avenue.
4. Collector streets – Hemlock Avenue, Live Oak Avenue, and Redwood Avenue.

### **B. General Design Guidelines**

The following general design criteria are intended to articulate consistent landscape treatments on similar classifications of corridors and provide a hierarchy of conceptual treatments for district gateway/intersection enhancements.

1. Landscaping should be used to accentuate and frame important view corridors.
2. Landscaping shall employ a common three-tiered approach to design:
  - a. Trees
  - b. Shrubs, vines and tall grass-like materials
  - c. Groundcovers (does not include turf)
3. Landscaping should be consistent and accentuated along arterial corridors and gateway intersections to emphasize district areas.
4. Street trees on major highways and primary highways shall consist of on-center planting of deciduous trees in medians (whenever medians are required) and evergreen trees in

parkways to provide seasonal variations of views during fall and winter months (clearer air and snow-capped peaks).

5. Secondary highways shall provide single species of evergreen trees planted in parkways.
6. Gateway intersection enhancements should incorporate the adjacent property tree species (used in buffer setback) in order to provide background and screening, and be enhanced with accent trees selected for their character and shape.
7. Primary and secondary gateways will include thematic monumentation for district identification and reflect elements of local identity (i.e. river rock, concrete, City logo, etc.).
8. All gateway intersection enhancement shall incorporate decorative paving at corner areas and plant materials that promote the best of water-efficient landscaping.

### **C. Streetscape Concept**

The Streetscape Concept Plan for the entire Specific Plan area is shown on Exhibit 9-5. The plan identifies major, primary, and secondary highways, as well as collector streets and the gateway intersections within the Specific Plan area. Roadway classifications are consistent with the General Plan, Circulation Master Plan.

#### **1. Major Highway Streetscape**

Major highway streetscapes define the image of the City and its districts, while providing arterial linkages within and beyond the City. There are four streetscape concepts for major highways: Six-Lane Major Highway, Modified Six Lane No Median Major Highway, Modified Six Lane Residential Adjacent Major Highway, and Eight-Lane Major Highway. These major highway streetscapes are designed in response to special design needs, right-of-way, and adjacencies. The only major highway within the SCD is Cherry Avenue. Streetscape cross-sections are shown in Exhibit 9-6, 9-7, and 9-8.

#### **2. Primary/Secondary Streetscape**

Primary/Secondary highway streetscapes define the areas within the Specific Plan and its districts, and connect to the major thoroughfares throughout the City. The only primary highway within the SCD is Slover Avenue. The only secondary highway in the SCD is Santa Ana Avenue. Streetscape cross-sections for these areas are shown in Exhibit 9-9.

# Southwest Industrial Park Specific Plan

Slover Central Manufacturing District

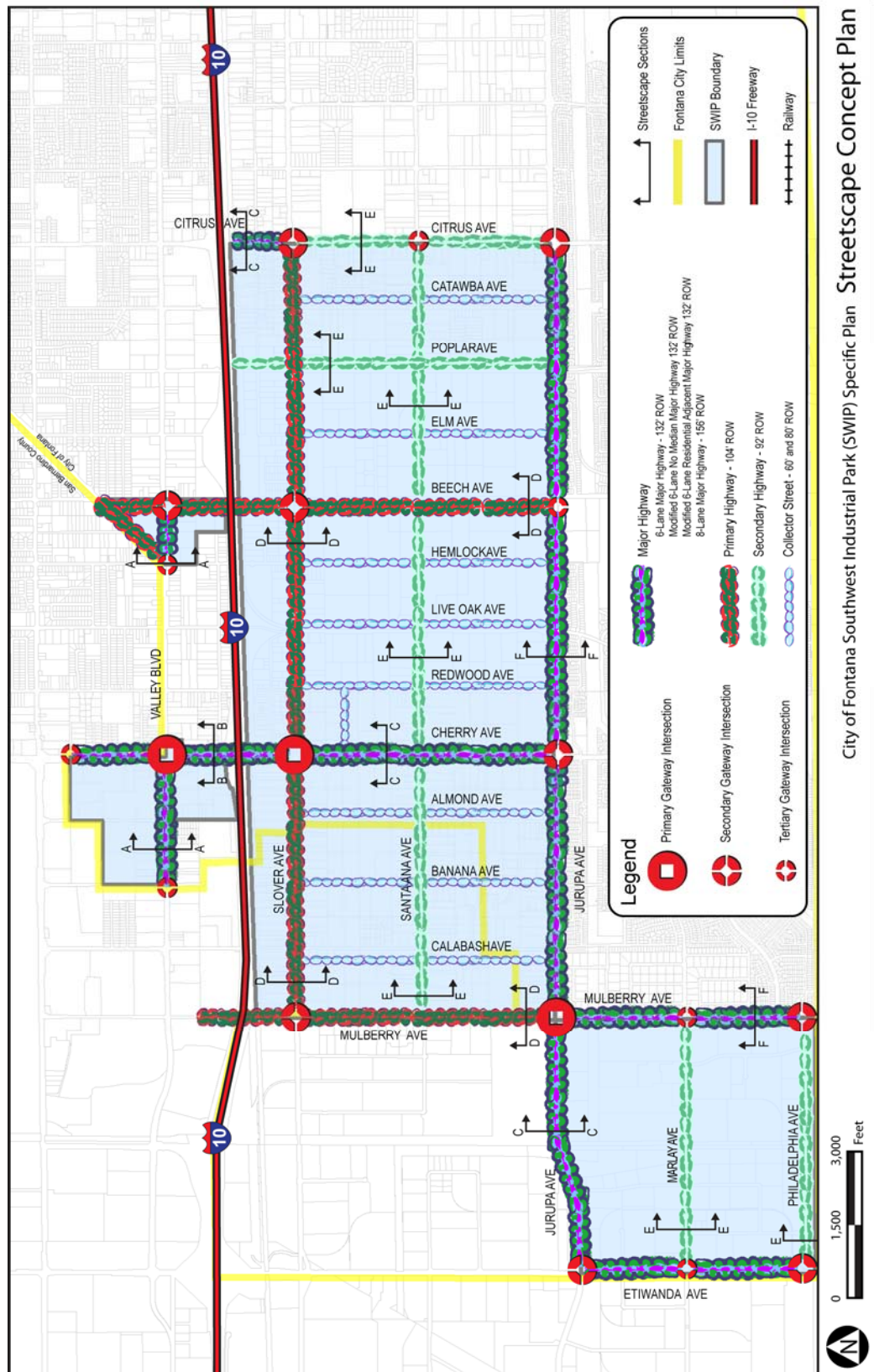


Exhibit 9-5 – Streetscape Concept Plan

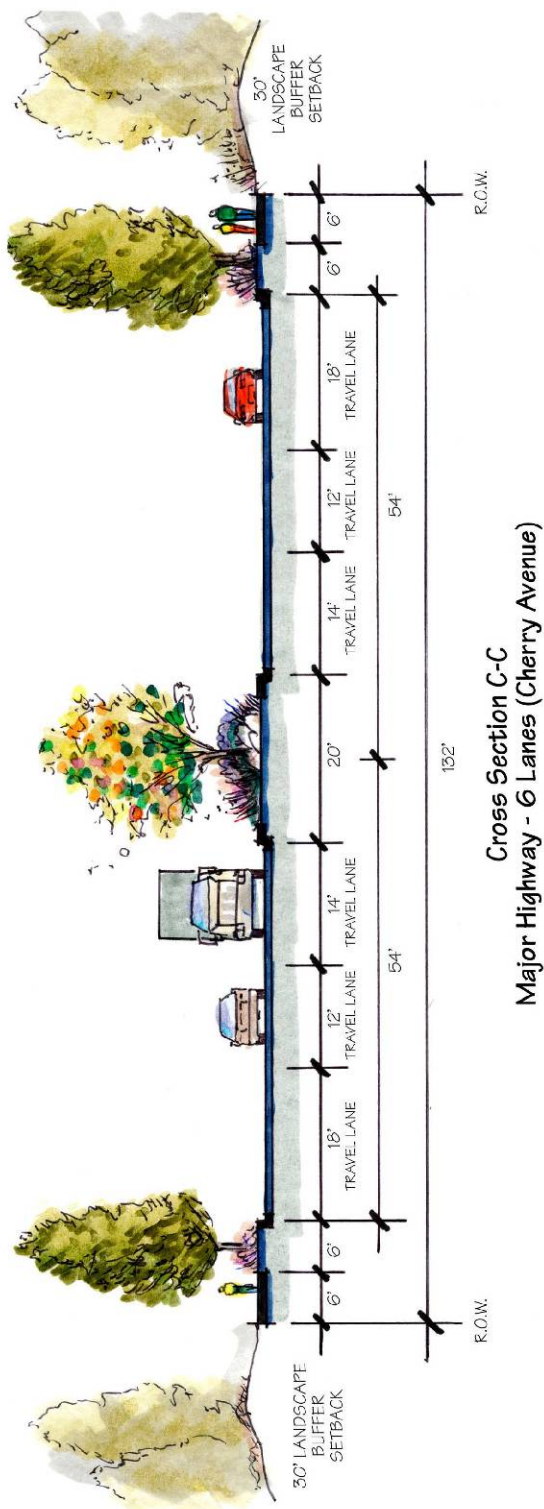


Exhibit 9.6 – Major Highway – 6 Lanes – Cross Section C-C (Cherry Avenue)

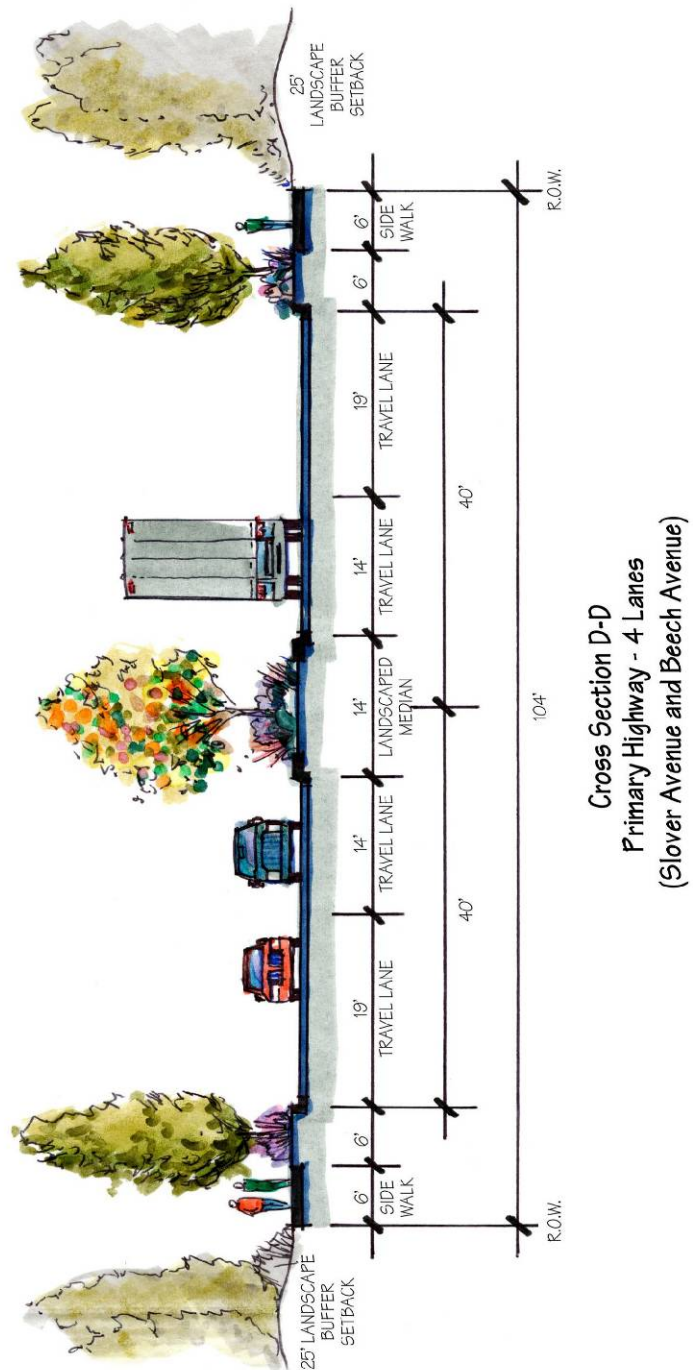
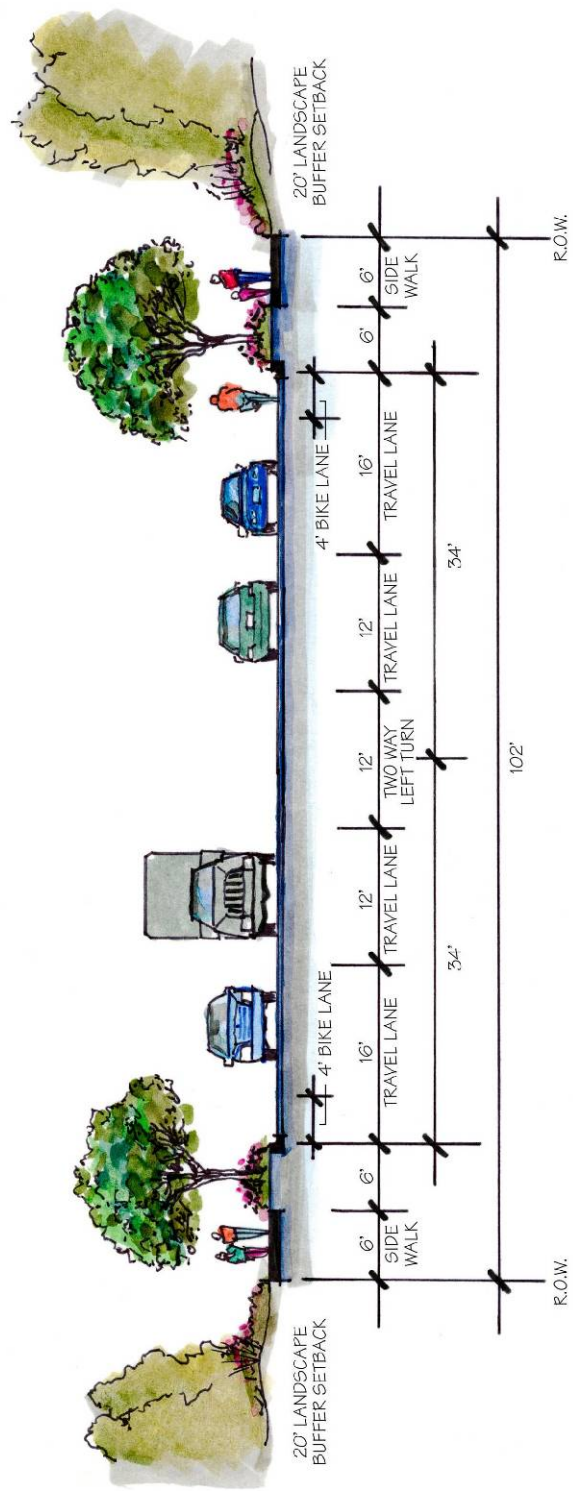


Exhibit 9-7 – Primary Highway – 4 Lanes – Cross Section D-D  
(Beech Avenue and Slover Avenue)



Cross Section E-E  
Secondary Highway - 4 Lanes (Santa Ana Avenue)  
\*Santa Ana Avenue will have bike lanes.

Exhibit g-8 – Secondary Highway – 4 Lanes – Cross Section E-E (Santa Ana Avenue)



3. Gateways

**A. Concept Plan**

The Streetscape Concept Plan – Exhibit 8-4 identifies a hierarchy of primary, secondary, and tertiary gateways. The intent of the gateway intersection enhancements is to provide a visual statement that you are within the Specific Plan area.

The gateway intersection enhancements should all incorporate uniform treatments (to varying degrees) within expanded corner setback areas (45 degree diagonal right-of-way). Depending on the hierarchy level, each gateway shall include special corner/sidewalk paving, planting schemes that highlight drought tolerant species, and monumentation signage. Monument signs are optional on tertiary gateway intersections.

Each corner planting scheme shall incorporate the three-tiered planting concept, consisting of accent trees, shrubs, or tall grass-like plant material, and a ground cover. Dense planting of evergreen tree species consistent with adjacent buffer setback plantings shall provide a background/screen for each corner setback area.

Gateway conceptual designs with typical dimensions (plan views) are illustrated in Exhibits 8-8, 8-9, and 8-10. The monument sign concept as it would appear in front of the planting treatment is illustrated in Exhibit 8-11.

Gateway enhancements and monument sign enhancements shall meet the City's line of sight regulations, as determined by the City Engineer. Dimensions of monument signs shall comply with Section 7.7.D.13 Monument Sign.

**B. Dedication and Maintenance of Gateway Intersection Improvements**

1. When dedication and maintenance is required.
  - a. Whenever a development project is proposed on land that is designated as a location for district gateway improvements in Section 8.8 Public Right-of-Way Streetscape, the developer shall:
    - i. Dedicate any necessary right-of-way area to the City or provide an easement in favor of the City for the installation of gateway intersection enhancements;
    - ii. Construct the gateway intersection enhancements to the standards indicated in Section 8.8 Public Right-of-Way Streetscape; and
    - iii. Enter into an agreement with the City that specifies perpetual maintenance.
  - b. The applicable review authority shall impose the dedication (or easement) requirement as a condition of project approval.

- c. The City Attorney and the Director of Community Development shall approve the form and content of any dedication or easement instrument used to ensure the installation and perpetual maintenance of the Gateway Intersection Enhancements.

## Southwest Industrial Park Specific Plan

Slover Central Manufacturing District

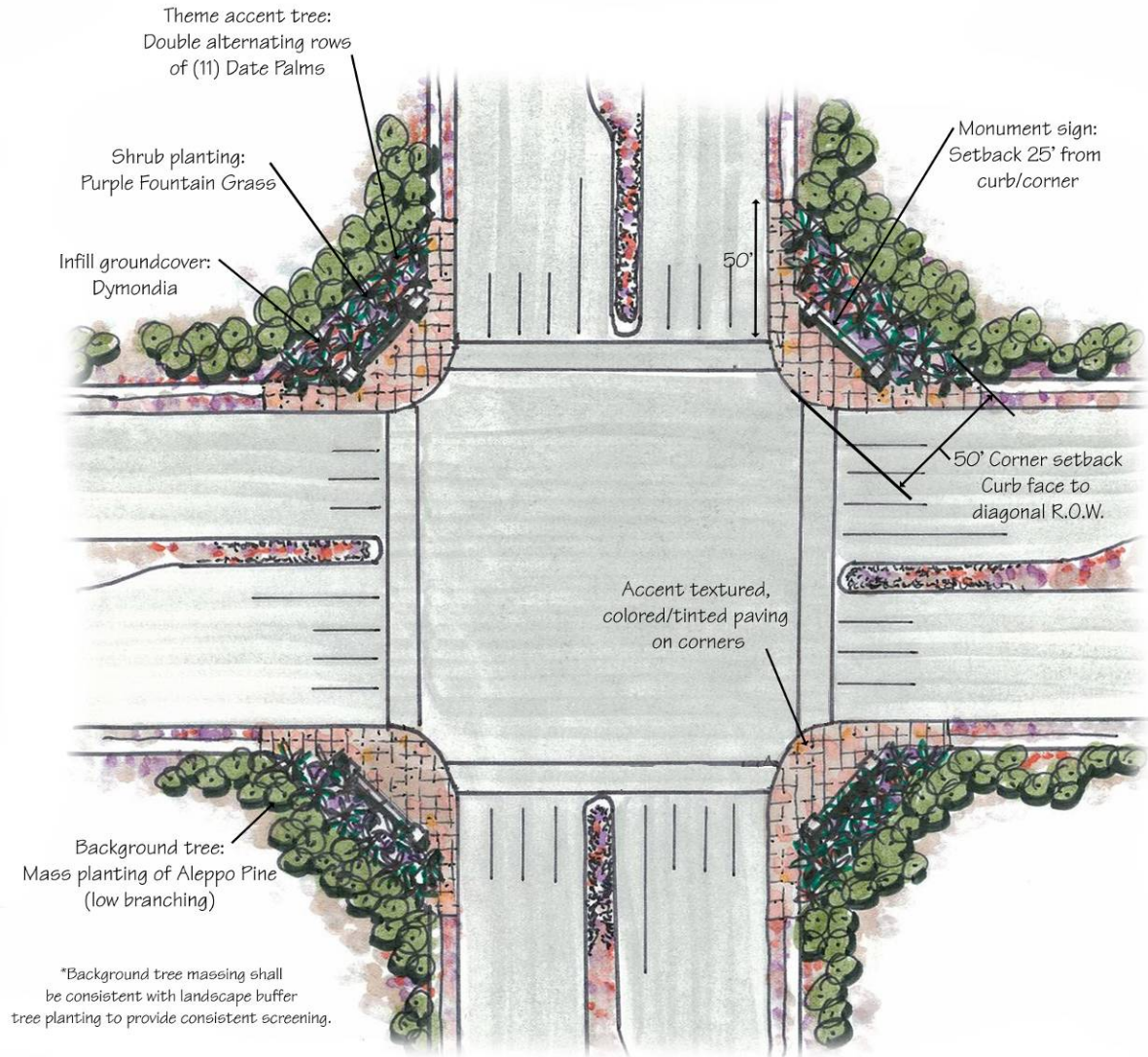


Exhibit 9-9 – Primary Gateway Intersection Enhancement Concept

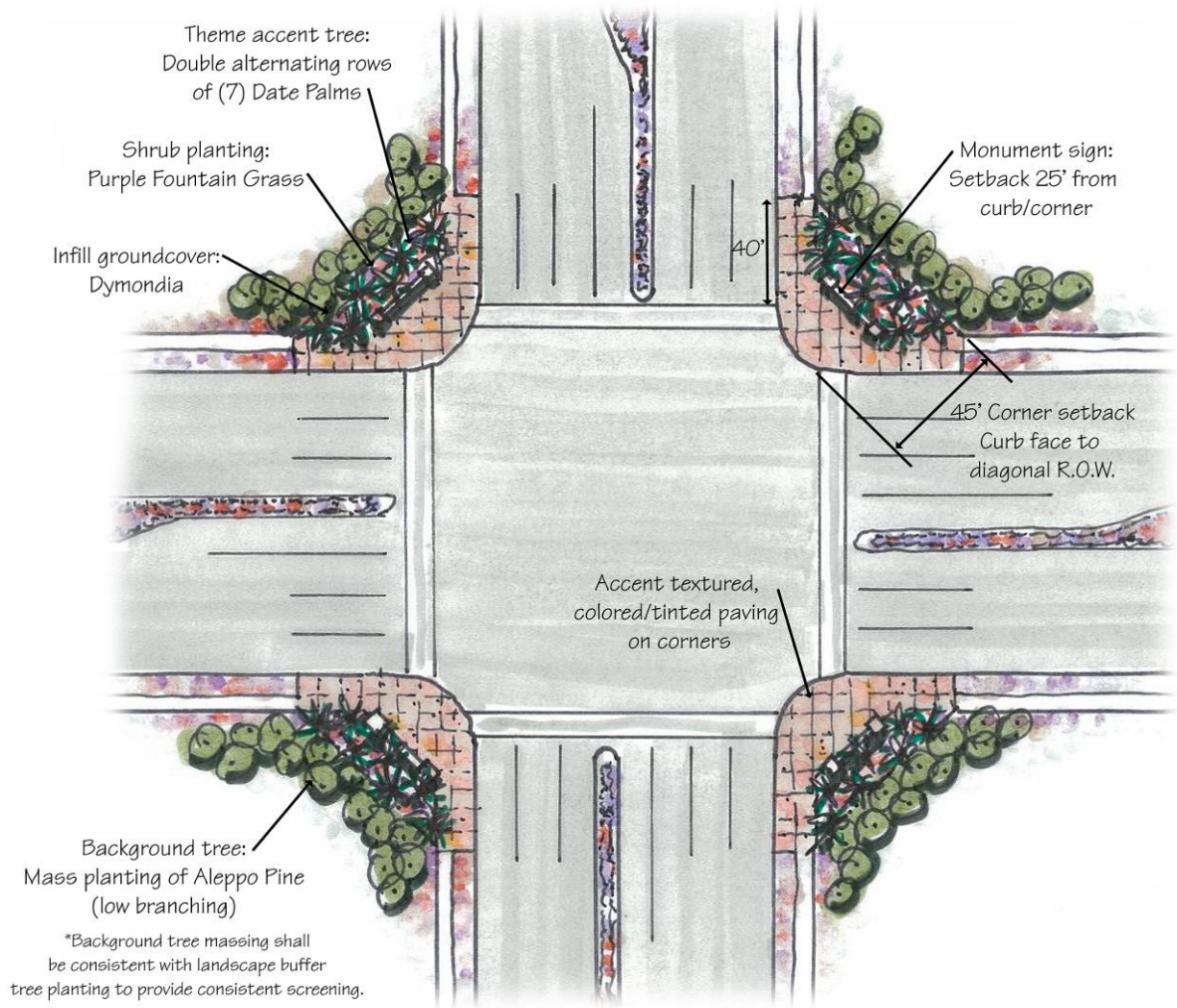


Exhibit 9-10 – Secondary Gateway Intersection Enhancement Concept



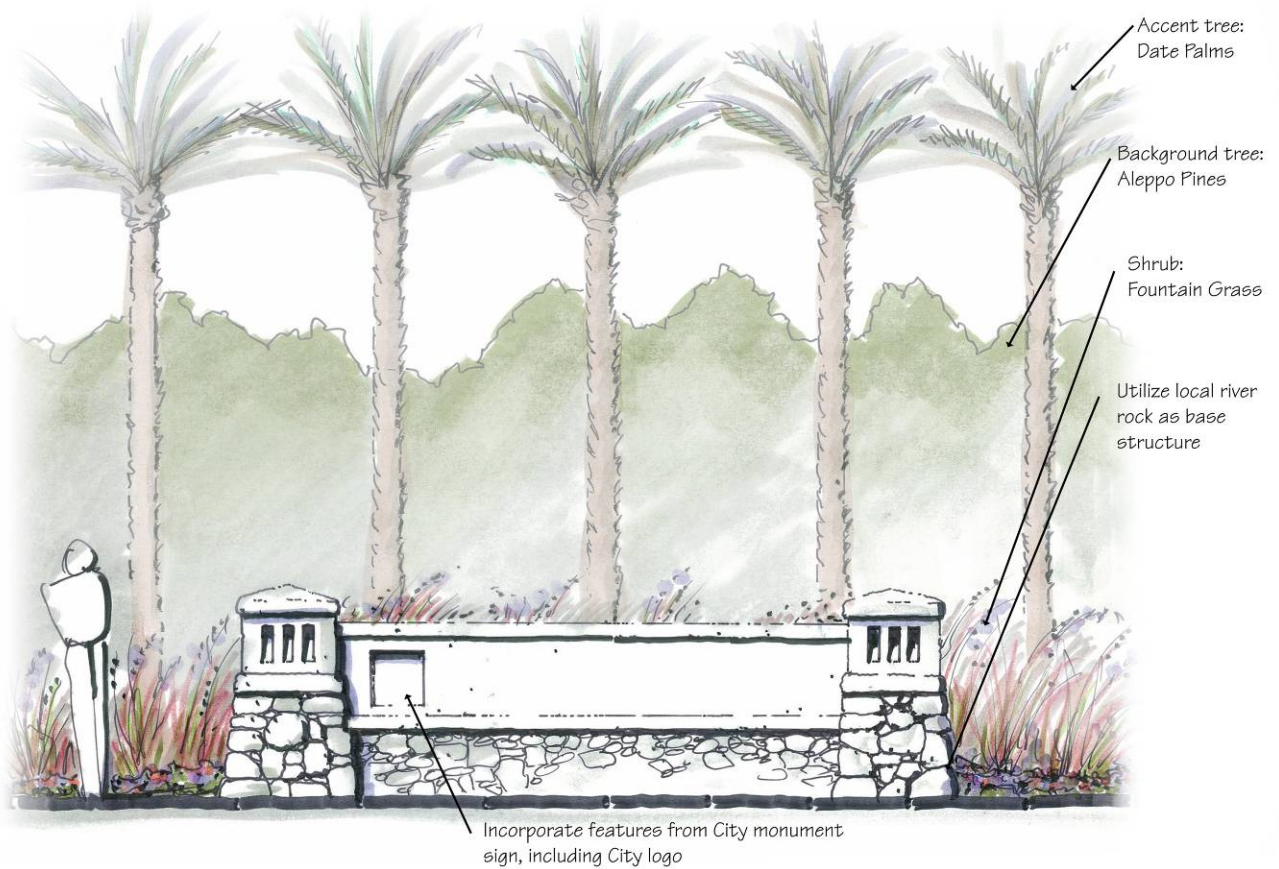


Exhibit 9-11 – Monument Sign Concept

#### 4. **Street Furniture**

Exhibit 9-12 – Street Furniture Palette, identifies recommended street furniture components, including lighting, trash receptacles, and benches, for the district. The palette is intended to ensure a unified visual identity for the district, which is distinct from the other districts within the Specific Plan area.



**Wall/building lighting  
Domus Series Lighting  
by Phillips Lumec  
DMS 55 - SG**



**Pole/pedestrian and parking lot lighting**



**Chase Park Series trash receptacle and bench  
by Landscape Forms**

Exhibit 9-12 – Street Furniture Palette

## **9.9 Design Guidelines**

### **A. Design Objectives**

The Design Guidelines will promote and reinforce the City's commitment to high quality development. In general, the guidelines are intended to ensure that development preserves or improves the positive characteristics of the City's image. The objectives of these guidelines are to:

- Promote orderly development by implementing the SWIP Specific Plan objectives, policies, and principles found in Section 2.o.
- Protect and enhance property values by ensuring that development fits properly within the context of its surroundings and does not negatively impact adjacent uses.
- Encourage individual creativity and innovative solutions by allowing flexibility in how a particular guideline is met as long as the intent of the guideline is achieved.
- Ensure functional pedestrian and motor vehicle circulation within a project and convenient pedestrian linkages to and from adjacent residential, commercial, industrial, and school areas.

### **B. Design Intent**

The design intent of the SCD is to provide for innovative and high quality design that accommodates and supports light and heavy manufacturing uses. Site design and architecture that meets the functional needs of the uses while allowing for buffering from adjacent uses and aesthetically-pleasing environments is highly encouraged.

### **C. Industrial, Distribution, and Business Park Uses**

The design guidelines in this Subsection shall apply to all industrial, distribution, and business park development within this land use district.



## 1. Site Design

### Site Layout

- The arrangement of multiple buildings and associated circulation, and parking areas should reflect a well-organized site plan that emphasizes pedestrian connectivity and landscaped areas responsive to the public.
- Site development may utilize variations on building placement and landscaping adjacent to the public street. Appropriate configurations may include, but are not limited to the following:
  - Fully landscaped setback between building and street.
  - Parking in front of building with a landscape buffer between parking and street. **See Figure 1.**



Figure 1. Appropriate building and landscape placement adjacent to public street

- Visitor parking may be located at the front of the building adjacent to the main entry while employee parking and service areas are located at the sides and rear of the building. **See Figure 2.**

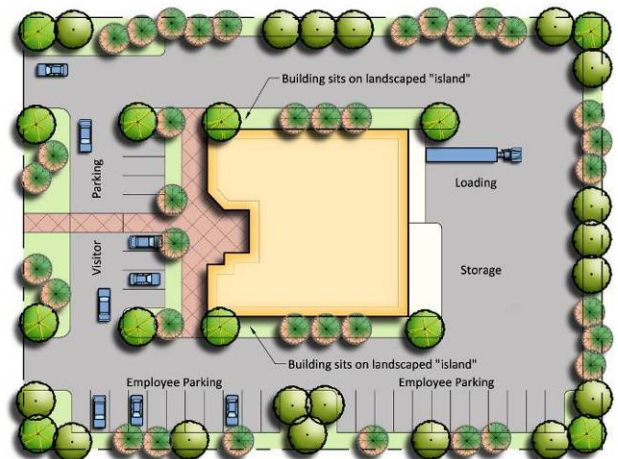


Figure 2. Parking layout.

- Service and loading should not be located on building side(s) adjacent to a public street.
- The design and location of accessory buildings (e.g., security kiosks, maintenance buildings, and outdoor equipment enclosures) shall be incorporated into and be compatible with the overall design of the project and the main buildings on the site.
- With the exception of security kiosks, accessory buildings shall be located as far back from the front and street side setback area as possible.
- Sea/train-type metal is prohibited.
- Noise generating activities and storage areas shall be located as far as possible from adjacent properties. Sound attenuation walls shall be used where appropriate to reduce noise.
- Outdoor storage, work, and loading areas shall be incorporated within the building design and located to the rear or side of buildings and screened from view from adjacent public streets. **See Figure 3.**

### Courtyards and Plazas

- Buildings should be arranged to create opportunities for open space amenities (e.g., plazas, courtyards, outdoor eating areas, recreation areas, etc.). **See Figure 4.**
- Business park development should provide recreational facilities (e.g., bicycle paths, tennis courts, volleyball courts, gymnasiums, etc.).

### 2. Building Orientation

- Multiple building developments should be oriented in a manner that will form gateways through facade enhancement, maximize public view, and capture public

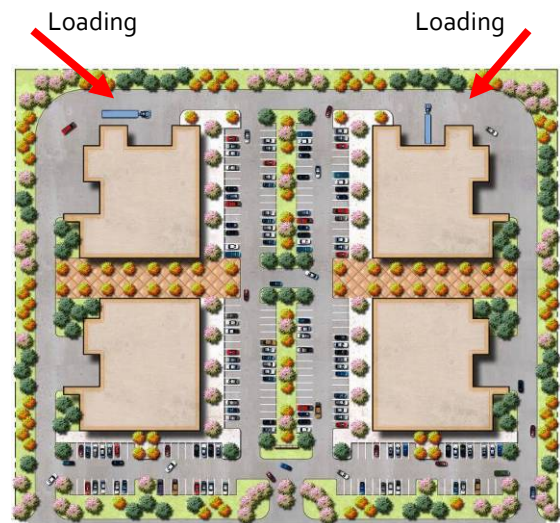


Figure 3. Appropriate location of loading areas.



Figure 4. Open space amenities.

interest along adjacent major streets. **See Figure 5.**

- The organization of buildings, parking areas, and landscaping shall recognize the existing characteristics of the site and shall relate to the surrounding development in scale and character.
- Buildings should generally be placed at or near setback lines with development oriented in a manner that will provide visual interest. **See Figure 6.**
- Buildings should be oriented in a manner that takes advantage of passive solar design.
- Buildings shall be oriented to provide a buffer between sensitive uses and outdoor work areas, loading and storage.

### 3. Site Elements

#### Fences and Walls

- Walls and fencing materials shall consist of wrought iron, tubular steel, stone, stucco, or brick, and shall be compatible with the overall design character/style of the development. The use of chain-link fence material is not allowed if visible from the public right-of-way. **See Figure 7.**
- Walls and fences shall be integrated with landscaping along the base of the wall or fence.
- Wall heights and surfaces shall be articulated with varying facade depths or pilasters to promote architectural interest, and shall include a cap along the top of the wall. **See Figure 8.**
- Landscaping shall be used in combination with walls and fences to visually soften blank surfaces and to deter graffiti. **See Figure 8.**



Figure 5. Buildings are oriented to create gateway into development.



Figure 6. Buildings are oriented to provide architectural features visible from public rights-of-way.



Figure 7. Tubular steel and stone pillars are appropriate fencing materials.



Figure 8. Wall is articulated with pillars and incorporates landscaping at the base and vines to deter graffiti

## Screening

- Loading bays and service areas shall be screened by building placement, decorative walls or landscaping to the fullest extent feasible so that views of loading areas are minimized from adjacent public streets. **See Figure 9.**
- Trash storage enclosures and outdoor mechanical equipment shall be screened from public view.
- Roof-mounted equipment shall be screened from public view through use of parapet walls or other screening devices. **See Figure 10.**

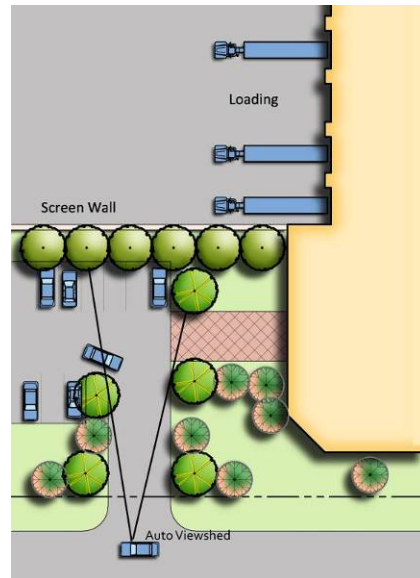


Figure 9. Appropriate placement, orientation and screening of service areas.

## Trash Enclosures

- Trash enclosures shall be incorporated as part of the building design.
- If trash enclosures cannot be located out of public view, the design of trash storage areas shall incorporate architectural screening elements and landscaping compatible with the design of buildings and landscaping on the site. **See Figure 11.**
- Trash enclosures shall integrate horizontal screening such as trellises. **See Figure 11.**

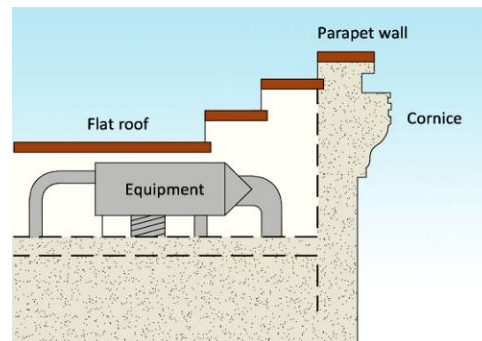


Figure 10. Screening of roof mounted equipment.

## Lighting

- Outdoor lighting plans shall take into consideration the location and potential growth pattern of nearby trees (existing and planned) so that appropriate lighting levels are maintained over time.
- Energy efficiency shall be considered through use of proper light location and placement, as well as use of energy-efficient bulbs or fixtures.
- Lighting fixtures shall include hoods or other design techniques to reduce glare and light pollution, especially along major



Figure 11. Trash enclosure.



streets, and to prevent light spillover onto adjacent properties. **See Figure 12.**

- Lighting shall be provided in project entryways, walkways, parking lots, and plazas or courtyards to promote safety. **See Figure 13.**
- Lighting may be mounted on poles or bollards, affixed to building walls, or placed within paved or landscaped areas. Appropriate materials and construction methods shall be used to ensure proper function of project lighting fixtures.
- Decorative light fixtures shall be consistent with the architectural design of the building. **See Figure 14.**
- Truck and truck trailer storage areas shall incorporate lighting to increase real and perceived security.

#### 4. Parking and Access

##### Parking

- Parking lots shall not be the dominant visual element on the site.
- Parking lots adjacent to and visible from public streets shall be appropriately screened to minimize undesirable visual impacts. **See Figure 15.**
- Surface parking areas shall integrate trees and landscape improvements to reduce the heat island effect. **See Figure 15.**
- Large parking lots (usually over 100 spaces) shall be divided into multiple, smaller areas and provided with canopy trees located throughout the parking area to reduce the effects of heat and the visual impacts of large parking areas.
- Employee parking areas should be located behind the building or alongside the building so as not to be visible from adjacent streets.



Figure 12. Hooded light fixture directs light downward.



Figure 14. Decorative light fixtures.

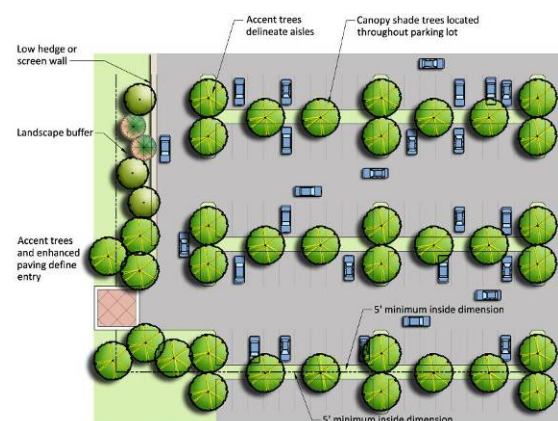


Figure 15. Parking lot landscaping.

- Internal vehicular and pedestrian circulation within a development involving multiple buildings or lots shall interconnect in an obvious and consistent manner. **See Figure 16.**
- Parking shall be provided within walking distance of all tenants and public sidewalks.
- Parking lot design shall include water quality storm water facilities consistent with City standards. **See Figure 17.**

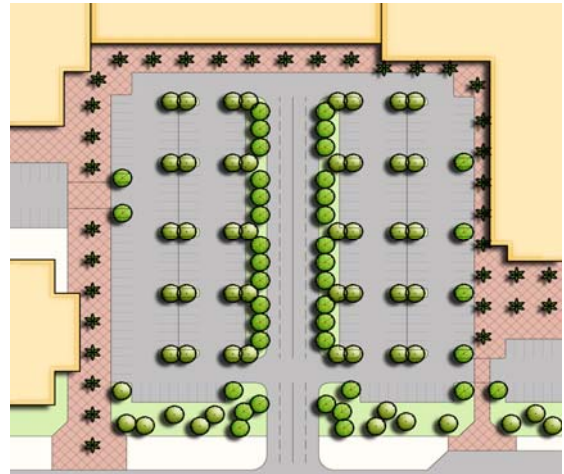


Figure 16. Pedestrian circulation is consistent along perimeter of parking lot

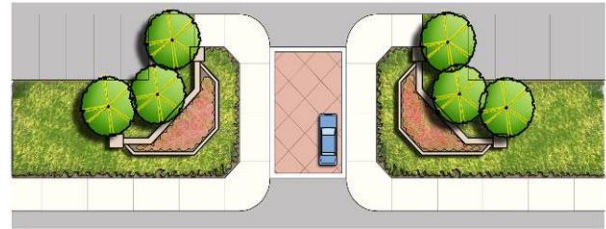
### Access

- The use of common (shared) access points and driveways is encouraged; placement of vehicle access points close to building entries shall be avoided to minimize pedestrian and vehicular conflicts. **See Figure 18.**



Figure 18. Shared parking access.

- Entry drives shall be clearly marked by special features, (e.g., enhanced paving, prominent landscape features, low-level decorative walls, and well-designed monument-type signs). **See Figure 19.**
- Access to each development site shall be clearly visible to pedestrians and motorists.
- Service and loading areas should take access from shared access points to reduce curb cuts along streets.



Enhance project entries with landscaping and special paving for visual impact.

Figure 19. Entry drive.

## 5. Architecture

### Mass and Scale

- The mass and scale of the buildings shall respect the visual and physical relationship to the adjacent buildings and surrounding sensitive uses. Taller building elements should be placed towards the center of the site, with lower elements adjacent to surrounding properties.
- Buildings should be stepped back when adjacent to or in close proximity to sensitive uses.
- Vertical and horizontal offsets shall be provided to reduce the visual bulk of the building. **See Figure 20.**



Figure 20. Incorporation of vertical offsets and material changes.

### Building Facades

- Building facades shall incorporate architectural elements such as windows, pillars, wall plane breaks to minimize blank walls and to create visual interest. **See Figure 21.**
- All building elevations, whether front, side, or rear shall be architecturally detailed.
- Architectural accents (e.g., cornices, tiles, trim around windows, grooves in building faces, accent band details, bulkheads, etc.) shall be used to create variation along building facades. **See Figure 22.**
- Higher facades and rooftops should be incorporated at corners and intersections,



Use of windows, fins and wall plane breaks provides visual interest.

Figure 21. Façade articulation.



Figure 22. Use of cornices, window trim and grooves.



and appropriate massing and scale shall be considered for the remainder of the building spanning public street frontage.

**See Figure 23.**

- Primary building entries shall be easily identified through the use of prominent architectural elements, signage, landscaping, lighting, canopies, roof form, hardscape, architectural projections, columns, vertical elements, or other design features that help emphasize a building's entry. **See Figure 24.**



Figure 23. Enhanced corner elements.



Figure 24. Articulated Entries.



- Roofs shall be designed as an integral component of building form, mass, and facade. Building form should be enhanced by sloped or offset roof planes, eave heights, and rooflines. **See Figure 25.**
- Locate and/or screen rooftop equipment so that it is not visible from the street. Rooftop screening shall be integral to the building's form.



Figure 25. Offset roof planes.

### Color and Materials

- Colors and materials for all structures on-site should consist of earth tones. Use of at least two to three different colors, materials or textures is encouraged.
- Building materials shall be durable and able to withstand long-term exposure to the elements.

- Large expanses of smooth material (e.g., concrete) shall be broken up with expansion joints, reveals, or changes in texture and color. **See Figure 26.**
- To the fullest extent feasible, buildings should use large windows along walls and skylights in rooftop designs to capture natural light during working hours.
- Use of metal as the primary building façade material is subject to approval of a conditional use permit by the Planning Commission.



Figure 26. Use of expansion joints.

## 6. Landscaping

- Landscaping shall be in scale with adjacent structures, streets, and public spaces, and be sized appropriately when fully grown.
- Landscaped areas should incorporate a three-tiered planting system:
  - 1) ground cover and flowering plants;
  - 2) shrubs and vines; and
  - 3) trees.

**See Figure 27.** See Recommended Plant Palette in Section 9.5.

- Special landscape features, such as specimen trees, shall be provided at major focal points (e.g., project entries, building entries, and pedestrian gathering areas).
- Entry and exit points shall be highlighted through a combination of distinctive landscape and hardscape features. Incorporation of public art is highly encouraged.
- Development on corner lots shall be enhanced with a combination of specimen trees, accent plantings, upgraded perimeter wall surfaces, hardscape treatments and landscape lighting adjacent to the street intersection .



Figure 27. Three-tiered planting system: trees, shrubs, and ground covers.

- Drought-tolerant and low-maintenance trees, vines, and groundcovers shall be used on-site. Drip irrigation systems shall be installed where feasible to ensure the highest possible level of water conservation.
- Planting materials shall be used in plaza areas to provide shade and soften the appearance of hard walls. Water features and public art are also encouraged. **See Figure 28.**
- The use of vines is encouraged on walls to soften the appearance of buildings and screen walls, and to help deter graffiti. **See Figure 29.**
- Planting materials shall be installed to provide a buffer against noise and should be integrated with walls or fences to achieve desired sound reduction. **See Figure 30.**



Figure 28. Plaza area.



Figure 29. Wall incorporates landscaping to soften appearance and deter graffiti.

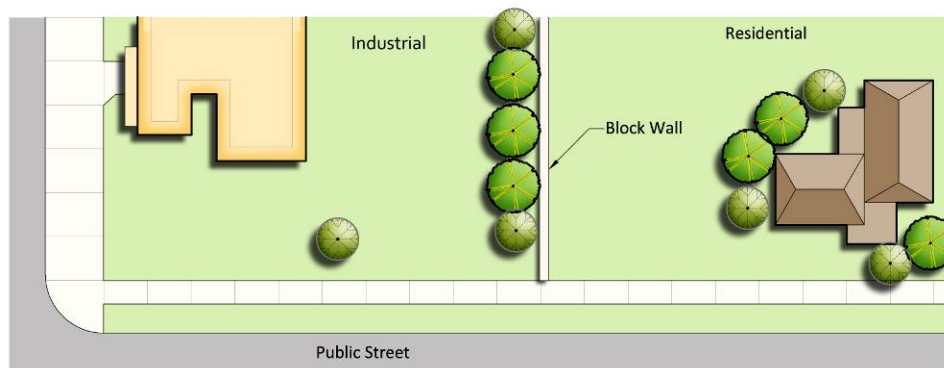
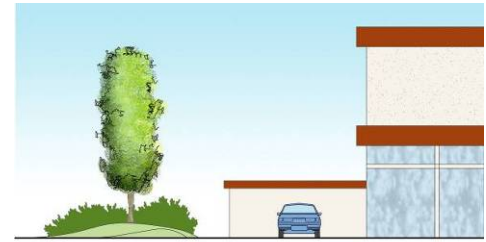


Figure 30. Plant material along buffer wall.

- Landscaping and trellises with vines are encouraged be used for screening trash storage areas, service areas and mechanical equipment.
- Setbacks adjacent to sensitive uses shall include dense landscaping to provide visual screening and noise abatement.

- Landscaped berms along site edges may be used to screen parking, loading and service areas and to serve as a sound reduction measure. **See Figure 31.**
- Surface parking lots shall be well-landscaped to reduce heat island effect and visually reduce the expanse of paved area. **See Figure 32.**
- Pervious paving materials are strongly encouraged for sidewalks, pathways, parking lots, plazas or gathering areas or other paved surfaces on-site.
- An automatic irrigation system using current equipment and technology shall be provided for planted areas.
- Run-off retention and on-site water filtration features and bio-swales should be a part of the overall landscape design, and can also serve as buffering methods for adjacent businesses. **See Figure 33.**
- Trees shall be selected and placed to provide canopy and shade for walkways, pedestrian open spaces, and parking areas.
- Landscape material in the setback and visible from the public right-of-way shall blend with and seem a part of the public right-of-way landscaping.
- Tree and shrub planting shall be in large masses.
- Plant material selected shall be suited to the specific soil and micro climatic conditions.
- Trees shall be healthy and have a uniform branching pattern.
- All ground cover shall be healthy and densely foliated and comprised of well rooted cuttings or container plants.



Wall, landscaping and berms screen industrial buildings and storage

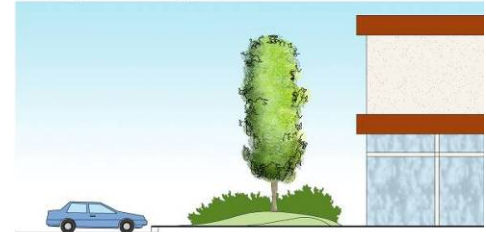


Figure 31. Landscaped berms.



Figure 32. Landscaped parking lot.

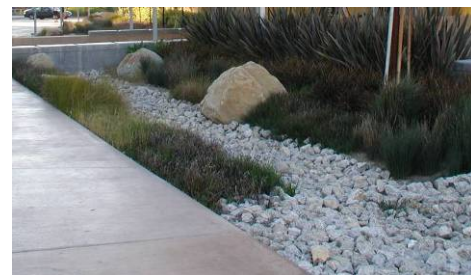


Figure 33. On-site water filtration.



- Availability and specific site conditions should be considered in final selection. Ground cover shall achieve 100% coverage in one year.
- Informal tree masses should be planted in a mix of sizes.

### **D. Commercial Uses**

#### **1. Site Design**

##### **Site Layout**

- The arrangement of multiple buildings and associated circulation and parking shall reflect a well-organized site plan that emphasizes pedestrian connectivity and landscaped areas that enhance publicly-accessible spaces. **See Figure 34.**
- Buildings may be located adjacent to the street with a fully landscaped setback or buildings may be set back with limited parking in front. **See Figure 35.**

##### **Courtyards, and Plazas**

- The organization and design of buildings shall encourage and facilitate pedestrian activity.
- Buildings should be organized to create usable open space, courtyards, plazas and dining areas. **See Figure 36.**

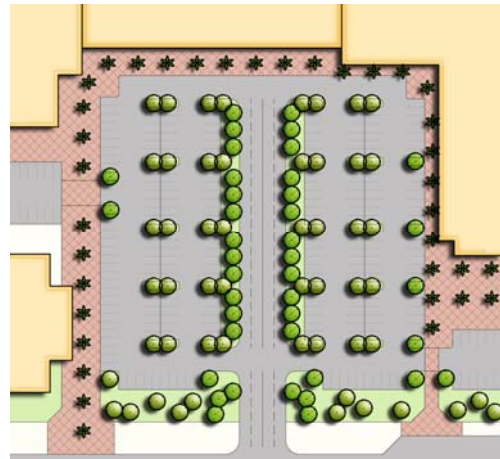


Figure 34. Site plan emphasizes pedestrian connectivity.



Figure 35. Limited parking adjacent to street with landscape setback.



Figure 36. Buildings create courtyard.

- Pedestrian-oriented open spaces, courtyards and plazas shall include a focal element such as a sculpture and/or water feature and sitting areas. **See Figure 37.**

## 2. Building Orientation

- The organization of buildings, parking areas, and landscaping shall recognize the existing characteristics of the site and shall relate to the surrounding development in scale and character.
- Commercial buildings on corner parcels shall establish a strong tie to both streets and should encourage pedestrian activity at corner locations. **See Figure 38.**
- Buildings associated with service retail and restaurant uses shall be pedestrian-scaled, with entries fronting onto streets, plazas or courtyards to reinforce pedestrian orientation.
- Buildings adjacent to sensitive uses shall be buffered. This may be accomplished by providing masonry walls, landscaped berms, appropriate building orientation, building height stepbacks and limitations on activities adjacent to sensitive uses. **See Figure 39.**



Figure 37. Open plaza areas with seating.



Figure 38. Commercial/retail buildings on corners should establish strong tie to the street.

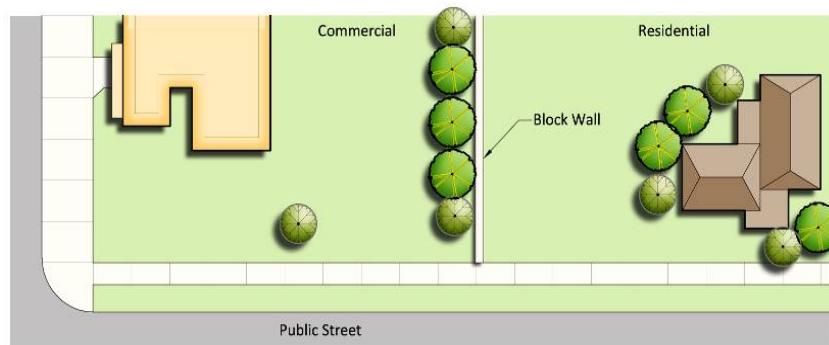


Figure 39. Masonry wall and landscaping separates uses.

- Commercial and retail buildings should generally be placed at or near setback lines with developments oriented in a manner that will provide visual interest.
- Buildings should be oriented in a manner that takes advantage of passive solar design to the maximum extent feasible.

### 3. Site Elements

#### Fences and Walls

- Wall heights and surfaces shall be articulated with varying façade depths or pilasters to promote architectural interest, and may include a cap along the top of the wall. **See Figure 40.**
- Walls visible from public streets shall be decorative and complement the design of on-site buildings.
- Wall and fencing materials may consist of brick, stone, stucco, wrought iron or tubular steel. Wall and fencing colors should match building colors, with neutral earth tones. **See Figure 41.**
- Walls and fences shall be integrated with landscaping along the base of the wall or fence.
- Electric fences, barbed wire, concertina wire, or other security wire is prohibited.



Figure 40. Wall incorporates pilasters and cap.



Figure 41. Stone wall.



## Screening

- Service and delivery areas shall be screened by building placement, decorative walls or landscaping to the fullest extent feasible so that views of loading areas are minimized from adjacent public streets. **See Figure 42.**
- Outdoor mechanical equipment should be screened from public view.
- Roof-mounted equipment shall be screened from public view through use of parapet walls or other screening devices. **See Figure 43.**

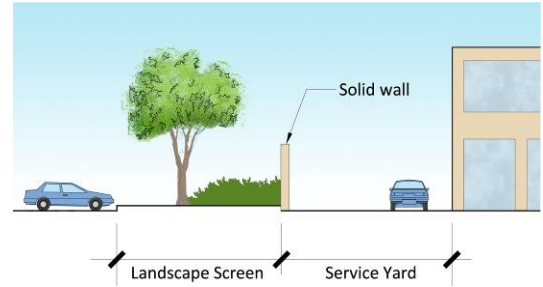


Figure 42. Screened delivery area.

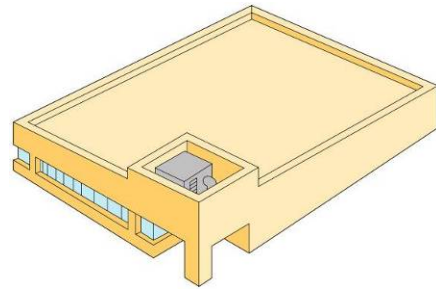


Figure 43. Screening of roof-mounted equipment.

## Trash Enclosures

- Trash enclosures shall be incorporated as part of the building design.
- If trash enclosures cannot be located out of public view, the design of trash storage areas shall incorporate architectural screening elements and landscaping compatible with the design of buildings and landscaping on the site.
- Trash enclosures visible from the public view shall integrate horizontal screening such as trellises.

## Lighting

- Outdoor lighting plans shall take into consideration the location and potential growth pattern of nearby trees (existing and planned) so that appropriate lighting levels are maintained over time.
- Energy efficiency shall be considered through use of proper light location and placement, as well as use of energy-efficient bulbs or fixtures.
- Lighting fixtures shall include hoods or other design techniques to reduce glare and light pollution, especially along major

streets, and to prevent light spillover into adjacent properties. **See Figure 44.**

- Lighting shall be provided in project entryways, walkways, parking lots, and plazas or courtyards to promote safety. **See Figure 45.**
- Lighting may be mounted on poles or bollards, affixed to building walls, or placed within paved or landscaped areas. Appropriate materials and construction methods shall be used to ensure proper function of project lighting fixtures. **See Figure 46.**
- Decorative light fixtures are encouraged, as long as fixtures are consistent with the architectural design of the building. **See Figure 47.**

#### **4. Parking and Access**

##### **Parking**

- Parking lots should be designed with a clear hierarchy of circulation: major access drives with no direct access to parking spaces; major circulation drives with little or no parking; and parking aisles for direct access to parking.
- Large commercial and retail parking areas should be located behind building facades so as not to be visible from major streets.
- Parking lots shall not be the dominant visual element on the site.



Figure 44. Hooded light fixture directs light downward.



Figure 45. Bollard lighting along pedestrian walkway.



Figure 46. Pole mounted light.



Figure 47. Decorative light fixtures.

- Surface parking areas shall integrate trees and landscape improvements to reduce the heat island effect. **See Figure 48.**
- Large parking lots (usually over 100 spaces) shall be divided into multiple, smaller areas and provided with canopy trees located throughout the parking area to reduce the effects of heat gain and the visual impacts of large parking areas.
- Internal vehicular and pedestrian circulation within a development involving multiple buildings or lots shall interconnect in an obvious and consistent manner. **See Figure 49.**
- Parking lot design shall include water quality storm water facilities consistent with City standards. **See Figure 50.**

#### Access - Vehicular

- Site access shall promote safety by providing an adequate stacking distance for vehicles between the back of the sidewalk and the first parking stall or circulation aisle.
- Conflict between vehicles and pedestrians shall be avoided at access driveways by providing a walkway on at least one side of the driveway.
- The number of access driveways shall be minimized and located as far as possible from street intersections.
- Site access locations shall be coordinated with existing or planned median openings and driveways on the opposite side of the roadway.
- Unobstructed line of sight at corners and driveways shall be provided to reduce vehicular conflicts. **See Figure 51.**
- Avoid placing primary vehicle access in close proximity to major building entrances



Figure 48. Landscaped parking lot.

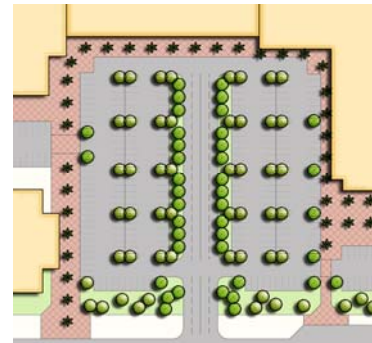


Figure 49. Pedestrian circulation is consistent along perimeter of parking lot.



Figure 50. On-site storm water capture.

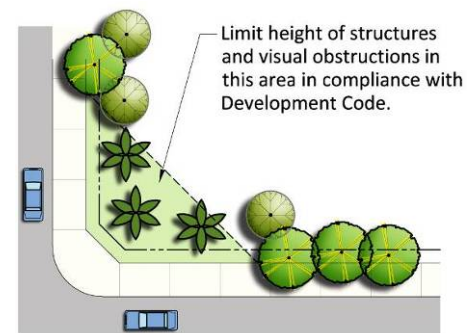


Figure 51. Unobstructed sight lines.

in order to minimize pedestrian and vehicular conflicts. **See Figure 52.**

#### Access - Pedestrian

- Clearly defined pedestrian walkways or paths should be provided from parking areas to primary building entrances. Clear and convenient pedestrian access shall be provided between the public sidewalk and the pedestrian areas of the development. **See Figure 53.**
- Raised walkways, decorative paving, landscaping and/or bollards shall be used to separate pedestrian paths from vehicular circulation areas. **See Figure 54.**



Figure 52. Vehicle access is placed away from building entrances.

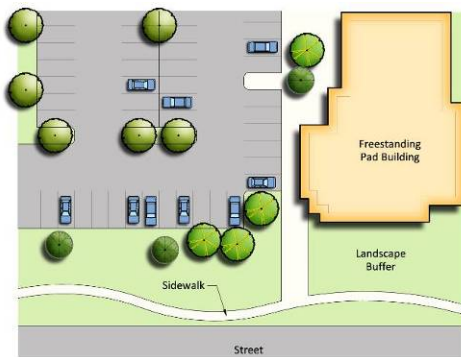


Figure 53. Clearly defined pedestrian walkways



Figure 54. Raised walkway and landscaping in parking lot.

- Parking areas should be designed so that pedestrians walk parallel to moving cars. **See Figure 55.**

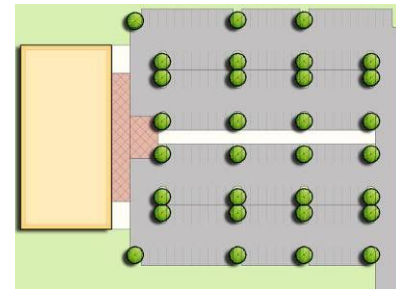
### Loading and Delivery

- Loading and delivery service areas shall be located and designed to minimize their visibility, circulation conflicts, and adverse noise impacts to the maximum extent feasible.
- Loading and delivery service areas shall be screened with portions of the building, architectural wing walls, freestanding walls or landscape planting.
- Loading areas shall be designed to not interfere with circulation or parking, and to permit trucks to fully maneuver on the property without backing from or onto a public street. **See Figure 56.**
- Service, loading and delivery areas should take access from planned shared access points to reduce curb cuts along project frontages.

## 5. Architecture

### Mass and Scale

- The mass and scale of new infill developments shall be compatible with the existing, adjacent structures. This can be accomplished by transitioning from the height of adjacent buildings to the tallest elements of the new development by stepping back the upper portions of taller buildings.
- Human-scale elements, such as pedestrian-scaled doors, windows and building modules shall be used to emphasize pedestrian orientation.



Appropriate



Inappropriate

Figure 55. Pedestrian circulation.



Figure 56. Loading area placed behind building outside of circulation lanes.



- The size and location of various building elements (e.g., roofs, parapet walls, wing walls, etc.) shall be in scale to the building as a whole and provide visual interest. **See Figure 57.**

#### Building Facades

- Buildings shall include enhanced and articulated facades along public streets).
- Design details shall be continued or repeated upon all building elevations.
- Building entrances should be readily identifiable. The use of recesses, projections, columns, and other design elements to articulate entrances are encouraged. **See Figure 58.**
- Facades shall provide visual interest with vertical and horizontal variations in wall and roof planes, building projections, door and window bays, arcades, and similar elements/techniques. **See Figure 59.**
- Buildings shall undergo a break in façade approximately every 40 feet, to create a varied wall surface along public areas. Higher facades and rooftops should be incorporated at corners and intersections, and appropriate massing and scale should be considered for the remainder of the building spanning public right-of-way frontage.
- Buildings should include vertical elements (e.g., clock tower, building articulation) that create points of visual interest when viewed from the public right-of-way.
- Roof designs that are visually interesting and designed to completely screen all rooftop equipment from public streets are required. **See Figure 60.**



Figure 57. Building elements add visual interest.



Figure 58. Building Entry.



Figure 59. Horizontal and vertical articulation.



Figure 60. Full roof screens all equipment and provides visual interest.

- Buildings should use large windows along walls and skylights in rooftop designs to capture natural light during operating hours.
- The interior areas of commercial development should have shaded or covered walkways.

### Storefronts

- Storefronts shall be comprised predominantly of transparent surfaces (ex. windows). **See Figure 61.**
- The use of clear glass on the first floor is strongly encouraged.
- Storefront windows shall be large and a minimum of 24 inches off the ground. The maximum bulkhead (wall plane between the ground and the bottom of the windows) height should be approximately 36 inches.
- Storefront entries should promote a sense of entry into the structure as well as provide a sense of shelter by incorporating elements such as overhangs, canopies, awnings, and recesses. **See Figure 62.**
- If security grilles are necessary, they shall be placed inside the building behind the window display area at a minimum distance of two feet behind the window.
- Product storage racks shall not block views through storefront windows.



Figure 61. Storefront windows.



Figure 62. Storefront overhangs provide a sense of shelter and entry.

### Colors and Materials

- The use of a coordinated three-color palette for the base color and major and minor trim accents is encouraged.
- Colors for all structures on-site should be varied and should consist of neutral, earth tones. **See Figure 63.**



Figure 63. Use of neutral, earth tones.



- Exterior finish materials shall be appropriate for the architectural style and/or theme of the entire development and should contribute towards a high quality image. **See Figure 64.**
- Changes in materials shall occur at inside corners to make building volumes appear substantial.
- Materials shall be varied to provide architectural interest, however, the number of materials shall be limited and not exceed what is required for contrast and accent of architectural features.
- Exterior materials and architectural details shall relate to each other in ways that are traditional and logical. For example, heavy materials should appear to support lighter ones. **See Figure 65.**

## 6. Landscaping

### Plants and Irrigation

- Landscaping should help complete the design of the site and enhance the quality of commercial developments by framing and softening the appearance of buildings, screening undesirable views, and buffering incompatible uses.
- Landscaped areas should generally incorporate planting utilizing a three tiered system:
  - 1) ground covers (including flowering plants—annuals and perennials),
  - 2) shrubs and vines, and
  - 3) trees.

**See Figure 66.**



Figure 64. Exterior finish materials.



Figure 65. Heavy materials at base of building with lighter materials above.



Figure 66. Example of three tier landscape system.

- Entry and exit points shall be highlighted through a combination of distinctive landscape and hardscape features. **See Figure 67.**
- Planting materials shall be used in plazas or gathering areas to provide shade and soften the appearance of hard surfaces. Water features and public art are also encouraged in these places. **See Figure 68.**
- Trees located along street frontages shall be selected to match or complement existing or proposed street trees in the public right-of-way.
- A minimum five-foot landscape strip shall be used along circulation aisles in parking lots, and along building side/rear elevations if a walkway is not used. A landscape strip is also encouraged in nonpublic areas and service areas between pavement and buildings.
- On-site water filtration features and bio-swales are strongly encouraged, and can also be used as buffering methods for adjacent businesses.
- Drought tolerant and low-water trees, vines, and groundcovers shall be used on-site. When feasible, drip irrigation systems shall be installed to provide on-site vegetation with appropriate irrigation and ensure the highest possible volume of water conservation.
- Planting materials shall be used to provide a buffer against noise, and may be integrated with walls or fences to achieve desired sound reduction and appearance.
- Tree and shrub planting shall be in large masses.
- Plant material selected shall be suited to the specific soil and micro climatic conditions.



Figure 67. Highlighting entry points.



Figure 68. Public plaza area within commercial development incorporates water feature.

- Trees shall be healthy and have a uniform branching pattern.
- All ground cover shall be healthy and densely foliated and comprised of well rooted cuttings or container plants.
- Availability and specific site conditions should be considered in final selection. Ground cover shall achieve 100% coverage in one year.
- Informal tree masses should be planted in a mix of sizes.

### Site Furniture

- Outdoor furniture and fixtures (e.g., lighting, directional signs, trellises, raised planters, works of art, benches, trash receptacles, fencing, etc.) shall be integral elements of the building and landscape design. **See Figure 69.**
- Outdoor furniture shall be of a sturdy construction to withstand daily use. Wood should be avoided.
- Outdoor furniture shall be located so it will not conflict with the pedestrian and motor vehicle circulation patterns. **See Figure 70.**
- Outdoor seating should be shaded.



Figure 69. Trellis.



Figure 70. Outdoor furniture outside of pedestrian walkway.

### Paving

- Decorative paving shall be incorporated into courtyards, plazas, pedestrian walkways, and crosswalks. **See Figure 71.**
- Paving materials shall complement the architectural design of the building and landscape design of the project. The use of stamped concrete, stone, brick, permeable pavers, exposed aggregate, or colored concrete is encouraged. The use of slippery materials (e.g., polished marble or granite) is prohibited.



Figure 71. Enhanced paving in pedestrian areas.

## E. Special Commercial Uses

### 1. Mini-Storage Facilities

#### Site Design

- Offices and customer service areas shall be located adjacent to the street frontage to provide convenient access and help visually break up the front façade.

#### Building Design

- Long, flat, unarticulated walls shall be avoided along street frontages. **See Figure 72.**
- Building walls and screen walls shall incorporate substantial articulation, and changes in plane and height to add visual interest.
- A minimum of two different building materials shall be used on building walls and screen walls adjacent to street frontages (e.g., stucco, brick, stone).
- Building materials, textures and landscaping shall be chosen to deter graffiti.



Figure 72. Articulated wall of mini-storage facility.

### 2. Parking Garages

#### Site Design

- A minimum 5-foot wide landscaped strip shall be provided on all sides of the parking structure.

#### Building Design

- Parking garages shall be designed to help reduce the mass and scale of the garage and to ensure their compatibility with surrounding uses.
- Conceal view of vehicles in the garage through a combination of screen walls and plantings. **See Figure 74.**



Figure 74. Parking structure with landscaping.

- Avoid a monolithic appearance. This can be accomplished as follows:
  - Minimize horizontal and vertical banding by balancing both horizontal and vertical elements.
  - Use simple, clean geometric forms, and coordinated massing.
  - Step back upper levels of the garage 5 to 10 feet above the first floor. **See Figure 75.**
- Coordinate openings in the parking garage with the size and modulation of adjacent windows and structural bays.
- Size openings in the parking garage to resemble large windows as in an office building.
- Use masonry materials that are predominantly light in color, but avoid unpainted concrete.
- Avoid a sloping ramp appearance by providing level and uniform wall planes between floors.
- Visually define and differentiate between pedestrian and vehicular entrances through appropriate architectural detailing. **See Figure 76.**



Figure 75. Horizontal and vertical articulation breaks up parking structure elevation.



Figure 76. Paving differentiates between pedestrian and vehicular entries.



### Access and Circulation

- Vehicle stacking areas for entering and exiting traffic shall be sufficient in length to minimize traffic backup into surrounding streets or within the garage. A minimum of two vehicle lengths of stacking distance shall be provided between the back of the sidewalk and the control gate.
- One inbound lane shall be provided for a garage with a capacity of up to 500 vehicles. At least two inbound lanes shall be provided for garages with a capacity of more than 500 vehicles.
- The maximum aisle length shall not exceed 400 feet without providing a cross aisle.
- Ramp grades shall not exceed 10 percent and parking areas should not exceed a slope of four to five percent.

### Security and Lighting

- The design of the garage shall eliminate possible hiding places and openings that could allow random pedestrian access.
- During periods when parking activity is substantially less than the garage capacity (i.e., during night operations), there shall be a means of securing unused parking levels from use, including stairwells and elevators. If the garage is not operated on a 24-hour basis the entire facility shall be secured from access during hours when the facility is closed.
- For security reasons, at least one or two sides of the stair tower shall include glass running vertically the height of the tower. Elevators shall be provided with glass-back cabs and shafts. **See Figure 77.**
- Stairs and elevators shall be located adjacent to a street on the exterior of the structure where lobbies can be exposed to outside view.
- The use of security cameras is required.



Figure 77. Glass-back elevator cab and shaft.

- A minimum of five foot-candles shall be provided inside the structure and a minimum of three foot-candles for exterior parking areas. Higher levels are recommended for remote areas subject to security problems such as stairways, elevators, and other pedestrian access points.
- Lighting levels shall be equally distributed to provide uniform illumination over all parking areas.
- Light sources shall be shielded so that the source of the illumination is not seen from outside the structure.

### 3. Service Stations

#### Site Design

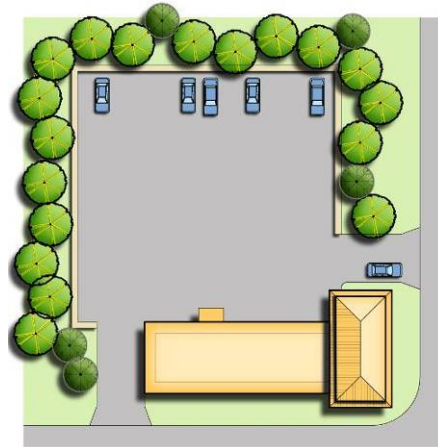
- The site shall be designed to accommodate anticipated circulation patterns and those patterns should be defined by paving and by well-placed landscaped areas.
- In areas developed with buildings adjacent to the sidewalk, service stations shall also be oriented to the sidewalk, placing any service bay door and car wash openings on the rear of the structure.
- Where commercial development abuts the service station, two-way vehicular access integrated with the adjacent commercial development shall be provided where feasible.
- The site design for projects located at street corners shall provide a strong design element at the corner to help frame the public right-of-way and anchor the corner. **See Figure 78.**



Figure 78. Corner landscaping element.



- Parking spaces for vehicles left for repair shall be located in the least visible areas of the site and screened from public view.
- Service or car wash bays shall not face toward a public street.
- Work bays shall be oriented so that the interior of the bays are not visible or audible from a public street. **See Figure 79.**
- Each pump island shall include a vehicle stacking area for at least two vehicles (38-feet), on at least one end of the pump island and shall not restrict vehicle circulation and parking areas.
- A gasoline tanker truck unloading zone shall be provided and shall not obstruct vehicle circulation and parking areas.



Work Bays

Figure 79. Work bays face interior.

### Building Design

- Service station buildings shall be designed to complement and be compatible with the predominant architectural theme and scale of the area. If located within a multi-use center, the architectural design shall be compatible with the design of the center.
- The design of the building should be clean and simple, and shall relate to surrounding buildings through use of similar scale, materials, colors, and/or detailing.
- Building elevations facing public streets shall be architecturally detailed to provide interest and the appearance of quality development.
- The roof design of service stations, including pump island canopies, shall incorporate full, pitched roof treatments with a low to moderate slope. **See Figure 80.**
- Building materials shall have the appearance of substance and permanency (e.g., masonry).



Figure 80. Sloped roof on pump island canopies.

## Landscaping and Walls

- A three-foot high, landscaped berm, a dense hedge, or a low wall shall be provided along all street frontages where parking is provided. **See Figure 81.**
- A minimum six-foot high decorative masonry wall shall be provided along side and rear property lines not abutting public streets. A minimum five-foot wide landscaped planter shall be provided adjacent to the wall in areas accessible to the public.



Figure 81. Landscaped berm.

## Site Elements

- Gates, fencing, and walls shall remain free of signs or other advertisements.
- The use of chain-link fencing is prohibited if visible from a public street.
- Where security is an issue, fencing shall consist of open grille work, and the use of surveillance cameras is encouraged.
- Electric fences, barbed wire, concertina wire, or other security wire is prohibited.

## 4. Shopping Centers

### Site Design

- Portions of primary buildings and/or freestanding satellite buildings shall be located at the street setback lines to enclose the site and help frame the street. **See Figure 82.**
- Buildings within the center shall have a logical spatial and functional relationship to each other and shall provide for convenient pedestrian circulation throughout the center.
- Parking shall be provided within convenient walking distances of all tenants. Walking paths to buildings from the public street shall be provided. **See Figure 83.**



Figure 82. Buildings placed at street



Figure 83. Walking paths.

- To reduce the visual impact of large paved areas, parking lots shall be broken up into smaller areas separated by landscaping, pedestrian circulation areas and drive aisles.
- Storage areas and loading facilities shall be limited in number and shall be designed, located, and screened to minimize their visibility from outside public areas and surrounding streets.

### Building Design

- Buildings, hardscape, landscape, site furnishings and signage should reflect a unified theme. **See Figure 84.**
- Long, linear buildings shall be avoided. Where such buildings are unavoidable, their length shall be mitigated by changes in building height, wall plane, and spatial volumes and by varied use of window areas, arcades, roof elements, and building materials. **See Figure 85.**
- If the shopping center contains a large scale building, integration of smaller-scale shops along the exterior of the building with entrances from the exterior of the building are desirable in order to create a more human scale and pedestrian-oriented character.
- Side and rear elevations of commercial buildings that are visible from public rights-of-way shall be architecturally consistent with the front elevations of the building.
- Blank walls adjacent to main pedestrian areas shall be avoided.
- Flat roofs, mansard roofs, and veneer parapets are strongly discouraged in favor of full, pitched roof treatments. In large centers, a combination of flat roofs with decorative cornices and full, pitched roofs may be acceptable if the design presents a balanced appearance. **See Figure 86.**



Figure 84. Unified theme.



Figure 85. Articulation along wall plane.



Figure 86. Appropriate roofing.

- All roof-top and ground-mounted equipment shall be screened from view.
- Outdoor sales and storage areas shall be designed to blend with the architecture of the main building. The height of the screening elements shall be tall enough to screen all stored materials. **See Figure 87.**



Figure 87. Outdoor sales area.

### **9.10 Development Incentives**

This Section offers development incentives to produce greater land use efficiencies and reduce incremental costs for new development.

#### **A. Applicability**

The incentives in this Section shall apply to all new development that meet(s) the applicable eligibility criteria.

#### **B. Definitions**

For the purposes of this Section, lot consolidation and lot integration shall have the following meanings:

1. Lot consolidation. A legal action in which a lot line is removed or abandoned; a lot line is adjusted; lots are merged; or other equivalent action is taken, for the purpose of allowing a structure or development to be built so that it extends over what were previously two or more separate lots. A lot consolidation cannot create additional lots and cannot make existing lots nonconforming. All lots must be identical in.
2. Lot integration. The comprehensive planning and improving of contiguous lots under multiple ownership as an integrated group, typically involving deed restrictions, cooperative agreements, reciprocal easements, or similar recorded instruments to bring about development that is comparable to what could occur if the lots were under common ownership.

#### **C. Lot Consolidation Incentives**

1. Eligibility requirements. In order to be eligible for the by-right development incentives indicated in Subparagraph 2, below, the minimum consolidated lot size for a development shall be 97,500 square feet.
2. By-right incentives. Eligible projects shall receive one or more of the following incentives:
  - a. Expedited application processing. Applications for eligible projects shall receive expedited project processing (i.e., projects will move to front of line for assignment to a planner for review), irrespective of the number of lots involved.
  - b. Parking Reduction. Required parking standards may be reduced up to a maximum of 20 percent, provided that the adequacy of proposed parking can be demonstrated in a parking study prepared in compliance with Section 9.6 Parking and Loading Standards, as approved by the Director of Community Development.
  - c. Allowable Bonuses. Allowable increases in intensity (i.e., floor area ratio (FAR) and in maximum height shall be in the amounts listed in Table 9-10 – Allowable Bonuses for Lot Consolidation. The intensity and height bonus incentives shall apply to the total gross square footage of the consolidated lots.

**Table 9-10 – Allowable Bonuses for Lot Consolidation**

| <b><i>Base Intensity (FAR)</i></b> | <b><i>Allowable Intensity Bonus</i></b> | <b><i>Base Height</i></b> | <b><i>Allowable Height Bonus</i></b> |
|------------------------------------|-----------------------------------------|---------------------------|--------------------------------------|
| 0.8                                | 10%                                     | 100 ft                    | 25 ft                                |

**D. Green Building Incentives**

1. Eligibility requirements. Projects that are seeking green building certification by a third-party entity (e.g., LEED, etc.) shall be eligible for the by-right development incentives indicated in Subparagraph 2.
2. By-right incentives.
  - a. Expedited application processing. Applications for eligible projects shall receive expedited project processing (i.e., projects will move to front of line for assignment to a planner for review).
  - b. Parking Reduction. Required parking standards may be reduced up to a maximum of 20 percent, provided that the adequacy of proposed parking can be demonstrated in a parking study prepared in compliance with Section 9.6 Parking and Loading, as approved by the Director of Community Development.
  - c. Allowable Bonuses. Allowable increases in intensity (i.e., floor area ratio (FAR) and in maximum height shall be in the amounts listed in Table 9-11 – Allowable Bonuses for Green Building. The intensity and height bonus incentives shall apply to the total gross square footage of the project site.

**Table 9-11 – Allowable Bonuses for Green Building**

| <b><i>Base Intensity (FAR)</i></b> | <b><i>Allowable Intensity Bonus</i></b> | <b><i>Base Height</i></b> | <b><i>Allowable Height Bonus</i></b> |
|------------------------------------|-----------------------------------------|---------------------------|--------------------------------------|
| 0.8                                | 10%                                     | 100 ft                    | 25 ft                                |

**E. Application and Review Process for Incentives**

1. Written submittal. Interested parties shall submit a written request for approval of incentives to the Director of Community Development on forms provided by the Community Development Department.
2. Determination. The Director of Community Development shall determine whether the proposed new development meets the eligibility criteria in Paragraphs C.1 . or D.1. Additional factors to be considered when reviewing applications for incentives shall include the following:

- a. Detriment. The proposal will not detrimentally affect access, design, or other public safety and welfare concerns.
  - b. Covenants or conditions. The proposal will not violate restrictive covenants contained on the face of the final plat or conditions of plat approval.
  - c. Right-of-way easements. The proposal will not invalidate any easement(s) unless the adjustment establishes replacement easement(s) that is properly filed with the city.
3. Conditions. Conditions may be imposed in connection with the granting of any incentive where the Director of Community Development deems that conditions are necessary to protect the public health, safety, and welfare.



### **9.11 Entitlement Procedures**

#### **A. Purpose**

These administrative procedures have two major purposes:

1. Ensure that development conforms to the SWIP Specific Plan ("Plan").
2. Ensure that the City's review is as expedited as possible while remaining legal and proper.

#### **B. Summary of Processing Procedures**

1. Conformity with the Plan. The Director of Community Development shall review each application for conformity with the development regulations in this Chapter. Conformity has two components:
  - a. Standards. Compliance with the Standards is mandatory and the City may not approve a project that fails to comply with the Standards.
  - b. Guidelines. The City may exercise discretion in evaluating the project's compliance with the Guidelines.
2. Project Review. Applications for development approvals shall be filed with the Department and will be returned for revision. Applications must strive to meet the "Guidelines," but applicants may propose alternate ways to achieve the goals of the Guidelines.
3. Timing of Permits and Approvals. Required planning approvals shall be obtained before the issuance of any grading, building, or other construction permit, and before the proposed use is constructed, otherwise established, or put into operation.
4. Processing Requirements. Applications for planning permits shall be processed in compliance with Table 9-12 – Hearing Bodies.
5. Timing of Project Review. Project review shall be required before the issuance of a Building or Grading Permit, Business License, or Certificate of Occupancy for any new structure (not including fences or walls) and/or existing structures to be reconstructed or remodeled (including facade improvements).

Table 9-12 – Hearing Bodies

| Reviewing Bodies                       |        |      |    |    |     | Appeal Body |    |
|----------------------------------------|--------|------|----|----|-----|-------------|----|
|                                        | D.A.B. | CD   | PC | CC | PR  | PC          | CC |
| Administrative site plan               | X*     | X    |    |    |     | X           |    |
| Administrative site plan, amendment    | X*     | X    |    |    |     | X           |    |
| Building relocation                    |        | X    |    |    |     |             | X  |
| Certificate of appropriateness         |        |      |    |    |     |             | X  |
| Code of the City of Fontana, Amendment | X      |      | Xf | X  |     |             |    |
| Conditional Use Permit                 | X      |      | X  |    |     |             | X  |
| Density bonus                          | X      | X    | Xf | X  |     |             |    |
| Design review                          | X      |      | X  |    |     |             | X  |
| Design review, amendment               | X      | X    | X  |    |     |             | X  |
| Design review, signs                   |        | X    |    |    |     | X           |    |
| Development agreements                 | X      | X    | Xf | X  |     |             |    |
| Development agreements, amendment      | X      | X    | Xf | X  |     |             |    |
| General plan amendments                | X      | X    | Xf | X  |     |             |    |
| Home occupation                        |        | X    |    |    |     | X           |    |
| Interpretation                         | X*     |      | X  |    |     |             | X  |
| Lot line adjustment                    |        | X*** |    |    |     |             |    |
| Parcel maps, tentative                 | X      | X    | X  |    |     |             | X  |
| Parcel maps, final                     |        | X*** |    |    |     |             |    |
| Pre-Annexation Agreement               |        |      | Xf | X  |     |             |    |
| Specific Plan                          |        |      | Xf | X  | X** |             |    |
| Specific plan, amendment               |        |      | Xf | X  | X** |             |    |
| Tract maps, tentative                  | X      |      | X  |    |     |             | X  |
| Tract maps, final                      |        |      |    | X  |     |             |    |
| Variances                              | X      |      | X  |    |     |             | X  |
| Zone changes                           | X      |      | Xf | X  |     |             |    |
| Administrative Variance                | X      | X    |    |    |     | X           |    |
| Minor Use Permit                       | X      | X    |    |    |     | X           |    |

## Notes:

Decisions of any "Reviewing Body" may be appealed to the City Council, except where State law limits such appeal to the City Engineer. If the Planning Commission is listed above as the "Appeal Body", the Commission must first review an Appeal before it may be forwarded to the City Council for consideration.

DAB—Development Advisory Board

CD—Community Development Director

PC—Planning Commission

CC—City Council

PR—Parks and Recreation Commission

X\*—At the discretion of the Director of Community Development or his/her designee

X\*\*—If Public Park(s) are considered

X\*\*\*—City Engineer has final approval

f—Recommending body to the City Council

**C. Administration and Enforcement**

The Director of Community Development shall enforce the provisions in this Specific Plan. All officers, employees, and officials of the City of Fontana, who are vested with the duty or authority to issue permits or licenses shall conform with this Specific Plan and shall not issue any permit or license, or approve any use or building, which would be in conflict with this Specific Plan. Any permit, license or approval issued that is in conflict with the requirements of this Specific Plan shall be considered null and void.

**D. Amendments to the Specific Plan**

The SWIP Specific Plan may be amended utilizing the same procedures by which it was originally adopted. In addition, subsequent amendments to this Specific Plan shall demonstrate the amendment meets the intent of the Specific Plan's existing policy framework, or specific findings to demonstrate the amendment enhances the Plan or is necessary to more effectively implement the Specific Plan. All sections or portions of the Specific Plan proposed to be amended or that may be affected by the amendment must be identified during the amendment process. A concurrent amendment to the General Plan would not be required provided that the Director of Community Development determines that substantive changes would not influence the goals, objectives, policies, or programs of the General Plan.

Allowing flexibility in the administration of the Specific Plan enhances the effectiveness of the Specific Plan as a comprehensive, "living" planning document. The following minor modifications to the Specific Plan qualify for processing as an administrative amendment to the Specific Plan subject to the review and approval of the Director of Community Development:

- Changes in the location of infrastructure and public facilities (e.g., internal roads, drainage facilities, etc.).
- Minor change in roadway alignment.

**E. Similar Use Determination**

1. Applicability and Authority. Unlisted uses in Table 8-2 are prohibited uses, unless the Director of Community Development finds a proposed use to be similar to an expressly allowed use in compliance with this Section. A Similar Use Determination is a process for determining when an unlisted use is similar in nature to a permitted or conditionally permitted use and may be permitted. As specified by Municipal Code Section 30-4 Other Uses to be Determined by the Director of Community Development, the Director of Community Development shall have the responsibility and authority to make Similar Use Determinations.
2. Ministerial Action. A Similar Use Determination shall constitute a ministerial action.
3. Application Contents and Filing. An application for similar use shall be in writing on forms provided by the Director of Community Development.
4. Determination Findings. In determining "similarity," the Director of Community Development shall make all of the following findings:

- a. The characteristics of and activities associated with the proposed use are equivalent to one or more of the listed uses and will not involve a higher level of activity or environmental impacts than the uses listed in the land use district;
  - b. The proposed use will be consistent with the purposes of the applicable land use district; and
  - c. The proposed use will be consistent with the General Plan and this SWIP Specific Plan.
- 5. Notice. A Similar Use Determination shall be made in writing and shall contain the facts that support the determination. The Community Development Department shall maintain all determinations on record for review by the general public upon request. The notice shall include:
  - a. A brief statement explaining the criteria and standards considered relevant to the decision;
  - b. A statement of the standards and facts relied upon in rendering the decision; and
  - c. An explanation of appeal rights and appeal deadlines. The determination of similar use by the Director of Community Development shall be subject to appeal to the Planning Commission.

***F. Nonconforming Lots, Structures, and Uses***

- 1. Nonconformance provisions are established to:
  - a. Bring all uses, structures, sites and signs into conformance with the developmental requirements and design guidelines in the Code;
  - b. Limit the occurrences and extent of nonconformance by prohibiting expansion, intensification, reinstatement, alteration, restoration after destruction, and reestablishment after abandonment; and
  - c. Gradually phase out nonconforming uses, structures, lots, and signs.
- 2. Applicability
  - a. Nonconforming uses, structures, signs and lots may be maintained, expanded, altered and/or abated only in accordance with the provisions of this Specific Plan.
  - b. Any Designated Historic Landmark, or any property listed on the California Register of Historical Resources or National Register of Historic Places, shall be exempt from the provisions of this Section with respect to the restoration and maintenance of structures, provided that any construction plans are approved through a Certificate of Appropriateness by the Historic Preservation Commission/Planning Commission.

3. Nonconforming Uses. A use that lawfully occupied a building or land at the time this Specific Plan became effective, and that does not conform to the use regulations of the land use district in which it is located, is deemed a "legal nonconforming use." A legal nonconforming use may continue, subject to the following:
  - a. Discontinuation of Use
    - i. Loss of legal nonconforming status. If a legal nonconforming use is discontinued for a period of 90 or more days, regardless of the owner's intent, it shall lose its legal nonconforming status and the continued use of the property shall be required to conform to all provisions of this Specific Plan.
    - ii. Extension of legal nonconforming status. Wherein special circumstances exist, the Director of Community Development may extend the legal nonconforming status of a use, for up to an additional 90-day period. Furthermore, an additional extension may be granted by the Planning Commission, for up to an additional 90-day period. The total time period of all time extensions shall not exceed 180 days.
    - iii. Extension of legal nonconforming use.
      - (1) An application for a Minor Use Permit shall be filed with the Community Development Department on a City application form, together with all required fees, plans, maps, reports, special studies, exhibits, and any other information deemed necessary by the Director of Community Development to process the application. The application shall be filed prior to the expiration of the 90-day period.
      - (2) The application shall be reviewed by the Director of Community Development within 30 days following application filing. The Director of Community Development shall notify the applicant, in writing, as to whether the application is complete. If the application is not complete, the Director of Community Development shall specify those parts of the application that are not complete and shall identify the manner by which it can be made complete. If written notification is not provided to the applicant within 30 days following application filing, the application shall be deemed complete.
      - (3) The Director of Community Development shall investigate the facts bearing on the application and provide the information necessary for action on the application, consistent with this Specific Plan and the General Plan. The applicant shall have made a good faith effort through the submittal of documentation and has diligently pursued compliance with this Specific Plan.
      - (4) The application shall be reviewed by the Director of Community Development at a duly noticed public hearing, whom shall then approve, modify or deny such application. The decision of the Director of Community Development shall be final and conclusive in the absence

of a timely filed appeal to the Planning Commission. An appeal of the Director of Community Development's decision shall be filed within 10 days from the date of the decision of the Director of Community Development. An appeal of the Director of Community Development's decision shall be reviewed by the Planning Commission. The decision of the Planning Commission shall be final and conclusive in the absence of a timely filed appeal to the City Council.

- (5) The applicant may appeal the decision of the Planning Commission to the final deciding body, the City Council. The City Council decision shall be final and conclusive. If the application to extend the legal nonconforming use is approved by the City Council, the extension shall be granted for 90 days from the date of approval.
- (6) If the Director of Community Development or appointed designee has determined that the applicant has failed to show a good faith effort towards continually processing the extension of legal nonconforming use application (i.e., revising plans, withdrawing the application, placing the project on hold, etc.), the legal nonconforming use shall cease within 60 days from the application submittal date.
- (7) In granting an extension of the legal nonconforming status, the Director of Community Development may attach reasonable conditions and restrictions to the request, in addition to those required by this Specific Plan, which will ensure that the use:
  - Will not endanger the public health, safety or general welfare;
  - Will not injure the value of adjoining or abutting property;
  - Will not result in any significant environmental impacts; and
  - Will be in harmony with the area in which it is located.
- (8) In approving an extension of the legal nonconforming status, the Director of Community Development or Planning Commission shall consider and clearly establish the following findings of fact:
  - The non-conforming use has been discontinued within the 90-day period.
  - A physical and/or economic hardship has prevented the nonconforming use from being in compliance prior to the expiration of the 90 day period;
  - Approving the extension will not adversely affect the health, safety or general welfare.

- b. Change in Ownership, Tenancy or Management. A change in ownership, tenancy or management of a nonconforming use shall not affect its legal nonconforming status, provided that the use did not discontinue pursuant to Section (3.a.i) "Loss of legal nonconforming status" or the type of use and/or intensity of use do not change.

- c. New Development. New development on any lot or parcel upon which a legal nonconforming use exists shall require that all uses on the property conform to the provisions of this Specific Plan.
  - d. Alterations and Expansion of Use
    - i. A nonconforming use shall not be enlarged or extended in such a way as to occupy any part of any structure or property that it did not occupy prior to the creation of the nonconformity.
    - ii. A structure fully or partially occupied by any nonconforming use shall not be moved, altered or enlarged, unless required by law, or unless the moving, alteration or enlargement will result in the elimination of the nonconforming use.
  - e. Intensification of Use. A nonconforming use shall not be intensified in such a way as to increase the discrepancy between existing conditions and the standards set forth in this Specific Plan.
4. Nonconforming Structures. A structure lawfully existing at the time this Specific Plan became effective, any portion of which does not comply with the requirements of the land use district in which it is located, including setbacks, separations, height and design, is deemed a "legal nonconforming structure." A legal nonconforming structure may continue to exist, subject to the following:
- a. Damage or Destruction
    - i. A legal nonconforming structure that is damaged or partially destroyed by fire, flood, wind, earthquake or other calamity, or the public enemy, or other cause which is beyond the control of the property owner, and which could not otherwise have been prevented by reasonable care and maintenance of the structure, may be reconstructed up to the original size, placement and density, provided that total cost of such reconstruction does not exceed more than 50 percent of the structure's current fair market value. The structure may be restored and the nonconforming use may be resumed, provided that restoration is started within six months, unless extended by the Director of Community Development, and diligently pursued.
    - ii. In the event that the cost of repairing such damage exceeds 50 percent of the current fair market value of the structure prior to such damage occurring, the structure may be reconstructed up to the original size, placement and density, subject to all of the following:
      - The Planning Commission, at a duly noticed public hearing, must find that continuing the nonconforming structure will not result in an annoyance to and/or reduction of any surrounding property; and
      - The extent of damage or partial destruction shall be based upon a comparison of the estimated cost of restoring the structure to its condition



prior to such damage or partial destruction with its value at the time the structure was damaged or partially destroyed. Estimates for such purpose shall be made by or reviewed by the Building Official; and

- The restoration is commenced within six months and diligently pursued to completion.
- An application for a Nonconforming Structure shall be filed with the Community Development Department on a City application form, together with all required fees, plans, maps, reports, special studies, exhibits, and any other information deemed necessary by the Director of Community Development to process the application. The application shall be filed prior to the expiration of the 90-day period.
- A structure or development that has been damaged or destroyed by fire, flood, wind, earthquake, or other calamity, or by public enemy, or other cause which is beyond the control of the property owner, and which could not otherwise have been prevented may be reconstructed up to the original size, placement and density, except a multiple family dwelling or development which has been abandoned for a period of 90 or more days prior to being involuntarily damaged or destroyed, or a multiple family dwelling or development constituting a public nuisance prior to being involuntarily damaged or destroyed may not be reconstructed unless the structure is made to comply to all provisions of this Specific Plan.

b. Alterations and Expansion

- i. A nonconforming structure shall not be moved, altered or enlarged so as to increase the discrepancy between existing conditions and the most current standard as prescribed by the land use district in which the structure is located, except alteration and/or enlargement to a single family dwelling conducted pursuant to section ("e") Nonconforming Single-Family Residential Structures".
- ii. Within land use districts, reasonable repairs and alterations may be made to legal nonconforming structures, provided that no structural alterations shall be made which would prolong the life of supporting members of a structure, such as bearing walls, columns, beams or girders. Structural elements may be modified only if such modification or repair is immediately necessary to protect the public health and safety, occupants of the legal nonconforming structure, or adjacent property, as determined by the Building Official. The total cost of such repairs or alterations may not exceed 50 percent of the replacement cost of the nonconforming structure.

- c. New Structures. Any new structure constructed on a lot or parcel with an existing legal nonconforming structure shall be constructed in conformance with all applicable provisions of this Specific Plan. However, in no case may a new nonresidential structure be constructed on the same lot as an existing legal nonconforming residential structure.

- d. Abatement of Nonconforming Structures Posing a Threat to the Public Health, Safety and General Welfare. A structure which is nonconforming because of a violation or deficiency that poses a threat to the public health, safety or general welfare, as determined by the Building Official, and which fails to resolve, repair or improve such, or to fully mitigate the hazard involved, shall be abated, condemned or demolished upon the issuance by the City of a nuisance abatement, condemnations or demolition order.
- e. Nonconforming Single-Family Residential Structures. In addition to the requirements of subsections a and d, above, a nonconforming single family residential lot and/or structure that was lawfully established and maintained before the adoption of this Specific Plan, but which under the provisions of this Specific Plan does not conform with the regulations of the land use district in which it is located with respect to use, design and/or development standards, and which is continuously used and maintained for single family residential purposes, shall be subject to the following:
  - i. Alterations and expansions to structures within nonresidential zones.
    - Necessary repairs and desirable alterations, as deemed appropriate by the Director of Community Development, may be made to a legal nonconforming single family residential structure that is nonconforming as to use.
    - A single family dwelling that is nonconforming as to its location within a land use district that does not permit single family dwellings, and in which the residential use was lawfully established and continuously maintained, shall be subject to the development regulations of the Municipal Code Chapter 30 Zoning and Development Code that pertain to the R1 zoning district and off-street parking and loading regulations.
- 5. Nonconforming Signs. A sign lawfully existing at the time this Specific Plan became effective, any portion of which does not comply with the requirements of Section 8.7 Sign Standards, is deemed a "legal nonconforming sign." A sign that presents a hazard to public safety, as determined by the City, shall be removed upon the issuance of a notice by the City. A legal nonconforming sign may continue to exist, subject to the following:
  - a. A nonconforming sign may not be altered, enlarged, extended, or moved, except in conformity with the requirements of Section 8.7 Sign Standards, or as otherwise required by law;
  - b. Where a use or a structure associated with a nonconforming sign is abandoned or discontinued, any sign associated with a new use of the site shall be in full conformity with the requirements of Section 8.7 Sign Standards.
- 6. Nonconforming to Development Standards. The development that is not in compliance with the site development standards prescribed by the regulations of the land use district in which the lot or parcel is located, including area, coverage, configuration, dimensions, parking, landscaping, screen walls, fences and enclosure trash receptacles, is deemed

"legal nonconforming," provided such development was lawfully created and existing at the time this Specific Plan, which created the nonconformity, became effective.

- a. A development that is nonconforming as to landscaping, screen walls, fences and enclosure of trash receptacles, shall be altered to comply with the district regulations covering the following standards, or as a condition of any subsequent Development Plan or Conditional Use Permit approval:
7. Nonconforming Lots. A lot or parcel that is not in compliance with the site development standards prescribed by the regulations of the land use district in which the lot or parcel is located, including area and configuration is deemed a "legal nonconforming lot," provided such lot or parcel was lawfully created and existing at the time this Specific Plan, which created the nonconformity, became effective.
  - a. A lot or parcel that is nonconforming as to minimum area or dimension shall be granted all development rights and uses of the land use district within which it is located.
    - i. The landscaping of setback areas insofar as a setback exists;
    - ii. The landscaping of parking areas, provided fulfilling the requirement does not reduce off-street parking or loading spaces to fewer than prescribed in this Specific Plan;
    - iii. The screening of storage areas; and
    - iv. The enclosure of trash receptacles.
8. Elimination of Nonconforming Adult Business Uses. Nonconforming adult business uses shall be eliminated in compliance with Municipal Code Chapter 30 Zoning and Development Code.
9. Abatement of Nonconforming Uses, Structures, Lots and Signs. Whenever a use, structure, site or sign becomes nonconforming because of a change of land use district boundaries or a change of the regulations prescribed for the district in which the site is located, the period of time prescribed in Municipal Code Chapter 30 Zoning and this Specific Plan for the abatement period for the elimination of the use, the removal of the structure or sign, or the improvement of the lot or parcel shall begin on the effective date of the change of district boundaries or regulations.

## Chapter 10.0 – Slover East Industrial District



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### **10.1 Purpose**

The Slover East Industrial District (SED) is intended to provide opportunities for light and heavy manufacturing activities that are supported by trucking routes and the existing rail spur. In addition, it is intended to promote the continued use and expansion of existing industrial, distribution and logistics-based warehousing developments, and strategically located service commercial facilities. The District will accommodate pedestrian-oriented elements along Poplar Avenue, and contribute towards buffering adjacent residential neighborhoods to the east. General features of this District include:

- Preservation and revitalization of existing industrial uses
- Encouraging future development of distribution, logistics-based warehousing, and manufacturing uses
- Promotion of lot consolidation
- Encourage pedestrian-oriented elements along Poplar Avenue
- Provide opportunities for service commercial development along major intersections
- Landscape and streetscape enhancement
- Development that is compatible with adjacent residential uses

## **10.2 Applicability**

### **A. Projects Subject to Development Regulations**

This Chapter contains the development regulations that govern all future private development actions in the SED, including new construction, additions or renovations to existing structures and/or new land uses proposed for existing facilities.

### **B. Right of Continued Use**

This Chapter shall not require any change in any existing building or structure for which a building permit has been previously issued or for plans on file in the Community Development Department before the effective date of this Specific Plan. Changes in the property's ownership or tenants of existing uses shall likewise require no change in any existing building or structure. Nonconforming standards and provisions shall be governed by Section 10.11 Entitlement Procedures.

### **C. Other Requirements**

This Chapter does not eliminate the need for obtaining any other permits required by the City, or any permit, approval or entitlement required by any other applicable special district or agency, and/or the regulations of any State or Federal agency.

### **D. Types of Development Regulations**

The development regulations are of two types – Standards and Guidelines – as follows:

1. Standards address those aspects of development that are essential to achieve the goals of the Specific Plan. They include specifications for allowable land uses and site development (e.g., building height, setbacks, etc.). Conformance with Standards is mandatory. Standards are indicated by use of the words "shall," "must," or "is / is not permitted."
2. Guidelines provide guidance for new development in terms of aesthetics and design details. They are intended to direct building and site design in a way that results in the desired character for the SED. Whereas conformance with the Standards is mandatory, conformance with the Guidelines is preferred and/or recommended. Provisions that fall into this category are indicated by the use of the words "should," "may" or "are encouraged to." In various cases, the Guidelines provide a choice of treatments that will achieve the desired effect. Developers are permitted to propose alternative design details if they are able to show that such details implement the Specific Plan objectives with respect to the desired character of the SED.

### **E. Minimum Requirements**

The provisions in this Chapter shall be minimum requirements. When this Chapter provides for discretionary authority on the part of the Director of Community Development, Planning Commission, or City Council, that discretion may be exercised to impose more stringent requirements if deemed necessary to accomplish the objectives of the SED.

### **F. Overview of Development Regulations**

1. Relationship of Land Use Districts. The development regulations in this Chapter are applied to those properties that are within the SED. Exhibit 10.1 – Land Use Plan indicates the location of the SED and its relationship to the other land use districts in the Specific Plan area.
2. Standards, Guidelines and Procedures. The development regulations are divided into the following sections: 10.3 Allowable Land Uses and Permit Requirements; 10.4 Development Standards; 10.5 Landscape Regulations; 10.6 Parking and Loading Standards; 10.7 Sign Standards; 10.8 Public Right-of-Way Streetscape; 10.9 Design Guidelines; 10.10 Development Incentives; and 10.11 Entitlement Procedures. Projects must meet all development standards in order to achieve approval in the development review process. Projects are encouraged to adhere to the recommendations contained in Section 10.9 Design Guidelines.
3. Steps for Using Chapter. Table 10-1 – Process Procedures illustrates the steps for using this Chapter.

| <b>Table 10-1 – Process Procedures</b>                                                                                      |                                                          |                                      |
|-----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|--------------------------------------|
| <i>Instructions</i>                                                                                                         | <i>Information Source</i>                                | <i>Where to Find in this Chapter</i> |
| Locate property and its street frontage                                                                                     | Land Use Plan                                            | Exhibit 10.1                         |
| Identify the allowable uses and refer to the definitions of the uses                                                        | Allowable Land Uses & Permit Requirements Definitions    | Table 10-2<br>Appendix A             |
| Comply with the requirements for intensity, lot dimensions, height limits, and setbacks                                     | Intensity and Dimensional Standards                      | Table 10-3                           |
| Comply with fence, wall, and screening requirements                                                                         | Fence, Wall, and Screening Standards                     | Table 10-4                           |
| Comply with landscaping requirements                                                                                        | Landscape Regulations<br>Public Right-of-Way Streetscape | Section 10.5<br>Section 10.8         |
| Comply with parking requirements                                                                                            | Parking and Loading Standards                            | Section 10.6                         |
| Comply with sign design requirements                                                                                        | Sign Standards                                           | Section 10.7                         |
| Review the design guidelines for preferred site layout, building orientation and architectural detail, fencing, and parking | Design Guidelines                                        | Section 10.9                         |
| Determine if development is eligible for incentives                                                                         | Development Incentives                                   | Section 10.10                        |
| Submit project application and proceed through project approval process                                                     | Entitlement Procedures                                   | Section 10.11                        |

# Southwest Industrial Park Specific Plan

Slover East Industrial District

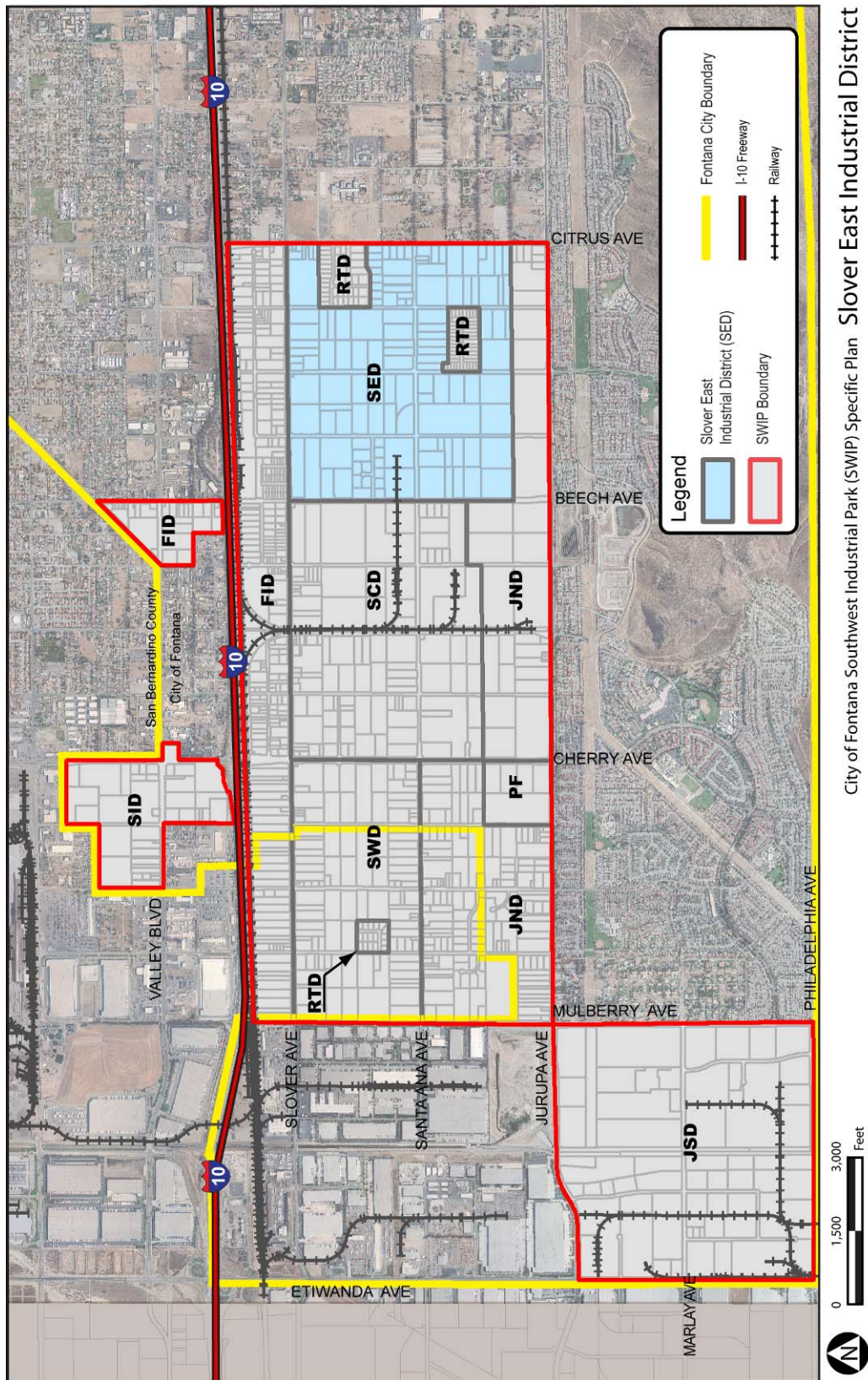


Exhibit 10.1 – Land Use Plan

### ***10.3 Allowable Land Uses and Permit Requirements***

This Section identifies allowable land uses and their permit requirements.

#### ***A. Allowed Uses***

Table 10-2 – Allowable Land Uses and Permit Requirements identifies the types of land uses allowed in the SED and the permit required to establish each use.

#### ***B. Uses Not Listed***

Uses not listed in Table 10-2 are prohibited land uses, until and unless the Director of Community Development makes a similar use determination in compliance with Subsection 10.11.C Entitlement Procedures -- Similar Use Determination.

#### ***C. Other Applicable Regulations***

See Section 5.9.B. Relationship to Zoning and Development Code.

#### ***D. Definitions***

Definitions for land uses are provided in Appendix A Definitions. If a definition is not provided, the definitions in the Municipal Code shall apply. The Director of Community Development shall interpret the definitions; make a similar use determination in compliance with Subsection 10.11.C Entitlement Procedures – Similar Use Determination; and/or refer any questions to the Planning Commission for its determination. For the purposes of this Specific Plan, the following definitions shall apply:

1. Commercial Use: Activity involving the sale of goods or services carried out for profit.
2. Industrial Use: Those fields of economic activity including construction; manufacturing; transportation, communication, electric, gas, and sanitary services; and wholesale trade.

## Southwest Industrial Park Specific Plan

Slover East Industrial District

**Table 10-2 – Allowable Land Uses and Permit Requirements**

| Land Use                                                 | Permit Requirement                                                                                     |  |
|----------------------------------------------------------|--------------------------------------------------------------------------------------------------------|--|
|                                                          | "P"= Use Permitted by Right<br>"C"= Conditional Use Permit Required<br>"M" = Minor Use Permit Required |  |
|                                                          | Slover East Industrial District                                                                        |  |
| Entertainment, Recreation and Public Assembly Uses       |                                                                                                        |  |
| Adult Businesses                                         | Municipal Code §30-11 & Municipal Code Chapter 15, Article XVIII                                       |  |
| Open Space / Park                                        | P                                                                                                      |  |
| Public Assembly Facilities                               | C                                                                                                      |  |
| Recreational Facilities                                  | C                                                                                                      |  |
| Industry, Manufacturing, and Processing Uses             |                                                                                                        |  |
| Handcraft Industry/<br>Small-Scale Manufacturing         | P                                                                                                      |  |
| Manufacturing, Light                                     |                                                                                                        |  |
| • Appliance Manufacturing                                | P                                                                                                      |  |
| • Electronics & Equipment                                | P                                                                                                      |  |
| • Furniture and Fixture Manufacturing                    | P                                                                                                      |  |
| • Glass Product Fabrication                              | P                                                                                                      |  |
| • Machinery Manufacturing                                | P                                                                                                      |  |
| • Paper Product Manufacturing                            | P                                                                                                      |  |
| • Product Assembly and Distribution                      | P                                                                                                      |  |
| General Manufacturing                                    |                                                                                                        |  |
| • Plastics, Synthetics, and Rubber Product Manufacturing | P                                                                                                      |  |
| • Pulp and Pulp Product Industries                       | P                                                                                                      |  |
| • Stone and Cut Stone Product Manufacturing              | P                                                                                                      |  |
| • Structural Clay and Pottery Product Manufacturing      | P                                                                                                      |  |
| • Textile and Leather Product Manufacturing              | P                                                                                                      |  |
| Research and Development                                 | P                                                                                                      |  |
| Residential Uses                                         |                                                                                                        |  |
| Caretaker Housing (1)                                    | C                                                                                                      |  |
| Retail Uses                                              |                                                                                                        |  |
| Alcohol Sales, Off-Site/On-Site                          | C                                                                                                      |  |
| Factory/Warehouse Outlet Store                           | P                                                                                                      |  |
| Retail Sales, General (2)                                | P                                                                                                      |  |
| Service Uses                                             |                                                                                                        |  |
| Animal Kennel Services                                   | P                                                                                                      |  |
| Business Support Services                                | P                                                                                                      |  |
| Food Service                                             |                                                                                                        |  |
| • Outdoor Dining                                         | P                                                                                                      |  |
| • Restaurants                                            | P                                                                                                      |  |
| Industrial Repair                                        | P                                                                                                      |  |
| Mini Storage Facility (2)                                | P                                                                                                      |  |
| Motor Vehicle                                            |                                                                                                        |  |
| • Car Wash/ Detailing                                    | M                                                                                                      |  |
| • Motor Vehicle Rental, Sales, and Leases                | C                                                                                                      |  |
| • Service Stations (2)                                   | C                                                                                                      |  |
| • Registered Vehicle Storage                             | C                                                                                                      |  |
| School, Commercial                                       | M                                                                                                      |  |
| School, Trucking                                         | C                                                                                                      |  |

Table 10-2 – Allowable Land Uses and Permit Requirements (continued)

| Land Use                                                                    | Permit Requirement                                      |                                       |
|-----------------------------------------------------------------------------|---------------------------------------------------------|---------------------------------------|
|                                                                             | "P" = Use Permitted by Right                            | "C" = Conditional Use Permit Required |
|                                                                             | "M" = Minor Use Permit Required                         |                                       |
| Slover East Industrial District                                             |                                                         |                                       |
| Distribution, Wholesaling and Warehousing Uses                              |                                                         |                                       |
| Industrial Equipment, Materials, and Supplies, Truck, Truck Trailer Storage |                                                         | C                                     |
| Logistics and Distribution Facilities                                       |                                                         | P                                     |
| Petroleum/Hazardous Material Storage                                        |                                                         | C                                     |
| Warehousing Facilities                                                      |                                                         | P                                     |
| Transportation, Communications and Infrastructure Uses                      |                                                         |                                       |
| Antennas                                                                    |                                                         | M                                     |
| Broadcasting Offices or Studios                                             |                                                         | P                                     |
| Parking Facilities (2)                                                      |                                                         | P                                     |
| Recycling Facilities                                                        |                                                         | C                                     |
| Truck and/or Trailer Storage<br>Caretaker housing required                  |                                                         | C                                     |
| Vehicle Auction                                                             |                                                         |                                       |
| Vehicle Auction                                                             |                                                         | P                                     |
| Other Uses                                                                  |                                                         |                                       |
| Drive-Through Uses (2)                                                      |                                                         | M                                     |
| Outdoor Display & Sales                                                     |                                                         | M                                     |
| Public Facilities                                                           |                                                         | P                                     |
| Temporary Uses                                                              | Municipal Code Chapter 30, Division 14 (Temporary Use). |                                       |

(1) See Section 10.4D

(2) See Section 10.9E



## 10.4 Development Standards

New land uses and structures and alterations to existing land uses and structures in the SED shall be designed, constructed, and established in compliance with the requirements in this Section.

### A. *Intensity and Dimensional Standards*

Table 10-3 – Intensity and Dimensional Standards provides the required intensity and dimensional standards for proposed development. The Director of Community Development is authorized to approve modifications of 10 percent or less of any land use district setback, lot width, lot depth, building coverage, building height, or wall height standard in compliance with the administrative variance procedures in Municipal Code Section 30-51.6 (Findings necessary for granting a variance). See Exhibit 10-2 – Dimensional Standards.

The Director of Community Development may grant an administrative variance from the requirements of this chapter where practical difficulties, unnecessary hardships, or results contrary to the intent of this chapter would occur from the strict and literal interpretation and enforcement of the Code. An administrative variance may be granted upon conditions which will ensure the protection of the public safety, health and welfare. To grant an administrative variance, the Director of Community Development must find from the facts presented that the following conditions exist.

- (1) That because of circumstances applicable to the property including size, shape, topography, location or surroundings, the strict application of this chapter will deprive the property of privileges enjoyed by other property in the vicinity and under identical zoning classification;
- (2) That the granting of such an administrative variance will be subject to conditions assuring that the variance shall not constitute a grant of special privileges inconsistent with the limitations upon other properties in the vicinity and zoning district in which the property is located;
- (3) That the administrative variance does not authorize a use or activity which is not a specifically allowed use in the zoning district in which the property is located; and
- (4) That the granting of one administrative variance will not be contrary to the general plan.

Table 10-3 – Intensity and Dimensional Standards

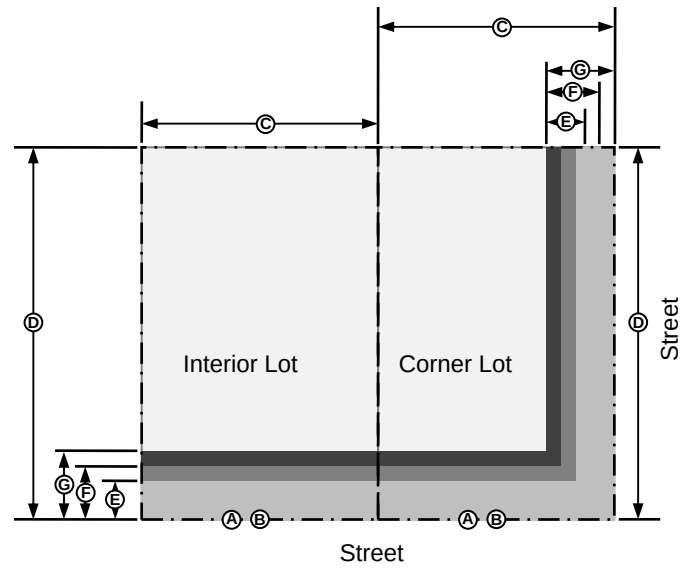
| Lot Size and Building Placement                                                 |                                                      |
|---------------------------------------------------------------------------------|------------------------------------------------------|
|                                                                                 | Industrial                                           |
| <b>INTENSITY</b>                                                                |                                                      |
| Floor Area Ratio (3)                                                            | 1.0 max. FAR                                         |
| <b>LOT DIMENSIONS</b>                                                           |                                                      |
| Lot Size                                                                        | 40,000 sq ft min.                                    |
| Lot Width (C)                                                                   | 200 ft min.                                          |
| Lot Depth (D)                                                                   | 175 ft min.                                          |
| <b>BUILDING SETBACKS</b>                                                        |                                                      |
| Front Setback (1)                                                               |                                                      |
| Major Highway (Not applicable) (G)                                              | Not applicable                                       |
| Primary Highway (Beech and Slover) (F)                                          | 25 ft min. (4)                                       |
| Secondary Highway/Collector Street (Catawba, Citrus, Elm Poplar, Santa Ana) (E) | 20 ft min. (4)                                       |
| Side (Street) Setback (1)                                                       |                                                      |
| Major Highway (Not applicable) (G)                                              | Not applicable                                       |
| Primary Highway (Beech and Slover) (F)                                          | 25 ft min. (4)                                       |
| Secondary Highway/Collector Street (Catawba, Citrus, Elm Poplar, Santa Ana) (E) | 20 ft min. (4)                                       |
| Side (Interior) Setback (2)                                                     | None                                                 |
| Rear Setback (2)                                                                | None                                                 |
| Adjacent to Residential Truck District (2)                                      | 50 ft min                                            |
| Accessory Building Setbacks                                                     | Comply with setbacks applicable to primary structure |

Table 10-3 – Intensity and Dimensional Standards

| Building Height and Mass                            |                                            |
|-----------------------------------------------------|--------------------------------------------|
|                                                     | Industrial                                 |
| <b>HEIGHT</b>                                       |                                            |
| Primary Building                                    | 60 ft max                                  |
| Accessory Building                                  | 1-story or 14 ft max. to eave/parapet line |
| Interior (Floor-to-Floor, excluding parking levels) | Ground floor – 12 ft min                   |
| <b>UPPER STORY STEPBACKS</b>                        |                                            |
| All buildings regardless of street frontage         | Allowed.                                   |

## Notes:

- (1) Setback is measured from public right-of-way line.  
 (2) Setback is measured from property line.  
 (3) See Section 10.10 Development Incentives.  
 (4) Corner cut-off setbacks per Specific Plan.



- Ⓐ = Public Right-of-Way Line
- Ⓑ = Property Line
- Ⓒ = Lot Width
- Ⓓ = Lot Depth
- Ⓔ = Front/Side Setbacks – Secondary Highway/Collector Street
- Ⓕ = Front/Side Setback – Primary Highway
- Ⓖ = Front/Side Setback – Major Highway

Exhibit 10-2 – Dimensional Standards.

**B. Fences, Walls, and Screening**

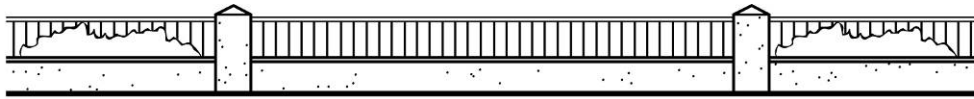
1. Standards. Table 10-4 – Standards for Fences, Wall and Screening contains standards for fences, walls, and screening. Refer to Section 10.9 Design Guidelines for guidelines about the design, materials, and construction of fences, walls, and screening.

**Table 10-4 – Standards for Fences, Walls, and Screening**

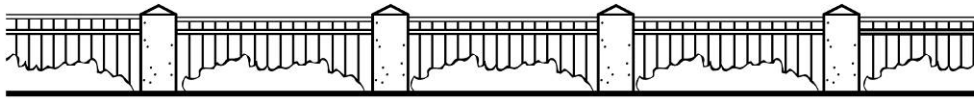
| <b>Location</b>                                                                             | <b>Materials</b><br><i>See Section 10.9 Design Guidelines</i>                                                                                                  | <b>Maximum Height</b>                                                                                     |
|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| Within front setback area                                                                   | Solid fencing/wall                                                                                                                                             | 36 inches; or<br>42 inches if abutting residential front yard                                             |
|                                                                                             | Open fencing/wall                                                                                                                                              | 6 ft                                                                                                      |
| Within street side setback area                                                             | Tubular steel construction allowed in required setback area if set back at least 15 ft from lot line. Solid masonry wall not allowed in required setback area. | 8 ft if necessary for security purposes, with 18-inch maximum width pilasters a minimum of 8 ft on center |
| Within interior side setback area                                                           | Any type of fence, hedge, or wall allowed, except that if abutting residential zone, solid masonry wall only                                                   | 8 ft                                                                                                      |
| Within rear setback area                                                                    | Any type of fence, hedge, or wall allowed, except that if abutting residential zone, solid masonry wall only                                                   | 8 ft                                                                                                      |
| Outside of a required setback area                                                          | Solid or open fencing/wall                                                                                                                                     | No height limit                                                                                           |
| Screening of outside storage materials and equipment from view from the public right-of-way | Solid fencing/wall                                                                                                                                             | 8 ft                                                                                                      |
| At intersections of alleys, streets, and driveways                                          | Solid or open fencing/walls                                                                                                                                    | 30 inches                                                                                                 |

Note: (1) All fences and walls shall meet the City's line of sight regulations, as determined by the City Engineer.

2. Materials.
  - a. Open fencing shall mean fencing with over 50 percent of the surface area open for free passage of light and air and through which the area behind the fence is visible to public view. See Exhibit 10-3 – Open and Solid Fencing.
  - b. Solid fencing shall mean fencing with 50 percent or less of the surface area open for free passage of light and air and designed to conceal the area behind the fence from public view. See Exhibit 10-3 – Open and Solid Fencing.
  - c. Barbed wire fences, electric fences, or similar fencing material is prohibited.
  - d. Chain link fencing is allowed on interior property lines that are not visible from public rights-of-way.



Elevation of Wall / Wrought Iron Combination

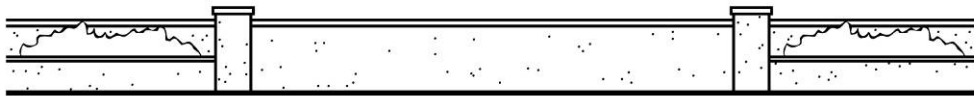


Elevation of Wrought Iron with Pilasters

*Examples of Open Fencing*



Elevation of Staggered Wall



Elevation of Planters / Wall



Elevation of Wall with Breaks

*Examples of Solid Fencing*

Exhibit 10-3 – Open and Solid Fencing.

3. Screening and buffering.

- a. Roof-mounted and ground-mounted mechanical equipment, utilities, storage, and solid waste storage areas shall be screened from adjoining properties and public right-of-ways by a visual barrier (e.g., wall, fence, landscape material, etc.) to the satisfaction of the Director of Community Development. Where only landscaping is used for screening, it shall be planted with five-gallon (minimum size) shrubs spaced to provide a continuous dense screen.
- b. Parking lot perimeters shall be screened and planted in compliance with Section 10.6 Parking and Loading Standards.

**C. Outdoor Activities and Storage**

- 1. Storage in Setback Areas. Material or equipment shall not be stored anywhere in the front yard area. Temporary storage of construction materials during construction on the same site is allowed. Boats, campers, motor vehicles, trailers, equipment, materials, or antenna may be stored in side and rear yards, provided that they are outside the required side and rear identified in Table 10-3 Intensity and Dimensional Standards.
- 2. Limitations on Outdoor Uses
  - a. All uses shall be conducted entirely within a completely enclosed building that is attached to a permanent foundation, except approved outdoor dining areas, vehicle sales and rental businesses, parking areas, nursery growing areas, industrial activities, truck trailer storage, oversize vehicle storage, and other approved uses that require outdoor activities.
  - b. Areas used for the approved outdoor storage of vehicles, equipment and/or building materials (raw or finished) may use compacted slag, gravel, or other similar material deemed suitable by the Director of Community Development.
- 3. Outdoor Wholesaling. Outdoor wholesaling of goods and materials shall comply with the following:
  - a. A building shall be provided on the same parcel or on an adjacent parcel associated with the same business.
  - b. All display materials, including vehicles, shall be set back five feet from any landscaped area and shall not be located on required parking areas.
  - c. The entire area used for display purposes shall be surfaced with asphalt or an equally serviceable hard pavement surface. The surface shall be maintained in good condition.
  - d. Display of equipment or materials, with the exception of vehicles for sale or rent, shall be screened by a visually solid masonry wall of minimum height six feet. The Planning Commission may determine through the design review process that the subject use requires a solid masonry wall higher than six feet.

- e. Outdoor display areas shall be maintained in a neat and orderly condition.

***D. Caretaker Housing***

Caretaker housing shall be:

- 1. Accessory to a principal use;
- 2. A maximum of 1,500 square feet total floor area unless otherwise approved by the planning commission;
- 3. Limited to one unit per lot; and
- 4. Subject to the setback requirements applicable to the principal structure with which it is associated.

***E. Solar Access***

A structure, fence, or wall shall not be constructed or modified, and vegetation shall not be placed or allowed to grow so as to obstruct more than 10 percent of the absorption area of a solar energy system on an abutting or adjacent lot at any time.

***F. Undergrounding of Utilities***

- 1. Utility service laterals to new development shall be installed underground.
- 2. Temporary overhead power and telephone facilities are permitted only during construction.
- 3. Placement, location and screening of utilities of any kind, which cannot be installed underground and must be placed above ground for function and safety reasons, require written approval by the Director of Community Development or the Planning Commission prior to any administrative or discretionary approval.
- 4. Transformer enclosures shall be designed of durable materials with finishes and colors used that are compatible and harmonious with the overall architectural theme.
- 5. All utilities including, but not limited to drainage systems, sewers, gas lines, water lines, and electrical, telephone, and communications wires and equipment shall be installed and maintained underground. Placement, location, and screening of utilities of any kind, which cannot be installed underground and must be placed above ground for function and safety reasons, require written approval by the Director of Community Development or the Planning Commission before any administrative or discretionary approval.

***G. Registered Vehicle Storage***

Registered vehicle storage will be defined as follows:



Registered Vehicle Storage means an off-street, ground level open area that allows parking for the purpose of storage of vehicles, including but not limited to, truck, truck-trailer, buses, boats, construction equipment, recreational vehicles, and automobile storage. These vehicles are to be stored and are not for sale, rental, or leasing. Maintenance or vehicle repair is not permitted at the premises unless otherwise separately allowed and approved under a separate conditional use permit.

Special use regulations are proposed to be applied to Registered Vehicles Storage. All businesses with registered vehicle storage shall comply with the following provisions:

1. The entire storage area shall be surfaced with asphalt, cement or an equivalent material. For specified and delineated storage areas, excluding required drive aisles and required non-storage parking, slag or gravel shall be considered as an equivalent paving material on a case-by-case basis. The surface material shall be striped as required (when feasible) and shall be maintained in good condition.
2. All storage areas shall clearly be identified on the site plan for the property and shall be screened from view from the public right-of-way by one or more decorative block screening walls. All screening walls adjacent to a public right-of-way shall have a minimum height of eight (8) feet and shall not be located in a required landscape setback area. Additional wall height and/or berming may be added as needed to satisfy screening requirements.
3. A line-of-sight analysis clearly demonstrating that all registered vehicles proposed to be located in the storage area(s) are screened from view from all adjacent public rights-of-way at all times shall be required with all proposals and/or applications. For the purpose of the line-of-sight analysis, the assumed height of the vehicles to be stored shall be fourteen feet and six inches (14'6"). To meet this requirement, storage areas shall be set back from required screening walls to provide the required line-of-sight clearance for screening. Storage areas which have been set back to provide the required line-of-sight clearance for screening shall be identified on the site plan and shall be marked and maintained at all times in a manner consistent with the site plan.
4. All vehicles stored on the premises shall have a valid vehicle registration from the State of California or other similar government entity and shall be maintained in an operable condition at all times.
5. Fire access lanes of a minimum twenty-six feet (26') in width shall be required along the interior perimeter of any required decorative block screening wall adjacent to a public right-of-way. Additional fire access lanes shall be provided as required by the Fire District. This required fire access lane may be used to meet the line-of-sight clearance set back requirement above.
6. All on-site fire access lanes, drive aisles, required parking, etc., (but not including Identified and marked vehicle storage areas) shall be paved with asphalt, cement or an equivalent material; gravel or slag in these lanes is specifically prohibited.

7. A guard station or similar structure shall be required near the primary access to the premises. The minimum size of such structure shall be sixteen square feet.
8. A residence for a caretaker may be permitted and incorporated into the project subject to the approval of a Conditional Use Permit application.
9. Permanent on-site security lighting shall be required to be designed and installed to the standards and satisfaction of the Police Chief or his/her designee.
10. Fire hydrants shall be required to the satisfaction of the Fire District.
11. Vehicles stored on the premises shall not themselves be used as storage containers to store materials in them. With prior 72 hour written notice to the property and/or business owner, any and all stored vehicles shall be open to inspection for the purpose of enforcing this provision.
12. To provide adequate space dimensions to accommodate the movement off large vehicles on the site, the minimum lot size shall be two (2) acres with a minimum lot width of 300 feet and a minimum lot depth of 300 feet. Irregular or unusually shaped lots may require additional minimums to meet the intent of this regulation, as shall lots with unusual, irregular, or severe topographic features or changes.
13. Landscaping adjacent to the public right-of-way is required per the Code. Interior lot landscaping shall not be required for any internal area (wall perimeter, parking area, storage area, etc.) enclosed by the required screening walls. Incidental landscaping may be required as needed to satisfy screening and other requirements in interface area(s) open to public view (entry gate, guard station, etc.)

## 10.5 Landscape Standards

### A. Required landscaping

This section provides the required minimum standards for all landscaped areas within any new and rehabilitated private development.

1. Landscaped area means the entire parcel less the building footprint, driveways, nonirrigated portions of parking lots, and hardscapes (such as driveways, approaches and sidewalks). Decorative hardscapes used to enhance the landscape will be considered as part of the landscape area; this would include such things as cobble rock, decomposed granite, brickwork, stamped concrete, gravel, pavers, and water features.
2. Landscape setbacks along public right-of-ways shall incorporate landscape buffers with undulating and variable height earth-mounding (berms), and/or low walls, and required plant materials as shown in Table 10-5 Landscape Standards.
3. Block wall and wrought iron fencing shall be located behind landscape setback area(s).
4. The developer shall submit to the City's Department of Engineering, a Landscape Documentation Package that conforms to the requirements of the Water Efficient Landscape Ordinance in Municipal Code, Chapter 28 Vegetation.
5. All new development landscaping shall comply with the standards shown in Table 10-5 – Landscape Standards. Additional guidelines that should be considered are addressed in Section 10.9 Design Guidelines.
6. The Recommended Plant Materials Palette, Table 10-6 can be found immediately after this section. The plant materials palette is provided to ensure the installation of drought-tolerant, water efficient landscaping that will provide wind breaks and thrive in the local climate conditions. In an effort to provide visual elements that distinguish this district from others, please note that turf (grass) does not appear in the Plant Materials Palette, and shall be prohibited, in lieu of drought-tolerant ground covers.
7. Public right-of-way improvements, including street improvements, streetscape/landscape (parkway) improvements, and street tree requirements, are in Section 10.8 Public Right-of-Way Streetscape.

**Table 10-5 – Landscape Standards**

*Note: The Director of Community Development may require additional setbacks.*

|                                                                                                      |                                                                                                                                                                                                                                                                                                                        |
|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Minimum Landscaped Area<br>Mixture of ground cover, shrubs, trees, and decorative hardscape features | 15% of total site area, not including areas covered by buildings, structures, or areas used for approved outside storage, loading, or other activities.<br><br>25% of total site area, for hotels, not including areas covered by buildings, or areas used for approved outside storage, loading, or other activities. |
| Decorative hardscape features<br>Brick, stone, art, fountains, ponds, etc.                           | Maximum 15 % of the total required landscaping of site area                                                                                                                                                                                                                                                            |
| Minimum plant sizes in landscaped areas                                                              | Minimum Ratio 1 tree/500 SF of landscape area                                                                                                                                                                                                                                                                          |
| Trees                                                                                                | 50% - 15-gallon<br>40% - 24-inch box<br>10% - 30-inch box or greater                                                                                                                                                                                                                                                   |
| Shrubs                                                                                               | 50% - 5-gallon<br>50% - 1-gallon                                                                                                                                                                                                                                                                                       |
| Groundcover (sod or hydro seeding)                                                                   | 12-inch maximum on center spacing that will cover area within one year of initial planting                                                                                                                                                                                                                             |
| Street trees in parkways per Master Plan of Parkway Trees                                            | 1 tree of not less than 24-inch box size for each 30 linear feet of street frontage<br><br>In parkways of inadequate width, street trees shall be planted in abutting setback/yard, in addition to the required buffer landscaping in setback area                                                                     |
| Landscape buffer in front setback area                                                               | 1 tree for each 20 linear feet minimum of street frontage and three 5-gallon shrubs for each tree<br><br>Undulating earth berms with informal tree and shrub massing and/or low decorative walls may be utilized.<br><br>Maximum slope: 3:1 for berms                                                                  |
| Additional landscape requirements                                                                    | 1 tree for each 800 square feet minimum of other required landscaped area and 8 shrubs for each tree.                                                                                                                                                                                                                  |
| Landscape Buffer<br>Front setback area and street-side setback area                                  | Major Highway: 30 ft minimum width<br>Primary Highway: 25 ft minimum width<br>Collector/Local Streets: 20 ft minimum width                                                                                                                                                                                             |
| Landscape buffer in any side or rear yard abutting a residential zone                                | 20 ft minimum width with 1 tree for each 20 linear feet of lot line, and 3 shrubs per tree                                                                                                                                                                                                                             |

**B. Recommended Plant Materials Palette**

Table 10-6 Recommended Plant Materials Palette provides a listing of primarily drought-tolerant trees, shrubs, and ground covers to provide water-efficient landscaping in new projects. The limited selection of landscape material in the palette is envisioned to assist the user in incorporating sustainable landscaping into the project, while including enough variety of size, form, and density, to meet the requirements within buffer setbacks and screening techniques. Final selection shall be approved the City. The Director of Community Development shall approve artificial turf.

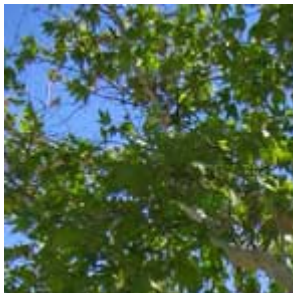
**Table 10-6 (a) – Recommended Plant Materials Palette**  
**Recommended Trees**



**African Sumac**  
*Rhus lancea*



**Aleppo Pine**  
*Pinus halepensis*



**Arizona Sycamore**  
*Platanus wrightii*



**Floss Silk Tree**  
*Chorisia speciosa*



**Bottle Tree**  
*Brachychiton populneus*



**Honey Locust**  
*Gleditsia triacanthos*

Table 10-6 (a) – Recommended Plant Materials Palette  
Recommended Trees (continued)



Canyon Live Oak  
*Quercus chrysolepis*



Western Redbud  
*Cercis occidentalis*



Chitalpa  
*Chitalpa tashkentensis*

Table 10-6 (b) – Recommended Plant Materials Palette  
Recommended Shrubs



Agave  
*Agave species*



Gray-Leaved Euryops  
*Euryops pectinatus*



Bougainvillea  
*Bougainvillea species*



Kangaroo Paw  
*Anigozanthus hybrids*



Table 10-6 (b) – Recommended Plant Materials Palette  
Recommended Shrubs (continued)



**Coffeeberry**  
*Rhamnus californicus*



**Purple Fountain Grass**  
*Pennisetum setaceum*  
'Cupreum'



**Coyote Brush**  
*Baccharis pilularis*



**Redberry**  
*Rhamnus croceus*



**Desert Spoon**  
*Dasylirion species*



**Red Hot Poker**  
*Kniphofia uvaria*



**Rosemary**  
*Rosmarinus officinalis*  
cultivars



**Yaupon**  
*Ilex vomitoria*



**Texas Ranger**  
*Leucophyllum species*



**Yucca**  
*Yucca species*



Table 10-6 (c) – Recommended Plant Materials Palette  
Recommended Groundcovers



**Moss Verbena**  
*Verbena tenuisecta*



**Prostrate Myoporum**  
*Myoporum parvifolium*



**Peruvian Verbena**  
*Verbena peruviana*



**Rosea Ice Plant**  
*Drosanthemum floribundum*



**Poverty Weed**  
*Iva hayesiana*



**Trailing Lantana**  
*Lantana montevidensis*

## **10.6 Parking and Loading Standards**

### **A. Applicability**

This section contains regulations for off-street parking and loading. Regulations identify required number of parking and loading spaces for all new development projects and those proposing substantial modification to existing buildings. Refer to Municipal Code Chapter 30 Zoning and Development Code for all parking and loading-related information or regulations not specifically addressed in this section.

### **B. General Parking and Loading Regulations**

1. Methods of Calculation.
  - a. Multiple Uses. If more than one use is located on a site, the total number of required off-street parking and loading spaces shall be the sum of the requirements for the various uses computed separately. If individual uses on the same site have a floor area less than that for which loading spaces would be required, then the total gross floor area of all uses on the site or lot shall be used in determining the required number of loading spaces.
  - b. Fractional Number. Whenever the computation of the required number of off-street parking or loading spaces results in a fractional number, one additional space shall be required for a fraction of more than one-half, but shall not be required for a fraction of one-half or less.
2. Off-Site Location. Required off-street parking spaces shall be located on the same property as the use that they are intended to serve. Where the required parking spaces cannot be accommodated on the same property, they may be located in a separate off-site parking facility that is not more than 300 feet from the use(s) they serve.
3. Shared Use. Required off-street parking and loading spaces shall not be considered as providing parking or loading spaces for any other use, except where shared use facilities are approved in compliance with Subparagraph 5 Adjustments to Parking Requirements, below.
4. Uses Not Specified. For uses not specified, the Director of Community Development shall determine parking requirements based upon the requirements of the most similar use. See SubSection 9.11.C Entitlement Procedures -- Similar Use Determination.
5. Adjustments to Parking Requirements.
  - a. Administrative Variance. The Director of Community Development is authorized to approve alternate parking plans involving a modification of 10 percent or less of any of the off-street parking and loading standards in compliance with Section 30-51.5 of Municipal Code Chapter 30.

- b. **Parking Study Option.** An applicant may submit a separate parking and loading study for new development to the Director of Community Development for review. A parking and loading study shall provide sufficient data and information to justify the need for adjustments to the parking and loading requirements and shall analyze whether:
  - i. Adequate off-street parking will be provided for the project;
  - ii. The project demonstrates the use of creative design concepts, including but not limited to shared parking facilities, transit accessibility, pedestrian amenities, and bicycle amenities;
  - iii. Environmental impacts associated with the project will not be increased by the modification of standards; and
  - iv. Traffic safety and pedestrian safety will be enhanced by the modifications.
- c. **Shared Use Facility.** Required off-street parking and loading spaces may be considered as providing parking or loading spaces for another use where joint facilities serving more than one use contain no less than the total number of spaces deemed necessary for each individual use added together with other uses. Where adjoining uses on the same site have different hours of operation with minimal conflict, the Director of Community Development may determine that some or all of the same spaces may be counted as satisfying the requirements for both uses, provided that the number of spaces shall not be less than the prescribed for the use requiring the greater number.

**C. Required Number of Parking Spaces**

Each land use shall provide the number of off-street parking spaces indicated in Table 9-7 – Parking Requirements by Land Use, except where adjustment has been granted in compliance with Subparagraph 9.6.B.5 Adjustments to Parking Requirements, above. For the purposes of this Section, the following definitions shall apply:

- 1. **Commercial Use:** Activity involving the sale of goods or services carried out for profit.
- 2. **Industrial Use:** Those fields of economic activity including construction; manufacturing; transportation, communication, electric, gas, and sanitary services; and wholesale trade.

**Table 10-7 – Parking Requirements by Land Use**

| <b>Land Use</b>                                                                   | <b>Number of Spaces Required<br/>GFA—Gross Floor Area</b>                                                                                                                                                                                                                                                               |                                                                        |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|
|                                                                                   |                                                                                                                                                                                                                                                                                                                         |                                                                        |
|                                                                                   | <i>Vehicle Spaces (Minimum #)</i>                                                                                                                                                                                                                                                                                       | <i>Bicycle Spaces (Minimum #)</i>                                      |
| <b>Entertainment, Recreation and Public Assembly Uses</b>                         |                                                                                                                                                                                                                                                                                                                         |                                                                        |
| Adult Businesses                                                                  | Subject to Parking Plan required by Municipal Code §15-918                                                                                                                                                                                                                                                              |                                                                        |
| Open Space / Park                                                                 | Public - Determined by Parks and Recreation Department<br>Private - .25 spaces/1,000 sq ft of total park area                                                                                                                                                                                                           | 1 space/ 33 vehicle parking spaces                                     |
| Public Assembly Facilities                                                        | With fixed seats – 1 space/3 fixed seats;<br>Without fixed seats – 25 spaces/1,000 sq ft of seating area;<br>and<br>4 spaces/1,000 sq ft GFA outside assembly area                                                                                                                                                      | 1 space/33 vehicle parking spaces                                      |
| Recreational Facilities – Indoor, except for the following:                       | 1 space/each 4 persons of the facility's allowed maximum capacity, unless otherwise modified in compliance with Section 10.6.B.5. –Adjustments to Parking Requirements                                                                                                                                                  |                                                                        |
| Amusement Arcade                                                                  | 1 space/each 4 persons of the facility's allowed maximum capacity                                                                                                                                                                                                                                                       | 1 space/ 3 games up to 20 games; and 1 space/5 games for over 20 games |
| Athletic Club/Gym                                                                 | 4 spaces/1,000 sq ft GFA;<br>20 spaces/1,000 sq ft of exercise floor area;<br>3 spaces/outdoor ball court                                                                                                                                                                                                               | .4 spaces/1,000 sq ft GFA                                              |
| Bowling Alley                                                                     | 4 spaces/lane, and additional spaces required for restaurant and other accessory uses                                                                                                                                                                                                                                   | 1 space/33 vehicle parking spaces                                      |
| Dancing                                                                           | 14 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                               |                                                                        |
| Pool/Billiard Hall                                                                | 2 spaces/table                                                                                                                                                                                                                                                                                                          | 1 space/5 tables                                                       |
| Skating Rink                                                                      | 14 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                               | 1 space/33 vehicle parking spaces                                      |
| Recreational Facilities – Outdoor, except for the following:                      | 1 space/each 4 persons of the facility's allowed maximum capacity, unless otherwise modified in compliance with Section 10.6.B.5 –Adjustments to Parking Requirements                                                                                                                                                   |                                                                        |
| • Golf driving range, batting cage                                                | 1 space/tee, cage, or similar; and<br>1 space/employee at maximum shift                                                                                                                                                                                                                                                 | 1 space/33 vehicle parking spaces                                      |
| • Swimming pools                                                                  | 14 spaces/1,000 sq ft of water surface area                                                                                                                                                                                                                                                                             | 1 space/33 vehicle parking spaces                                      |
| <b>Industry, Manufacturing, and Processing Uses</b>                               |                                                                                                                                                                                                                                                                                                                         |                                                                        |
| Handcraft Industry/ Small-Scale Manufacturing                                     | 2 spaces per 1,000 sq ft GFA                                                                                                                                                                                                                                                                                            | None                                                                   |
| Light Manufacturing<br>All uses listed under "Manufacturing, Light" in Table 10-2 | 1.85 spaces/1,000 sq ft GFA;<br>4 spaces/1,000 sq ft GFA of office space, sales, or similar use where those uses exceed 10% GFA; and<br>1 space/1 facility vehicle<br>Where multiple tenants and or uses occupy the same building, the parking shall be calculated based upon the floor area used by each tenant or use | 1 space/33 vehicle parking spaces                                      |

**Table 10-7 – Parking Requirements by Land Use (continued)**

| <b>Land Use</b>                                                                                         | <b>Number of Spaces Required<br/>GFA—Gross Floor Area</b>                                                                                                                                                                                                                                                                  |                                   |
|---------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
|                                                                                                         | <b>Vehicle Spaces (Minimum #)</b>                                                                                                                                                                                                                                                                                          | <b>Bicycle Spaces (Minimum #)</b> |
| General Manufacturing<br>All uses listed under “General Manufacturing” in Table 3.3-1                   | 1.85 spaces/1,000 sq ft GFA;<br>4 spaces/1,000 sq ft GFA of office space, sales, or similar use where those uses exceed 10% GFA; and<br>1 space/1 facility vehicle<br>Where multiple tenants and or uses occupy the same building, the parking shall be calculated based upon the floor area used by each tenant or use.   | 1 space/50 vehicle parking spaces |
| Research and Development                                                                                | 2 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                                   | 1 space/33 vehicle parking spaces |
| <b>Residential Uses</b>                                                                                 |                                                                                                                                                                                                                                                                                                                            |                                   |
| Caretaker Housing                                                                                       | 2 spaces in an enclosed garage                                                                                                                                                                                                                                                                                             | None                              |
| <b>Retail Uses</b>                                                                                      |                                                                                                                                                                                                                                                                                                                            |                                   |
| Alcohol Sales, Off-Site/On-Site                                                                         | Same as required spaces for the underlying use (e.g., restaurant, public assembly facility, retail store, etc.), unless otherwise modified in compliance with Section 10.6.B.5 – Adjustments to Parking Requirements                                                                                                       |                                   |
| Factory/Warehouse Outlet Store                                                                          | 5 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                                   | None                              |
| Retail Sales, General                                                                                   |                                                                                                                                                                                                                                                                                                                            |                                   |
| Not in shopping center or factory/warehouse outlet mall)                                                | 4 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                                   | 1 space/33 vehicle parking spaces |
| Shopping Center                                                                                         | 5 spaces/1,000 sq ft GFA for the initial 10,000 sq ft; and<br>4 spaces/1,000 sq ft GFA for over 10,000 sq ft                                                                                                                                                                                                               | 1 space/33 vehicle parking spaces |
| <b>Service Uses</b>                                                                                     |                                                                                                                                                                                                                                                                                                                            |                                   |
| Animal Kennel Services                                                                                  | 4 spaces/1,000 sq ft GFA; and<br>1.25 spaces/1,000 sq ft of boarding area                                                                                                                                                                                                                                                  | None                              |
| Business Support Services                                                                               | 4 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                                   | None                              |
| <b>Food Service:</b>                                                                                    |                                                                                                                                                                                                                                                                                                                            |                                   |
| <ul style="list-style-type: none"> <li>Fast food restaurant with drive through, walk-in area</li> </ul> | Indoor Seating: 13 spaces/1,000 sq ft GFA*<br><i>*GFA shall not include play areas without seating.</i><br>Outdoor Seating (patio area):<br>Less than 50% of indoor area: 6.5 spaces/1,000 sq ft<br>50% or more of indoor area: 13 spaces/1,000 sq ft                                                                      | 4 spaces                          |
| <ul style="list-style-type: none"> <li>Other restaurant</li> </ul>                                      | Indoor Seating: 10 spaces per 1,000 sq ft GFA<br>Outdoor Seating (patio area):<br>Less than 50% of indoor area: 5 spaces/1,000 sq ft<br>50% or more of indoor area: 10 spaces/1,000 sq ft                                                                                                                                  | 2 spaces                          |
| Industrial Repair                                                                                       | 2 spaces/1,000 sq ft GFA for the initial 40,000 sq ft<br>1.3 spaces/1,000 sq ft additional GFA greater than 40,000 sq ft<br>4 spaces/1,000 sq ft GFA of office space, where those uses exceed 10% of GFA<br><b>OR</b><br>1 space for each employee on the maximum shift as determined by Director of Community Development | None                              |
| Mini-Storage Facility                                                                                   | 1.75 spaces/100 units; and<br>1 space/employee                                                                                                                                                                                                                                                                             | None                              |

**Table 10-7 – Parking Requirements by Land Use (continued)**

| <b>Land Use</b>                                                                      | <b>Number of Spaces Required<br/>GFA—Gross Floor Area</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                      |
|--------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
|                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                      |
|                                                                                      | <b>Vehicle Spaces (Minimum #)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>Bicycle Spaces (Minimum #)</b>    |
| <b>Motor Vehicle</b>                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                      |
| Car Wash/<br>Detailing                                                               | 1 space/employee;<br>1 space per wash lane                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | None                                 |
| • Car Wash<br>Full-Service                                                           | 1 space/employee;<br>Stacking for 5 vehicles for car wash lane<br>Reserve spaces equal to 3 times the wash lane capacity                                                                                                                                                                                                                                                                                                                                                                                         | None                                 |
| • Car Wash<br>Self-Service                                                           | 2 spaces/bay                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | None                                 |
| • Motor Vehicle<br>Rental, Sales,<br>and Leases                                      | Indoor display/sale/service = 3.3 spaces/1,000 sq ft GFA;<br>Outdoor display/sale = .40 spaces/1,000 sq ft GFA; and<br>1 space/employee                                                                                                                                                                                                                                                                                                                                                                          | None                                 |
| • Service Stations                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                      |
| With<br>convenience<br>market                                                        | 5 spaces/1,000 sq ft GFA; and 5 spaces/service bay                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1 space/10 vehicle<br>parking spaces |
| Without<br>convenience<br>market                                                     | 3.3 spaces/1,000 sq ft or 5 spaces/service bay, whichever is<br>more; minimum of 4 spaces                                                                                                                                                                                                                                                                                                                                                                                                                        | None                                 |
| School, Commercial                                                                   | 1 space/teaching and non-teaching position on maximum<br>shift; and<br>1 space/2 students on maximum enrollment                                                                                                                                                                                                                                                                                                                                                                                                  | 1 space/33 vehicle<br>parking spaces |
| School, Trucking                                                                     | 1 truck parking space/truck operated by or for school;<br>1 space/teaching and nonteaching staff member on maximum<br>shift;<br>1 space/2 students on maximum enrollment<br>additional spaces required for accessory lodging                                                                                                                                                                                                                                                                                     | 1 space/<br>4 classrooms             |
| <b>Distribution, Wholesaling and Warehousing Uses</b>                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                      |
| Industrial Equipment,<br>Materials, and<br>Supplies, Truck,<br>Truck Trailer Storage | 1 space/employee;<br>1 space/2,000 sq ft of site area (spaces shall be reserved for<br>customer/employee parking only); and<br>truck/trailer storage spaces determined by approved site plan                                                                                                                                                                                                                                                                                                                     | None                                 |
| Logistics and<br>Distribution Facilities<br>(High Cube)                              | <b>Vehicle Parking:</b><br>1 space/1,000 sq ft GFA for the first 20,000 sq ft;<br>1 space/2,000 sq ft for the second 20,000 sq ft;<br>1 space/5,000 sq ft for that portion over 40,000 sq ft.<br>No add'l spaces if office area less than 10% of total<br>building square footage.<br>Office space rate if office area over 10% of total building<br>square footage.<br><b>Truck and Trailer Parking:</b><br>1 oversized truck space/5,000 sq ft GFA*<br>*Truck docks shall not be included in this calculation. | None                                 |
| Petroleum/Hazardous<br>Material Storage                                              | 1 space/employee on maximum shift                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | None                                 |
| Warehousing<br>Facilities                                                            | 1 space/1,000 sq ft GFA for the initial 40,000 sq ft;<br>1 space/4,000 sq ft of additional GFA greater than 40,000 sq<br>ft;<br>4 spaces/1,000 sq ft GFA of office space. Where multiple<br>tenants and or uses occupy the same building, the parking<br>shall be calculated based upon the floor area used by each                                                                                                                                                                                              | None                                 |

**Table 10-7 – Parking Requirements by Land Use (continued)**

| <b>Land Use</b>                                               | <b>Number of Spaces Required<br/>GFA—Gross Floor Area</b>                                                                                                                                                                                                                                                                                                                  |                                   |
|---------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
|                                                               | <b>Vehicle Spaces (Minimum #)</b>                                                                                                                                                                                                                                                                                                                                          | <b>Bicycle Spaces (Minimum #)</b> |
|                                                               | tenant or use                                                                                                                                                                                                                                                                                                                                                              |                                   |
| <b>Transportation, Communications and Infrastructure Uses</b> |                                                                                                                                                                                                                                                                                                                                                                            |                                   |
| Antennas                                                      | 1 space                                                                                                                                                                                                                                                                                                                                                                    | None                              |
| Broadcasting Offices or Studios                               | 5 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                                                                                   | None                              |
| Recycling Facilities                                          | 1 space/employee;<br>1 space/facility vehicle; and<br>Sufficient spaces to accommodate all persons at establishment at any one time under normal operating conditions                                                                                                                                                                                                      | None                              |
| • Vehicle Auctions                                            | <b>Automobile or boat sales (new/used/auction)</b><br>1 space/300 sq ft of indoor display, sales, or service area;<br>1 space/2,500 sq ft of outdoor sales or display area; and<br>1 space/employee<br><b>Truck sales/services (new/used/auction)</b><br>1 space/250 sq ft of sales area;<br>1 space/3,000 sq ft of outdoor sales or display area; and<br>1 space/employee | None                              |
| <b>Other Uses</b>                                             |                                                                                                                                                                                                                                                                                                                                                                            |                                   |
| Drive-Through                                                 | Stacking for 7 vehicles at each bay, window, lane, ordering station, or machine                                                                                                                                                                                                                                                                                            | None                              |
| Outdoor Display & Sales                                       | 1 space/1,000 sq ft of outdoor merchandise areas                                                                                                                                                                                                                                                                                                                           | None                              |
| Public Facilities                                             | Per Public Agency                                                                                                                                                                                                                                                                                                                                                          |                                   |
| Temporary Uses                                                | Per Temporary Use Permit                                                                                                                                                                                                                                                                                                                                                   |                                   |

*Note: Sources consulted to compile the table entries include the Municipal Code; The Dimensions of Parking, ULI and National Parking Association, 5th Edition, 2010; Recommended Zoning Ordinance Provisions, National Parking Association, December 2006; and Parking Standards, APA Planning Advisory Service Report 510/511; November 2002.*



**D. Required Number of Loading Spaces**

Each land use shall provide the number of off-street loading spaces indicated in Table 10-8 – Loading Space Requirements by Land Use. Requirements for uses not specifically listed shall be determined by the Director of Community Development based upon the requirements for comparable uses and upon the particular characteristics of the proposed use. For other standards (e.g., size of loading spaces, location, turning radius, etc.), refer to Article XI Off-Street Parking and Loading Standards, Division 4 Loading Area Regulations, in Municipal Code Chapter 30 Zoning and Development Code.

| Table 10-8 – Loading Space Requirements by Land Use                                    |                                                                                                                                                                                            |                 |
|----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| Land Use                                                                               |                                                                                                                                                                                            |                 |
|                                                                                        |                                                                                                                                                                                            |                 |
|                                                                                        | Loading Spaces (Minimum #)                                                                                                                                                                 | Type (1)        |
| Entertainment, Recreation and Public Assembly Uses                                     |                                                                                                                                                                                            |                 |
| Public Assembly Facilities                                                             | 1 space; and<br>Additional spaces as required by design review                                                                                                                             | Van             |
| Recreational Facilities                                                                | 0 - 29,999 sq ft: 1 space<br>30,000 - 99,999 sq ft: 2 spaces<br>Over 100,000 sq ft: 3 spaces                                                                                               | Truck           |
| Industry, Manufacturing, and Processing Uses                                           |                                                                                                                                                                                            |                 |
| Handcraft Industry/<br>Small-Scale<br>Manufacturing                                    | 5,000 - 30,000 sq ft: 1 space; and<br>1 additional space for each additional 30,000 sq ft                                                                                                  | Truck           |
| All uses listed under<br>“Manufacturing,<br>Light” in Table 10-2                       |                                                                                                                                                                                            |                 |
| All uses listed under<br>“General<br>Manufacturing” in<br>Table 10-2                   |                                                                                                                                                                                            |                 |
| Research and<br>Development                                                            |                                                                                                                                                                                            |                 |
| Retail Uses                                                                            |                                                                                                                                                                                            |                 |
| Retail Sales, General<br>and<br>Factory/Warehouse<br>Outlet Store                      | Up to 10,000 sq ft: 1 space                                                                                                                                                                | Truck           |
|                                                                                        | 10,001 - 30,000 sq ft: 1 space<br>30,001 - 90,000 sq ft: 2 spaces<br>Over 90,000 sq ft: 2 spaces; and 1 additional space for each<br>additional 50,000 sq ft over the initial 90,000 sq ft | Tractor Trailer |
| Service Uses                                                                           |                                                                                                                                                                                            |                 |
| All uses listed under<br>“Service Uses” in<br>Table 10-2; except for<br>the following: | Up to 10,000 sq ft: 1 space                                                                                                                                                                | Truck           |
|                                                                                        | 10,001 - 30,000 sq ft: 1 space<br>30,001 - 90,000 sq ft: 2 spaces<br>Over 90,000 sq ft: 2 spaces; and 1 additional space for each<br>additional 50,000 sq ft over the initial 90,000 sq ft | Tractor Trailer |

| <b>Table 10-8 – Loading Space Requirements by Land Use (continued)</b>                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                            |                 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| Industrial Repair                                                                                                                                                                                                                                                                                                                                                            | 5,000 - 30,000 sq ft: 1 space; and<br>1 additional space for each additional 30,000 sq ft                                                                                                                                                                                                                                                                                  | Truck           |
| <b>Motor Vehicle</b>                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                            |                 |
| • Motor Vehicle Rental, Sales, and Leases                                                                                                                                                                                                                                                                                                                                    | 1 space                                                                                                                                                                                                                                                                                                                                                                    | Tractor Trailer |
| • Service Stations                                                                                                                                                                                                                                                                                                                                                           | 1 space                                                                                                                                                                                                                                                                                                                                                                    | Tractor Trailer |
| School, Commercial                                                                                                                                                                                                                                                                                                                                                           | 1 space; and additional spaces required by design review                                                                                                                                                                                                                                                                                                                   | Van             |
| • Vehicle Auctions                                                                                                                                                                                                                                                                                                                                                           | <b>Automobile or boat sales (new/used/auction)</b><br>1 space/300 sq ft of indoor display, sales, or service area;<br>1 space/2,500 sq ft of outdoor sales or display area; and<br>1 space/employee<br><b>Truck sales/services (new/used/auction)</b><br>1 space/250 sq ft of sales area;<br>1 space/3,000 sq ft of outdoor sales or display area; and<br>1 space/employee | None            |
| <b>Distribution, Wholesaling and Warehousing Uses</b>                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                            |                 |
| Warehousing Facilities                                                                                                                                                                                                                                                                                                                                                       | 5,000 - 30,000 sq ft: 1 space; and<br>1 additional space for each additional 30,000 sq ft                                                                                                                                                                                                                                                                                  | Tractor Trailer |
| <b>Notes:</b><br>(1) A van loading space shall be a minimum of 12 ft wide by 19 ft long with a minimum 10 ft overhead clearance.<br>A truck loading space shall be a minimum of 12 ft wide by 45 ft long with a minimum 14 ft overhead clearance.<br>A tractor trailer loading space shall be a minimum of 12 ft wide by 70 ft long with a minimum 14 ft overhead clearance. |                                                                                                                                                                                                                                                                                                                                                                            |                 |

### **E. Landscaping Standards for Parking Areas**

Within any parking area, one tree shall be planted for every five single-row parking stalls or 10 double-row parking stalls. Eighty percent of these shall be 15 gallons in size and the remaining 20 percent shall be 24-inch box or larger in size. If for some reason the contractor is unable to distribute trees in the interior of the parking area in compliance with these standards, the Director of Community Development may approve the placement of no more than 40 percent of the trees within the perimeter of the parking area. Planters shall not have a dimension less than four feet, excluding the thickness of the curbing. These requirements may be reduced for industrial parking areas that are screened from public view.

1. Parking areas shall contain a minimum landscape area equivalent to 30 percent of the total required 15 percent landscaping for the total site area.
2. Parking area perimeter landscaping.
  - a. Parking areas for nonresidential uses abutting or adjacent to residentially zoned property shall provide a landscape strip that is a minimum of 10 feet in width, excluding overhang, curb, and walkways, between the parking area and the common property line bordering the residentially zoned property. Parking areas shall be screened from the residentially zoned property by a solid decorative masonry wall that is a minimum of six feet in height.

- b. Parking areas for nonresidential uses abutting or adjacent to non-residentially zoned property or a street shall install a landscape strip that is a minimum of five feet in width, excluding overhang, curb, and walkways, between the parking area and the common property line or the parking area and the street right-of-way. This requirement may be reduced or modified if a joint access agreement exists that is satisfactory to the Director of Community Development. Parking areas shall be screened from streets through combinations of plant materials, earth berms, raised planters, grade separations, or low walls. Slopes shall not exceed three to one or exceed 36 inches in height measured from the parking lot surface.
  - c. Plant materials, walls, or structures within a traffic sight area shall not block sight lines from driveways to streets and shall not exceed 36 inches in height.
  - d. End of aisle spaces adjacent to landscape finger shall be two feet wider for step out area.
3. Parking area interior landscaping.
- a. Tree number and location. One tree shall be provided for each four parking spaces and shall be evenly spaced throughout the interior parking area at a rate of one tree for every eight parking spaces. See Exhibit 10-4 – Parking Lot Landscaping. The required number of trees in the interior area shall not include trees required around the parking area perimeter. Trees are not required for tractor-trailer parking. A minimum of one cluster of trees shall be provided for each 100 feet of a row or double row of parking spaces. Trees shall be located in planters that are bounded on at least two sides by parking area paving. Planters shall have a minimum exterior dimension of five feet.

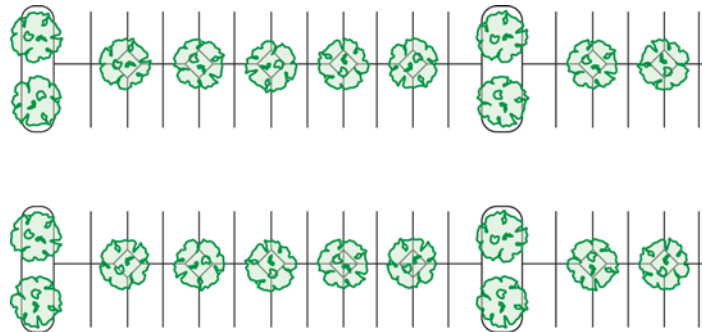


Exhibit 10-4 – Parking Lot Landscaping.

- b. Tree size. All trees within the parking area shall be a minimum 24-inch box container at time of planting.
- c. Landscape protection. Landscaping shall be protected by concrete curbs of at least six inches in height. An end-of-aisle planter shall be provided at the ends of all parking aisles. Finger aisle planters shall be a minimum of nine feet wide and end-of-aisle planters shall be a minimum of seven feet wide, as measured from the

inside of the curb. The parking space side of finger and end-of-aisle planters shall have a 24-inch wide concrete surface measured from the face of the curb. Planters shall be landscaped with a mixture of trees, shrubs, and ground cover. Planting areas shall have round corners instead of 90 degree corners and shall be shaped to allow vehicle movements. The Director of Community Development may approve alternative barriers designed to protect landscaped areas from vehicle damage. Wheel stops may be placed to allow for two feet of vehicle overhang area within the dimension of the parking space. To increase the parking lot landscaped area, a maximum of two feet of the parking stall depth may be landscaped with low-growth, hardy materials in-lieu of paving, allowing a bumper overhang while maintaining the required parking dimensions. However, the overhang area shall not be counted as part of minimum landscape area required by paragraph (1) above, and when adjacent to a required landscaping strip shall be in addition to the minimum required width. Fixtures (e.g., lights, sprinklers) that are higher than the curb are prohibited within a bumper overhang area. Curbing that creates a bumper overhang barrier shall not exceed a height of five inches.

- d. Parking areas with more than 100 spaces shall provide an appropriate entry feature consisting of a concentration of landscape elements, including trees, flowering plants, enhanced paving, and project identification.
4. Parking structures. A landscaping strip 10 feet wide shall be provided on all sides of a parking structure. One tree shall be provided for each 20 to 40 feet of perimeter of the structure, based on species selected. These trees shall be distributed evenly throughout the subject landscape area.

## 10.7 Sign Standards

### A. Applicability

This section contains standards and guidelines for signage to ensure that signs are consistent with the overall quality and character of anticipated new development. Regulations identify permitted sign types; provide standards for number of signs, size, and location; and provide design guidelines for color, materials, and illumination. Please refer to the Fontana Municipal Code for all sign-related information or regulations not specifically addressed in this section.

### B. Standards and Guidelines

1. Standards. The following standards shall apply to all signs, regardless of type:
  - a. Sign types not listed in this Section are not permitted.
  - b. Linear Frontage Ratio. For each establishment, one and one-half (1 ½) square feet of total sign area shall be allowed for each linear foot of building frontage ("Linear Frontage Ratio"). Unless otherwise noted, all signs (including temporary signs) shall count toward the total sign area permitted based on the Linear Frontage Ratio. For multi-tenant buildings, each establishment shall be calculated individually. For corner establishments, each facade shall be calculated individually. Permitted sign area based on the linear frontage of one establishment or facade shall not be placed on another establishment or facade.
  - c. Signs shall not be animated.
  - d. Commercial messages that identify, advertise, or attract attention to a business, product, service, or event or activity sold, existing, or offered elsewhere than upon the same property where the sign is displayed are expressly prohibited.
  - e. In the event of a conflict between this Section and any other City regulation, the provisions of this Section shall apply.
  - f. All issues not specifically addressed herein (e.g., signage in the public right-of-way, exempt signs, permit processing, etc.) shall be addressed pursuant to the Fontana Municipal Code.
2. Guidelines. The following guidelines shall apply to all signs, regardless of type.
  - a. Design Compatibility
    - Provide signage that is compatible with the building architecture and coordinate sign materials and colors with the building facade/storefront design.
    - Place signs in accordance with facade rhythm, scale, and proportion.
    - Ensure that signs associated with multi-tenant buildings are complementary to one another. A consistent location for tenant identification signs is recommended.

b. Location

- Signs shall be placed at or near the public entrance to a building or main parking area to indicate the most direct access to the business.
- Signs shall not be located so that they cover or interrupt the architectural details or ornamentation of a building's facade.
- Signs shall not project above the edge of the rooflines and shall not obstruct windows and/or doorways.

c. Sign Legibility

- Avoid hard-to-read, intricate typefaces. Typefaces that are difficult to read reduce the sign's ability to communicate.
- Avoid spacing letters and words too close together. Lettering shall not occupy more than 75 percent of the sign face.
- Limit the number of lettering styles in order to increase legibility. Signs shall be limited to no more than two styles for small signs (generally up to 10 square feet) and three styles for larger signs.
- Use significant contrast through incorporating light colored letters and a darker, contrasting background to provide the most visible and best-looking image.
- Incorporate business identity symbols and logos.
- Logo means any symbol or any combination thereof adopted and used by an individual or corporation to identify goods made or sold or services rendered by an individual or corporation and to distinguish them from goods made or sold or services rendered by others and that is nationally or State of California registered.

d. Color and Materials

- Bright day-glo (fluorescent) colors shall be avoided as they are distracting and do not blend well with other background colors.
- Sign colors shall relate to and complement the materials or color scheme of the buildings, including accent and trim colors.
- Sign materials shall be selected with consideration for the architectural design of the building's façade and also contribute to the legibility of the sign.
- Construct signs of durable, high-quality materials.
- Wood, paper, and cloth signs, and painted wall signs are prohibited.

e. Illumination

- Individually illuminated letters, either internally illuminated or back-lighted solid letters (reverse channel), are a preferred alternative to internally illuminated plastic-faced cabinet signs.
- Signs shall be comprised of individual letters.
- The use of backlit, individually cut letter signs is strongly encouraged for all types of business and signs, including monument-type signs.

- Whenever indirect lighting fixtures are used, care shall be taken to properly shield the light source.
- f. Electrical Raceways and Conduits
- Electrical transformer boxes and raceways shall be concealed from public view.
  - All exposed conduit and junction boxes shall be appropriately concealed from public view.

### C. Sign Types

For the purposes of this plan, Table 10-9 Sign Types indicates the signs that are allowed in the Slover East Industrial District.

| Table 10-9 Sign Types |                                                                                                              |
|-----------------------|--------------------------------------------------------------------------------------------------------------|
| 1                     | <b>Grand Wall Sign</b><br>Non-residential uses with unfenestrated wall areas of 2,000 square feet or greater |
| 2                     | <b>Wall Sign</b><br>Non-residential uses with a dedicated ground floor entrance                              |
| 3                     | <b>Projecting Sign</b><br>Non-residential uses with a dedicated ground floor entrance                        |
| 4                     | <b>Awning Valance Sign</b><br>Non-residential uses with a dedicated ground floor entrance                    |
| 5                     | <b>Awning Side Sign</b><br>Non-residential uses with a dedicated ground floor entrance                       |
| 6                     | <b>Canopy Fascia Sign</b><br>Non-residential uses with a dedicated ground floor entrance                     |
| 7                     | <b>Under-Awning or Under-Canopy Sign</b><br>Non-residential uses with a dedicated ground floor entrance      |
| 8                     | <b>Recessed Entry Sign</b><br>Non-residential uses with a dedicated ground floor entrance                    |
| 9                     | <b>Window Sign</b><br>Non-residential uses with a dedicated ground floor entrance                            |
| 10                    | <b>Temporary Window Sign</b><br>Non-residential uses with a dedicated ground floor entrance                  |
| 11                    | <b>Temporary Wall Sign</b><br>Non-residential uses with a dedicated ground floor entrance                    |
| 12                    | <b>Monument Sign</b><br>Any building with continuous linear street frontage of 200 feet or greater           |
| 13                    | <b>Directional Sign</b><br>Each vehicle entrance                                                             |
| 14                    | <b>Accessory Sign</b><br>Identified specific uses                                                            |



## **D. Sign Type Standards and Guidelines**

This section provides Standards and Guidelines for each Sign Type.

### **1. Grand Wall Sign**

Grand Wall Signs are large signs located on, and parallel to, large unfenestrated building wall areas.

#### **a. Standards**

- i. A Grand Wall Sign shall only be located on unfenestrated wall areas of 2,000 square feet in size or greater.
- ii. Only one (1) Grand Wall Sign shall be permitted per establishment.
- iii. The Grand Wall Sign area shall not count towards the total sign area permitted based on the Linear Frontage Ratio.
- iv. A Grand Wall Sign shall not exceed 1,000 square feet or 25 percent of the total wall area, whichever is less.
- v. Grand Wall Signs shall project no more than one (1) foot from the façade of the building.

#### **b. Commercial Guidelines**

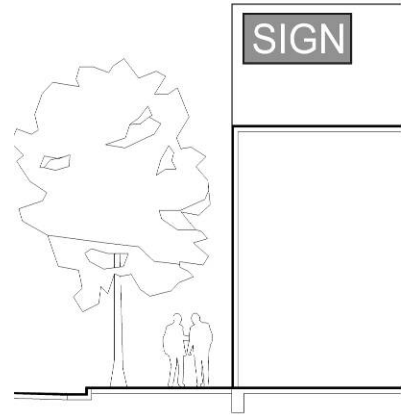
- i. Materials used in Grand Wall Signs shall be wood, ceramic, metal, or paint only.
- ii. Grand Wall Signs shall be illuminated by external illumination only.

#### **c. Industrial Guidelines**

- i. Materials used in Grand Wall Signs shall be ceramic or metal.
- ii. Grand Wall Signs shall be illuminated by external illumination only.

### **2. Wall Sign**

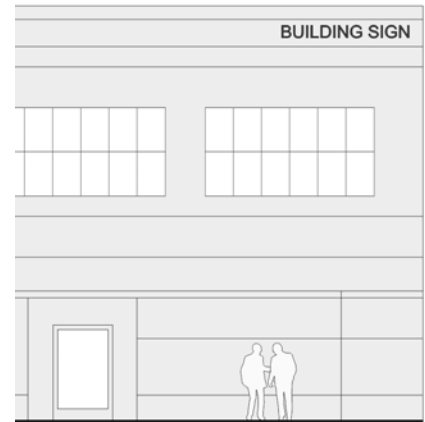
Wall Signs are signs that are located on, and parallel to, a building wall. Business Identification Wall Signs are signs that announce the name of a business within a building and Building Identification Wall Signs are signs that announce the name of a building. Both are located on, and parallel to, a building wall.



1) Grand Wall Sign.

a. Standards

- i. Wall Signs shall be located below the second floor and within the middle 50 percent of the building or tenant frontage measured from lease line to lease line. Building Identification Wall Signs shall be located only on the frieze or fascia (articulated banding across the top of every building floor) area of storefront level; frieze, fascia, parapet of the uppermost floor; or above the entrance to main building lobby.
- ii. No Wall Sign shall exceed 150 square feet in size. Building Identification Wall Signs shall be no taller than 24 inches in height.
- iii. Wall Signs shall count towards the total sign area permitted based on the Linear Frontage Ratio, except that the area of Building Identification Wall Signs shall not count towards the total sign area permitted based on the Linear Frontage Ratio.
- iv. Wall Signs shall project no more than one (1) foot from the façade of the building.



2) Building Identification Wall Sign.

b. Commercial Guidelines

- i. Materials used in wall signs shall be wood, ceramic, and/or metal. Wall signs may also be inscribed into the façade of the building. Building Identification Wall Signs shall be inscribed into the façade or constructed of individual metal letters.
- ii. Wall Signs shall be illuminated by external illumination or halo illumination only.
- iii. Where individual letters are used, letters shall be three-dimensional, created by raised letter forms mounted to the building façade or sign panel, or by incised openings cut out from the sign panel.
- iv. New wall signs for individual businesses in a shopping center shall be placed consistent with the location of signs for other businesses in the center. This will establish visual continuity among storefronts and create a unified appearance for the center.
- v. When signs that are attached to a wall are removed, holes and other disfigurements of the wall's surface shall be patched and painted to match surrounding areas.



2) Business Identification Wall Sign.

c. Industrial Guidelines

- i. Materials used in wall signs should be ceramic, and/or metal. Wall signs may also be inscribed into the façade of the building. Building Identification Wall Signs should be inscribed into the façade or constructed of individual metal letters.
- ii. Wall signs shall be illuminated by external illumination, exposed neon tube illumination, exposed incandescent bulb illumination, or halo illumination only. Building Identification Wall Signs shall be illuminated by external illumination or halo illumination only.
- iii. Where individual letters are used, letters shall be three-dimensional, created by raised letter forms mounted to the building façade or sign panel, or by incised openings cut out from the sign panel.
- iv. When signs that are attached to a wall are removed, holes and other disfigurements of the wall's surface shall be patched and painted to match surrounding areas.

3. **Projecting Sign**

Projecting Signs are signs that are oriented perpendicularly to the building façade and are either (1) suspended under a bracket, armature, or other mounting device or (2) are cantilevered (i.e., structurally affixed to the building).

a. Standards

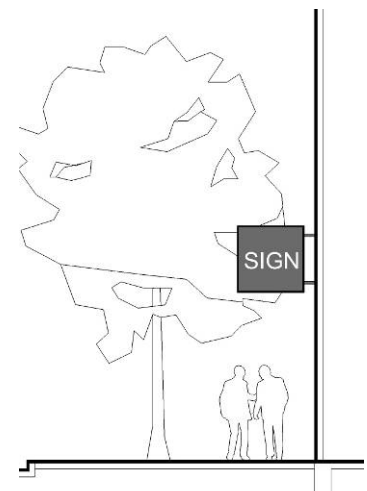
- i. Projecting Signs shall only be mounted on the wall area below the second floor.
- ii. No Projecting Sign shall exceed 16 square feet in size.
- iii. Projecting Signs shall project no more than four feet from the façade of the building.
- iv. No portion of a Projecting Sign shall be lower than eight feet above the level of the walkway over which it projects.

b. Commercial and Industrial Guidelines

- i. Projecting Signs that are suspended under a bracket, armature, or other mounting device shall be wood or metal and shall be illuminated by external illumination only.



3) Suspended Projecting Sign.



3) Cantilevered Projecting.

- ii. Projecting Signs that are cantilevered signs shall be wood, ceramic, metal, and paint only and shall be illuminated by external illumination or halo illumination only.
- iii. Sign supports and brackets shall be compatible with the design and scale of the sign and the architectural design of the building.

#### 4. ***Awning Valance Sign***

Awning Valance Signs are signs applied to the awning valance and are contained completely within the valance.

- a. Standards
  - i. Lettering for Awning Valance Signs shall include one (1) line of lettering not to exceed two-thirds (2/3) the height of the valance or 12 inches, whichever is less.
  - ii. Awning Valance Signs shall project no farther from the building than its associated awning.
  - iii. No portion of an Awning Valance Sign shall be less than eight feet above the level of the walkway over which it projects.
- b. Commercial and Industrial Guidelines
  - i. Awning Valance Signs shall consist of metal, or vinyl or paint applied directly to the awning.
  - ii. Awning Valance Signs shall be illuminated by external illumination only.
  - iii. The shape, design, and color of awnings shall be carefully designed to coordinate with, and not dominate, the architectural style of the building. Where multiple awnings are used on the building, the design and color of the sign awnings shall be consistent with all other awnings.
  - iv. The use of temporary signs/letters on awnings is not allowed. Only permanent signs that are an integral part of the awning or canopy shall be used.
  - v. The use of adhesive/press on lettering is not allowed. Awning signs shall be painted directly on the canvas awning.
  - vi. To avoid having to replace awnings or paint out previous tenant signs when a new tenant moves in to a building, the use of replaceable valances shall be considered.

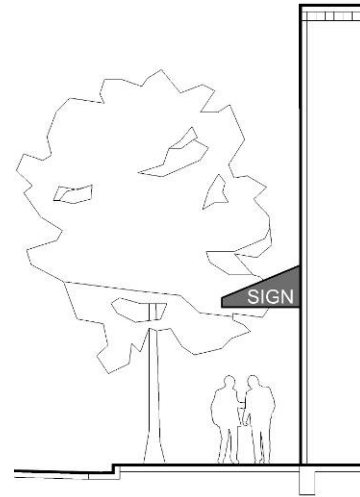


4) Awning Valance Sign.

#### 5. ***Awning Side Sign***

Awning Side Signs are signs applied to the side panel of an awning.

- a. Standards
  - i. The area of Awning Side Signs shall not count towards the total sign area permitted based on the Linear Frontage Ratio.
  - ii. Lettering for Awning Side Signs shall not exceed 12 inches in height with total sign area not to exceed 20 percent of the area of the awning side area.
  - iii. Awning Side Signs shall project no farther from the building than its associated awning.
  - iv. No portion of an Awning Side Sign shall be less than eight feet above the level of the walkway over which it projects.



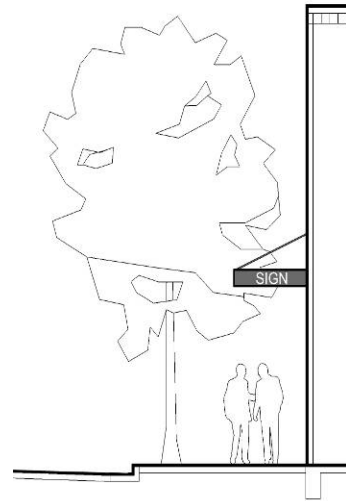
5) Awning Side Sign.

- b. Commercial and Industrial Guidelines
  - i. Awning Side Signs shall consist of vinyl or paint applied directly to the awning.
  - ii. Awning Side Signs shall be illuminated by external illumination only.
  - iii. The shape, design, and color of awnings shall be carefully designed to coordinate with, and not dominate, the architectural style of the building. Where multiple awnings are used on the building, the design and color of the sign awnings shall be consistent with all other awnings.
  - iv. The use of temporary signs/letters on awnings is not allowed. Only permanent signs that are an integral part of the awning or canopy shall be used.
  - v. The use of adhesive/press on lettering is not allowed. Awning signs shall be painted directly on the canvas awning.
  - vi. To avoid having to replace awnings or paint out previous tenant signs when a new tenant moves in to a building, the use of replaceable valances shall be considered.

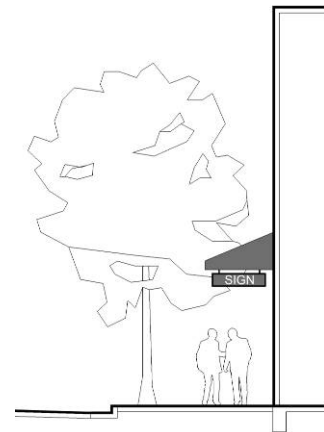
## 6. Canopy Fascia Sign

Canopy Fascia Signs are signs that are mounted to the front or side fascia of a canopy and contained completely within that fascia.

- a. Standards
  - i. The height of Canopy Fascia Signs shall not exceed two-thirds ( $2/3$ ) the height of the fascia or 12 inches, whichever is less.
  - ii. The width of Canopy Fascia Signs shall not exceed two-thirds ( $2/3$ ) of the canopy width.
  - iii. Canopy Fascia Signs shall project no farther from the building than its associated canopy.
  - iv. No portion of a Canopy Fascia Sign shall be less than eight feet above the level of the walkway over which it projects.
  - v. Canopy Fascia Signs shall consist of only one (1) line of lettering articulated as individual letters mounted directly to the canopy.
- b. Commercial and Industrial Guidelines
  - i. Materials used in Canopy Fascia Signs shall be metal and paint only.
  - ii. Canopy Fascia Signs shall be illuminated by external illumination only.



6) Canopy Fascia Sign.

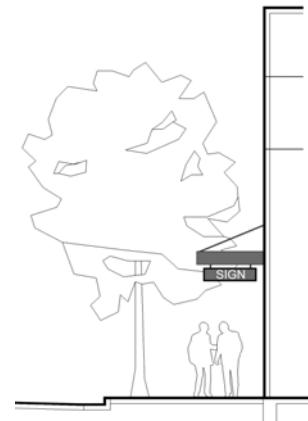


7) Under-Awning Sign.

## 7. Under-Awning or Under-Canopy Sign

Under-Awning or Under-Canopy Signs are signs that are suspended under an awning or canopy, perpendicular to the building facade.

- a. Standards
  - i. Under-Awning or Under-Canopy Signs shall be located adjacent to a public entrance.
  - ii. No more than one (1) Under-Awning or Under-Canopy Sign shall be permitted per establishment per façade.
  - iii. The area of Under-Awning or Under-Canopy Signs shall not count towards the total sign area permitted based on the Linear Frontage Ratio.
  - iv. Under-Awning or Under-Canopy Signs shall not exceed three (3) square feet in area.



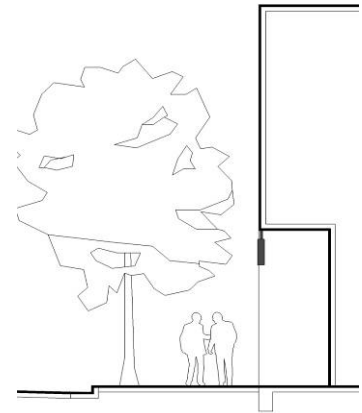
7) Under-Canopy Sign.

- v. Under-Awning or Under-Canopy Signs shall project no farther from the building than its associated awning or canopy.
  - vi. No portion of an Under-Awning or Under-Canopy Sign shall be less than eight feet above the level of the walkway over which it projects.
- b. Commercial Guidelines
- i. Materials used in Under-Awning or Under-Canopy Signs shall be wood, metal, and paint only.
  - ii. Under-Awning or Under-Canopy Signs shall be illuminated by external illumination only.
- c. Industrial Guidelines
- i. Materials used in Under-Awning or Under-Canopy Signs shall be metal and paint only.
  - ii. Under-Awning or Under-Canopy Signs shall be illuminated by external illumination only.

**8. Recessed Entry Sign**

Recessed Entry Signs are signs that are oriented parallel to the building façade and that are suspended over a recessed entry.

- a. Standards
- i. No Recessed Entry Sign shall exceed twenty (20) square feet in size.
  - ii. Recessed Entry Signs shall not project beyond the façade of the building.
  - iii. No portion of a Recessed Entry Sign shall be lower than eight feet above the level of the walkway.
- b. Commercial Guidelines
- i. Materials used in Recessed Entry Signs shall be wood, metal, and paint only.
  - ii. Recessed Entry Signs shall be illuminated by external illumination only.



8) Recessed Entry Sign-  
Section View.



8) Recessed Entry Sign-  
Elevation View.



c. Industrial Guidelines

- i. Materials used in Recessed Entry Signs shall be metal and paint only.
- ii. Recessed Entry Signs shall be illuminated by external illumination only.

**9. Window Sign**

Window Signs are signs that are applied directly to a window or mounted or suspended directly behind a window.

a. Standards

- i. Window Signs shall be permitted on windows below the second floor level only. A Window Sign that only identifies a building shall be located on a transom window above a primary entrance, or the glazed area of primary door.
- ii. Window signs shall count towards total sign area permitted based on the Linear Frontage Ratio, except that the area of a Window Sign that only identifies a building shall not count towards the total sign area permitted based on the Linear Frontage Ratio. One (1) Window Sign that only identifies a building shall be permitted per building per street-facing façade.
- iii. No more than 25 percent of any individual window area shall be covered or otherwise occupied by signage.
- iv. The letter height of each Window Sign shall not exceed 12 inches and shall be taller than four inches.

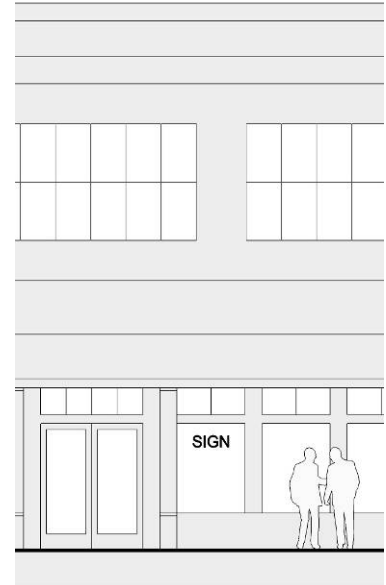
b. Commercial and Industrial Guidelines

- i. Ground-floor Window Signs shall consist of vinyl or paint applied to the glass, neon mounted or suspended behind the glass, or framed and mounted paper signs. Window Signs that only identify a building shall consist of vinyl or paint applied to the glass only.
- ii. Ground floor Window Signs shall not be illuminated.

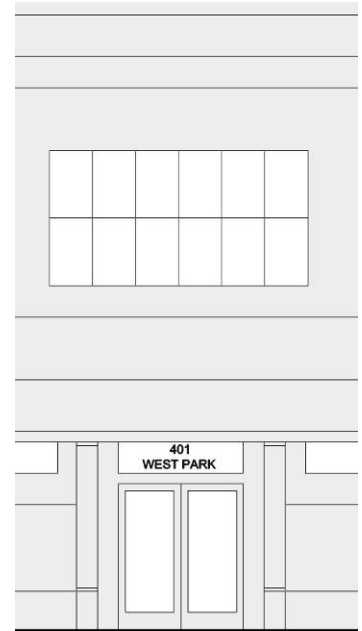
**10. Temporary Window Sign**

Temporary Window Signs are signs that are applied directly to a window or mounted or suspended directly behind a window and are designed, constructed, and intended for display on private property for a period of not more than 90 consecutive days per year. Examples include "grand opening", "special sale," and seasonal signage.

a. Standards



9) Window Sign – Business Identification.



9) Window Sign – Building Identification.

- i. Temporary Window Signs shall be located only on ground floor windows on building facades that face a public street or a parking lot.
  - ii. Temporary Window Signs shall not exceed six square feet in size.
  - iii. Temporary Window Signs shall not cause the total amount of the window area covered with signage to exceed 25 percent.
  - iv. Temporary Window Signs that satisfy the above standards and General Standards do not require a permit.
- b. Commercial and Industrial Guidelines
- i. Temporary Window Signs shall be constructed of paint applied directly to the glass or framed paper signs placed behind the glass.
  - ii. Temporary Window Signs shall not be illuminated.
  - iii. Temporary Window Signs that satisfy the above guidelines and General Guidelines do not require a permit.



10) Temporary Window Sign.

**11. Temporary Wall Sign**

Temporary Wall Signs are signs that are located on, and parallel to, a building wall and are designed, constructed, and intended for display on private property for a period of not more than ninety (90) consecutive days per year. Examples include “grand opening”, “special sale,” and seasonal temporary banner signage.

- a. Standards
- i. Temporary Wall Signs shall only be mounted on a wall area below the second floor level that faces a public street or a parking lot.
  - ii. A maximum of one (1) Temporary Wall Sign is allowed per establishment.
  - iii. No Temporary Wall Signs shall exceed 32 square feet in area.
  - iv. Temporary Wall Signs shall project no more than one (1) foot from the façade of the building.



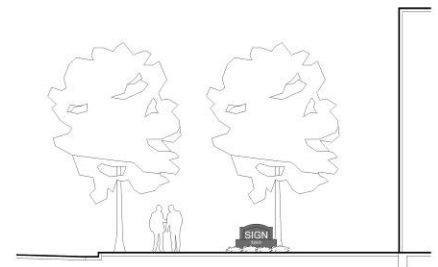
11) Temporary Wall Sign.

- b. Commercial and Industrial Guidelines
  - i. Materials used in Temporary Wall Signs shall consist of a flexible vinyl material with grommet holes installed around the edges to accommodate attachment to a building.
  - ii. Temporary Wall Signs shall not be illuminated.

## 12. Monument Sign

A Monument Sign is a freestanding sign supported by a solid architectural element at its base.

- a. Standards
  - i. A maximum of one Monument Sign is allowed per street frontage for single-purpose buildings, multi-tenant buildings or complexes and shopping centers on a -parcel with one or more street frontages of at least 100 feet.
  - ii. A Monument Sign shall not exceed eight feet in length or six feet in height.
  - iii. Monument Signs shall be placed perpendicular or parallel to the street. The base of a Monument Sign shall be set back a minimum of five feet from any public right-of-way or interior property line; a minimum of 10 feet from the edge of a driveway; and a minimum of 50 feet and from any Monument Signs or Pylon Signs on adjoining sites. Monument Signs shall not block sight lines at entry driveways and circulation aisles.
  - iv. The sign copy for a Monument Sign shall only identify the name of the center, complex, or building and the address; however, the name of the primary tenant, if any, may be included in the copy. The minimum letter size allowed shall be six inches. Sign copy shall not be located closer than one half-letter height to the sign edge or other line of copy. Between 5 to 10 percent of the sign area should be dedicated to identification of the street address.
  - v. The area of Monument Signs shall not count towards the total sign area permitted based upon Linear Frontage.
  - vi. Monument Signs shall not project over any on-site driveway or vehicle circulation area.
  - vii. Landscaping with automatic irrigation shall be provided at the base of the supporting structure equal to twice the area of one face of the sign or 75 square feet, whichever is greater. For example, 40 sq. ft. of sign area = 80 sq. ft. of landscaped area.



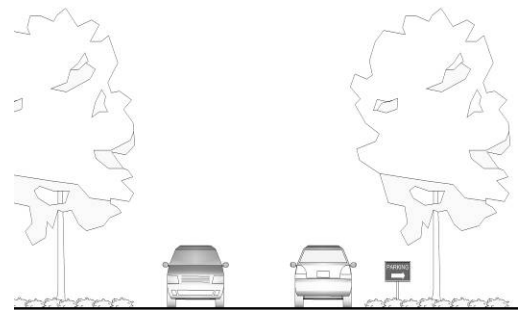
12) Monument Sign.

- b. Commercial and Industrial Guidelines
- i. Monument Signs may be illuminated, however the sign copy should be the only portion of the sign face that is illuminated. The sign background or field shall be opaque with a nonglossy, nonreflective finish.
  - ii. The sign area and height of the sign shall be in proportion to the site and surrounding buildings. Signs shall not be overly large so as to be a dominant feature of the site.
  - iii. Monument Signs shall incorporate architectural elements, details, and articulation as follows:
    - Provide a solid architectural base that supports the sign. The base shall be a minimum of one-foot in height.
    - Provide architectural elements on the sides and top to frame the sign pane(s). Use columns, pilasters, cornices, and similar details to provide design interest.
    - Incorporate materials and colors into the sign support structures to match or be compatible with materials and colors of the development the sign serves so it does not appear out of scale with its adjacent building(s).
    - Keep the overall size of the sign in proportion with the development it serves so it does not appear out of scale with its adjacent building(s).

**13. Directional Sign**

A Directional Sign is an on-premise sign giving directions, instructions, or facility information of an establishment (e.g., parking signs, exit and entrance signs, etc.).

- a. Standards
- i. One (1) directional sign for each vehicle entry to a site with a maximum area of three square feet per sign. Maximum sign height shall be four feet. Additional directional signs may be allowed with approval of a Comprehensive Sign Program.



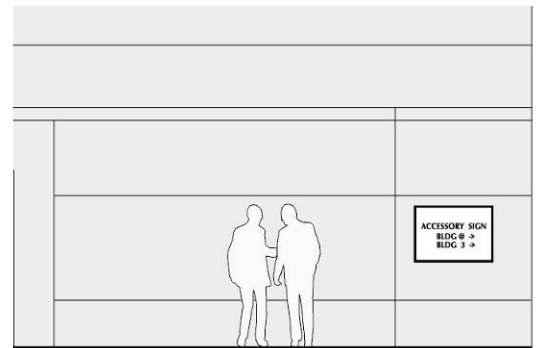
13) Directional Sign.

- b. Commercial and Industrial Guidelines
  - i. Directional signs and their supports shall use the same color palette of the proposed building.
  - ii. Directional signs shall be located to maintain sight lines along major circulation routes and shall be illuminated for visual clarity and safety.
  - iii. Directional signs shall be designed with easy-to-read fonts, contrasting colors from the surrounding support panels, and durable materials.
  - iv. Double-sided parking directional signs shall incorporate messaging and direction arrows on both sides of sign.
  - v. Parking directional signage shall be used consistently throughout each individual development.

#### 14. Accessory Signs

Accessory Signs are signs that provide incidental information about a project site or a business and its goods or services. For the purposes of this plan, Accessory Signs include:

- Directory Sign. A sign listing the tenants or occupants of a building or building complex.
- Nameplate Sign. A sign indicating the name and/or address of a building or occupant.
- Restaurant Menu Sign. Menus displayed on the exterior premises of a restaurant.



14) Accessory Sign.

- a. Standards
  - i. The area of Accessory Signs shall not count towards the total sign area permitted based upon Linear Frontage.
  - ii. Directory Signs: Limited to a total sign area of 10 square feet.
  - iii. Nameplate Sign: One non-illuminated sign not to exceed one square foot in area.
- b. Commercial and Industrial Guidelines
  - i. Materials used in Accessory Signs shall be wood and metal.
  - ii. Accessory Signs shall be illuminated by internal or external illumination as appropriate.

## **10.8 Public Right-of-Way Streetscape**

This section establishes standards for streetscape landscaping improvements within the public rights-of-way along the major highways, primary highways, and secondary highways as identified in the General Plan, Circulation Master Plan, as well as district gateway/intersection enhancements. The intent of these streetscape improvement concepts and gateway enhancements is to provide a “sense of place” or identity, while interweaving the standards and tree palettes that may be provided by any overriding City Master Street Tree Plan.

### **A. Street Classifications**

Streets within the SED are classified as follows:

1. Major highways:
  - a. Six-lane major highway – none within SED.
  - b. Modified six-lane residential adjacent major highway – none within SED.
  - c. Modified six-lane no median major highways – none within SED.
  - d. Eight-lane major highways – none within SED.
2. Primary highways – Beech Avenue and Slover Avenue.
3. Secondary highways – Citrus Avenue, Poplar Avenue, and Santa Ana Avenue.
4. Collector streets – Catawba Avenue and Elm Avenue.

### **B. General Design Criteria**

1. Landscaping should be used to accentuate and frame important view corridors.
2. Landscaping shall employ a common three-tiered approach to design:
  - a. Trees
  - b. Shrubs, vines and tall grass-like materials
  - c. Groundcovers (does not include turf)
3. Landscaping should be consistent and accentuated along arterial corridors and gateway intersections to emphasize district areas.

4. Street trees on major highways and primary highways shall consist of on-center planting of deciduous trees in medians (whenever medians are required) and evergreen trees in parkways to provide seasonal variations of views during fall and winter months (clearer air and snow-capped peaks).
5. Secondary highways shall provide single species of evergreen trees planted in parkways.
6. Gateway intersection enhancements should incorporate the adjacent property tree species (used in buffer setback) in order to provide background and screening, and be enhanced with accent trees selected for their character and shape.
7. Primary and secondary gateways will include thematic monumentation for district identification and reflect elements of local identity (i.e. river rock, concrete, City logo, etc.).
8. All gateway intersection enhancements shall incorporate decorative paving at corner areas and plant materials that promote the best of water-efficient landscaping.

### ***C. Streetscape Concept***

The Streetscape Concept Plan for the entire Specific Plan area is shown on Exhibit 10-5. The plan identifies major, primary, and secondary highways, as well as collector streets and the gateway intersections within the Specific Plan area. Roadway classifications are consistent with the General Plan, Circulation Master Plan.

1. **Primary/Secondary Streetscape.** Primary/Secondary highway streetscapes define the areas within the Specific Plan and its districts, and connect to the major thoroughfares throughout the City. Primary highways within the SED include Beech Avenue and Slover Avenue. Secondary highways within the SED include Citrus Avenue, Poplar Avenue, and Santa Ana Avenue. Streetscape cross-sections for these areas are shown in Exhibits 10-6 and 10-7.



# Southwest Industrial Park Specific Plan

Slover East Industrial District

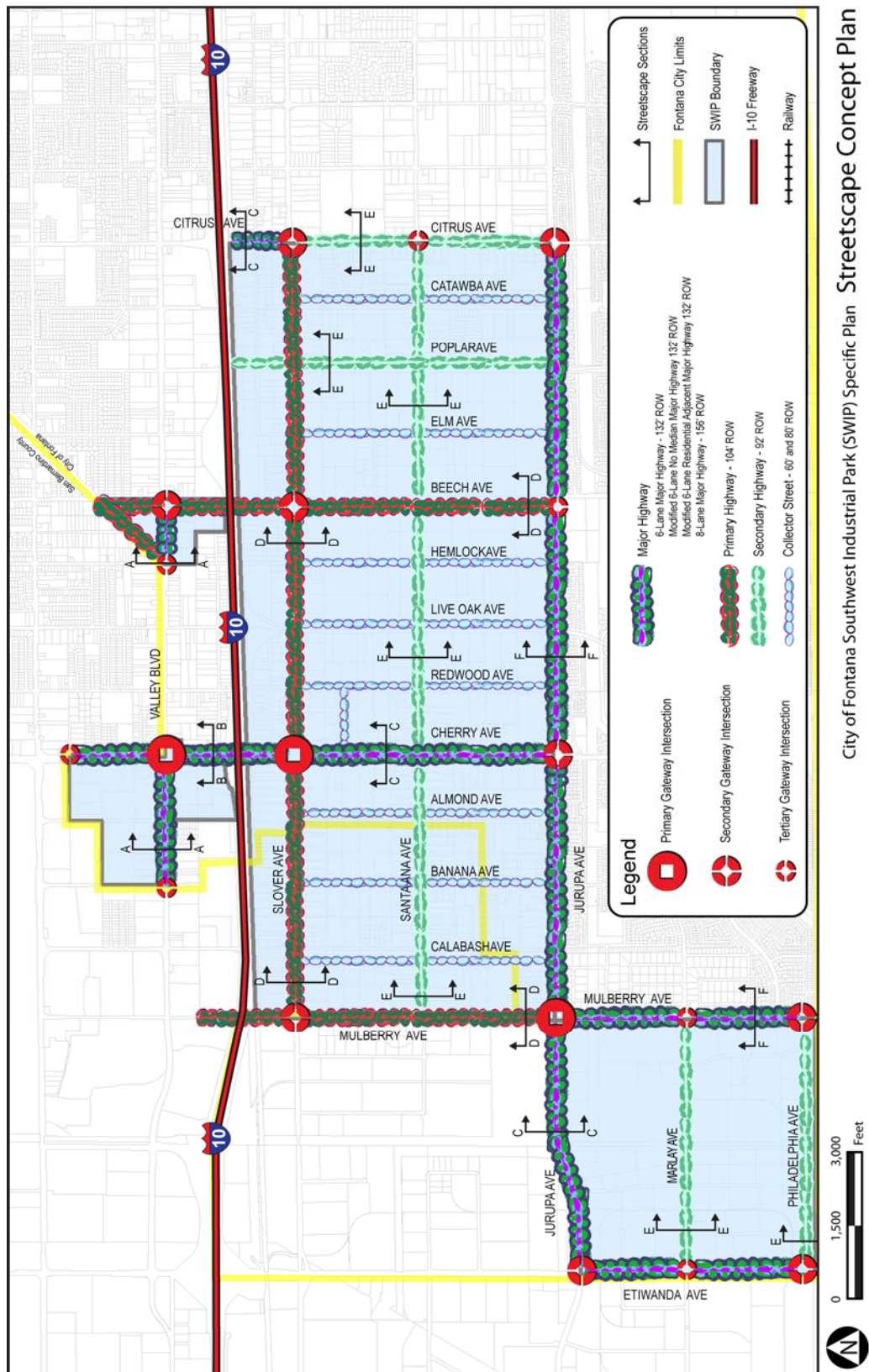


Exhibit 10-5 – Streetscape Concept Plan

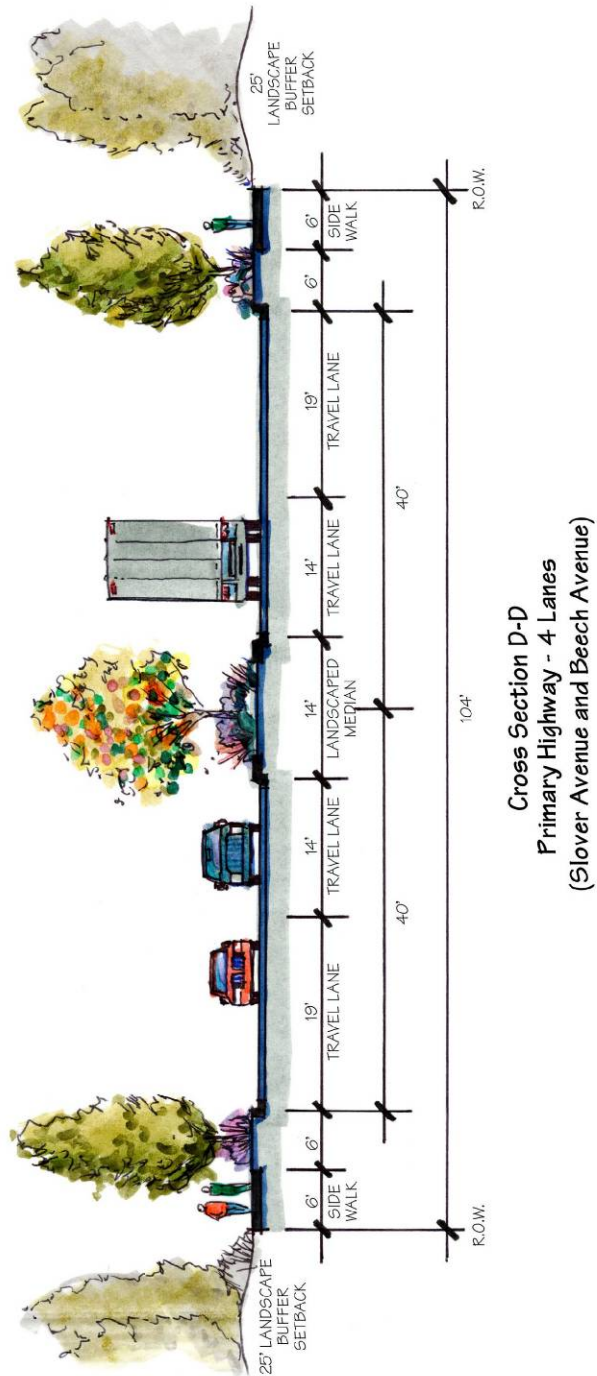
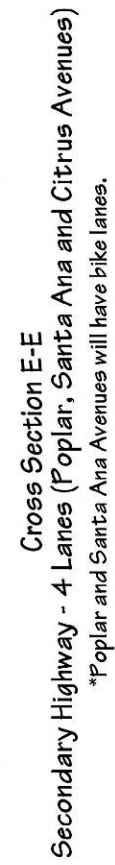


Exhibit 10-6 – Primary Highway – 4 Lanes – Cross Section D-D (Beech Avenue and Slover Avenue)



10-52

**D. Gateways****A. Concept Plan**

The Streetscape Concept Plan Exhibit 10-5 identifies a hierarchy of primary, secondary, and tertiary gateways. The intent of the gateway intersection enhancements is to provide a visual statement that you are within the Specific Plan area.

The gateway intersection enhancements should all incorporate uniform treatments (to varying degrees) within expanded corner setback areas (45 degree diagonal Right-of-Way). Depending on the hierarchy level, each gateway shall include special corner/sidewalk paving, planting schemes that highlight drought tolerant species, and monumentation signage. Monument signs are optional on tertiary gateway intersections.

Each corner planting scheme shall incorporate the three-tiered planting concept, consisting of accent trees, shrubs, or tall grass-like plant material, and a ground cover. Dense planting of evergreen tree species consistent with adjacent buffer setback plantings shall provide a background/screen for each corner setback area.

Gateway conceptual designs with typical dimensions (plan views) are illustrated in Exhibits 10-8 and 10-9. The monument sign concept as it would appear in front of the planting treatment is illustrated in Exhibit 10-10.

Gateway enhancements and monument sign enhancements shall meet the City's line of sight regulations, as determined by the City Engineer. Dimensions of monument signs shall comply with Section 10.7.D.12.

**B. Dedication and Maintenance of Gateway Intersection Enhancements**

1. When dedication and maintenance is required.
  - a. Whenever a development project is proposed on land that is designated as a location for gateway intersection enhancements in Section 6.8.B Public Right-of-Way Streetscape- Gateways, the developer shall:
    - i. Dedicate any necessary right-of-way area to the City or provide an easement in favor of the City for the installation of gateway intersection enhancements;
    - ii. Construct the gateway intersection enhancements to the standard indicated in Section 6.8., Public Right-of-Way Streetscape; and
    - iii. Enter into an agreement with the City that specifies perpetual maintenance.
  - b. The applicable review authority shall impose the dedication (or easement) requirement as a condition of project approval.
  - c. The City Attorney and the Director of Community Development shall approve the form and content of any dedication or easement instrument used to ensure

the installation and perpetual maintenance of the gateway intersection enhancements.



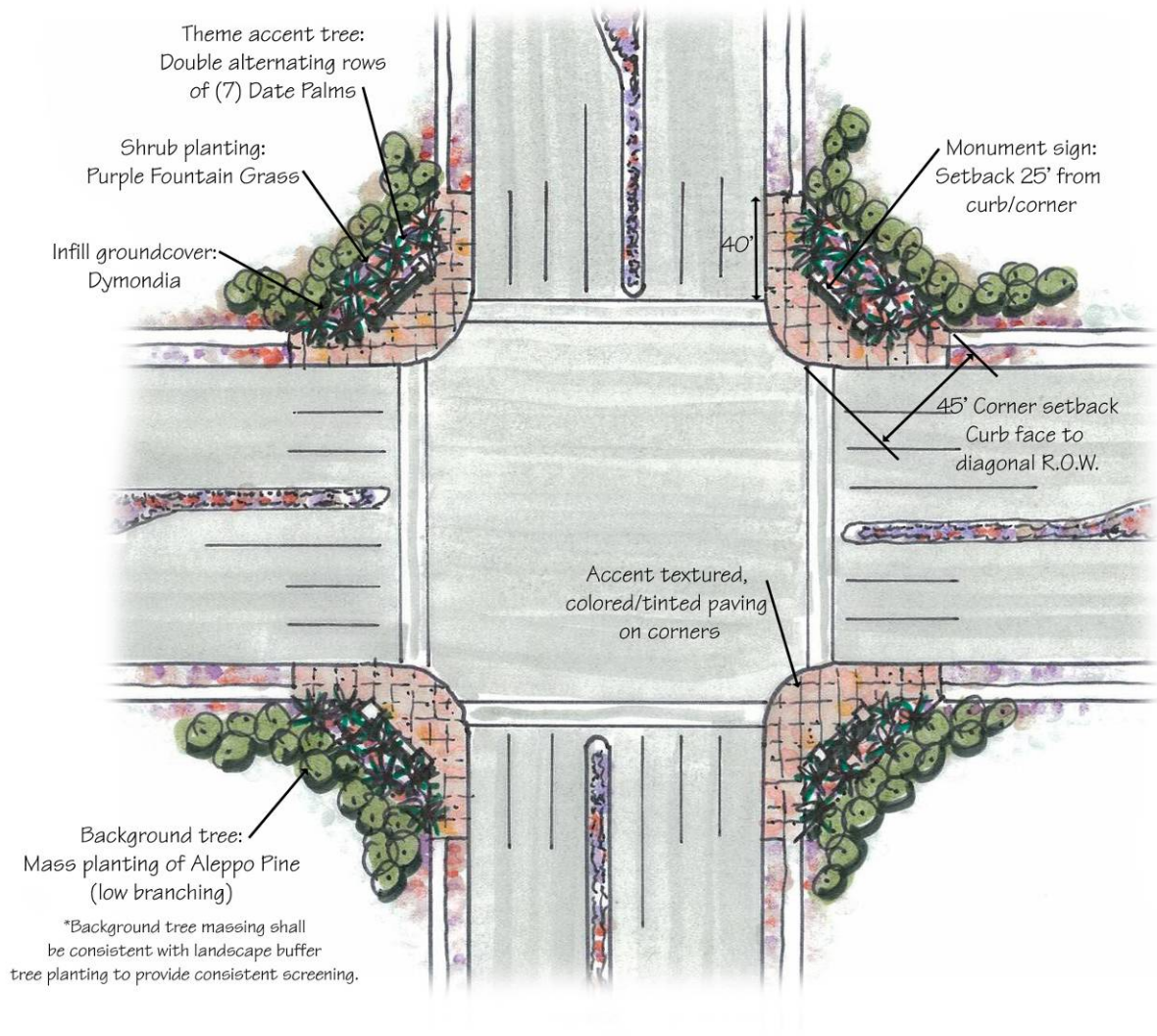


Exhibit 10-8 – Secondary Gateway Intersection Enhancement Concept

## Southwest Industrial Park Specific Plan

Slover East Industrial District

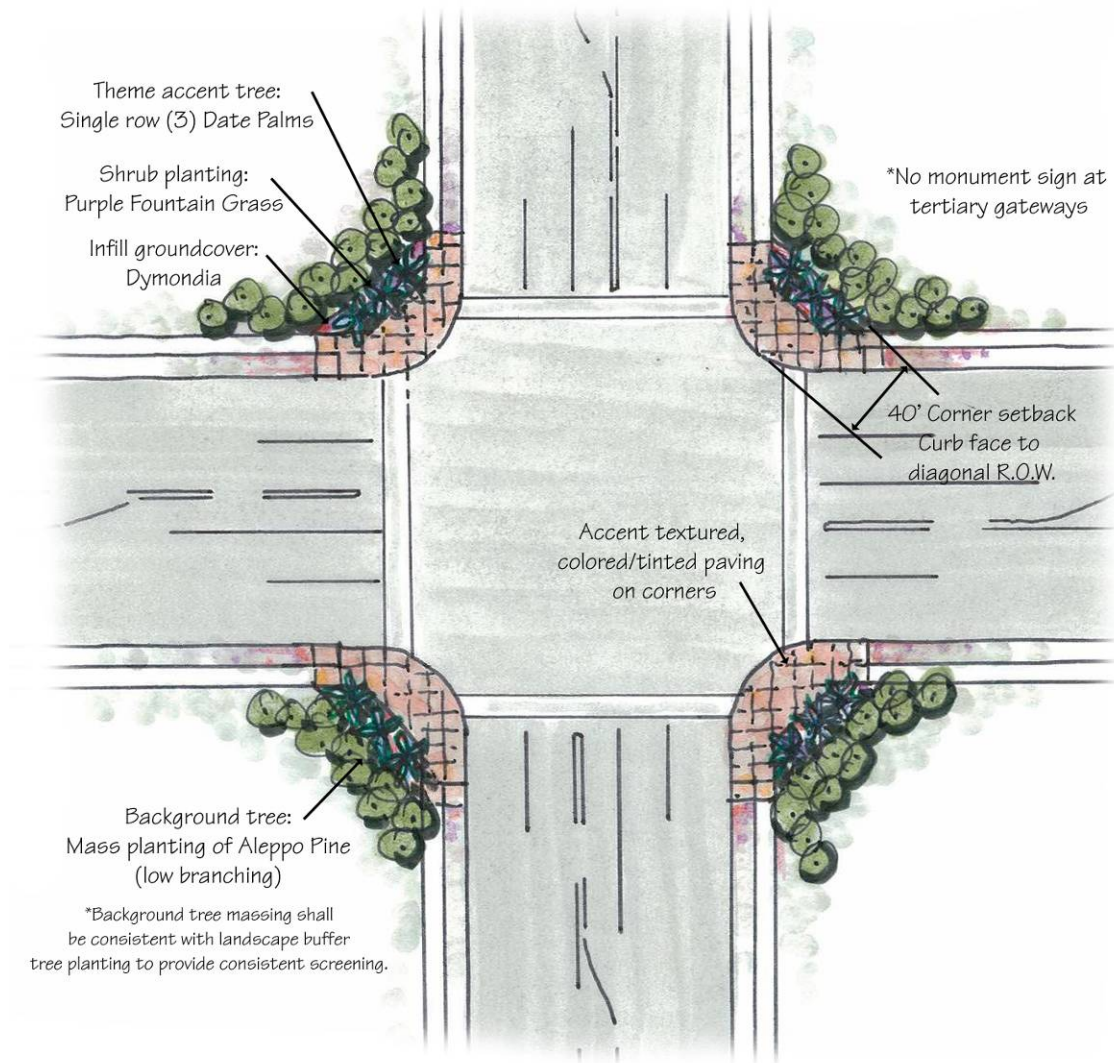


Exhibit 10-9 – Tertiary Gateway Intersection Enhancement Concept



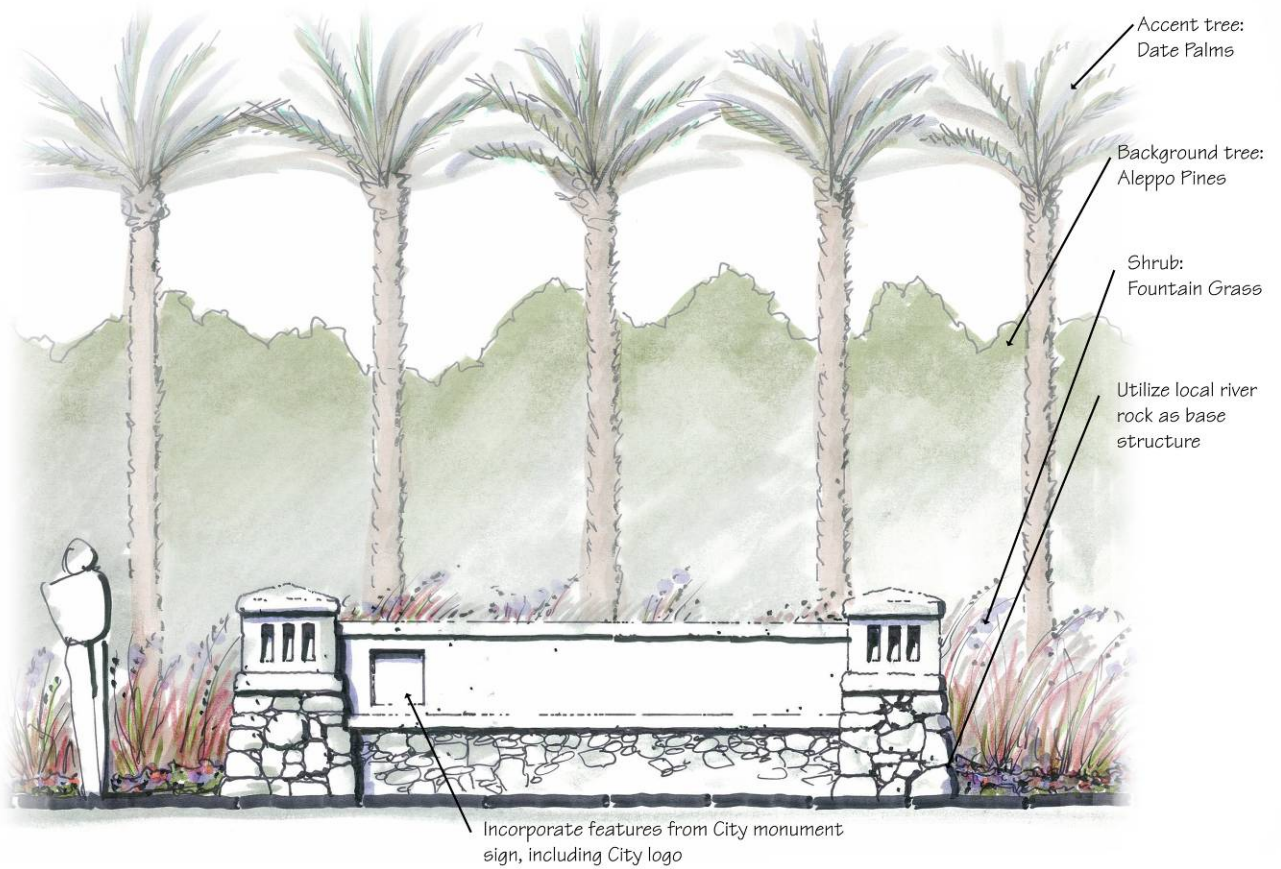


Exhibit 10-10 – Monument Sign Concept

4. Street Furniture. Exhibit 10-11 – Street Furniture Palette identifies recommended street furniture components, including lighting, trash receptacles, and benches, for the district. The palette is intended to ensure a unified visual identity for the district, which is distinct from the other districts within the Specific Plan area.



**Wall/building lighting  
Domus Series Lighting  
by Phillips Lumec  
DMS 55 - SG**



**Pole/pedestrian and parking lot lighting**



**Chase Park Series trash receptacle and bench  
by Landscape Forms**

Exhibit 10-11 – Street Furniture Palette.

## **10.9 Design Guidelines**

### **A. Design Objectives**

The Design Guidelines will promote and reinforce the City's commitment to high quality development. In general, the guidelines are intended to ensure that development preserves or improves the positive characteristics of the City's image. The objectives of these guidelines are to:

- Promote orderly development by implementing the SWIP Specific Plan objectives, policies, and principles found in Chapter 2 Policy Framework.
- Protect and enhance property values by ensuring that development fits properly within the context of its surroundings and does not negatively impact adjacent uses.
- Encourage individual creativity and innovative solutions by allowing flexibility in how a particular guideline is met as long as the intent of the guideline is achieved.
- Ensure functional pedestrian and motor vehicle circulation within a project and convenient pedestrian linkages to and from adjacent residential, commercial, industrial, and school areas.

### **B. Design Intent**

The design intent of the SED is to provide for well-planned and well-designed industrial development. Innovative site design and architecture which supports the functional needs of the uses is highly encouraged.

### **C. Industrial, Distribution, and Business Park Uses**

The design guidelines in this Subsection shall apply to all industrial, distribution, and business park development within this land use district.

### 1. Site Design

#### Site Layout

- The arrangement of multiple buildings and associated circulation, and parking areas should reflect a well-organized site plan that emphasizes pedestrian connectivity and landscaped areas responsive to the public.
- Site development may utilize variations on building placement and landscaping adjacent to the public street. Appropriate configurations may include, but are not limited to the following:
  - Fully landscaped setback between building and street.
  - Parking in front of building with a landscape buffer between parking and street. **See Figure 1.**



Figure 1. Appropriate building and landscape placement adjacent to public street.

- Visitor parking maybe located at the front of the building adjacent to the main entry while employee parking and service areas are located at the sides and rear of the building. **See Figure 2.**

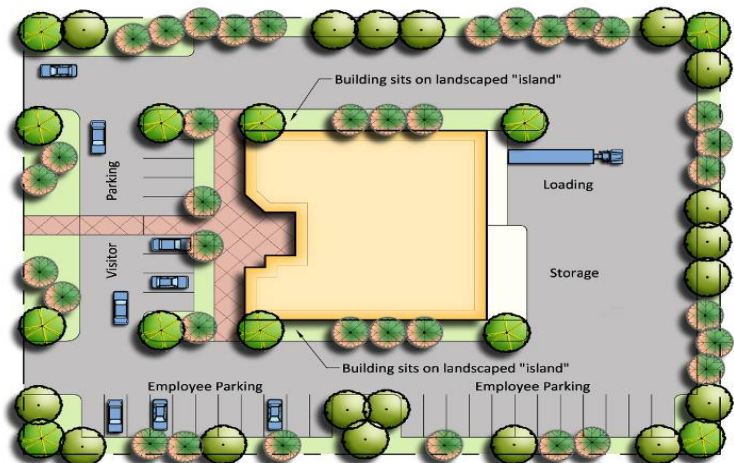


Figure 2. Parking layout.



- Service and loading should not be located on building side(s) adjacent to a public street.
- When buildings abut residential properties, parking and loading areas shall be located at the side of the building instead of the rear. The rear setback area shall be fully landscaped. **See Figure 3.**
- The design and location of accessory buildings (e.g., security kiosks, maintenance buildings, and outdoor equipment enclosures) shall be incorporated into and be compatible with the overall design of the project and the main buildings on the site.
- With the exception of security kiosks, accessory buildings shall be located as far back from the front and street side setback area as possible.
- Sea/train-type metal is prohibited.
- Noise generating activities and storage areas shall be located as far as possible from adjacent properties, especially residential zones. Sound attenuation walls shall be used where appropriate to reduce noise.
- Outdoor storage, work, and loading areas shall be incorporated within the building design and located to the rear or side of buildings and screened from view from adjacent public streets. **See Figure 4.**



Figure 3. Fully landscaped setback adjacent to residential.

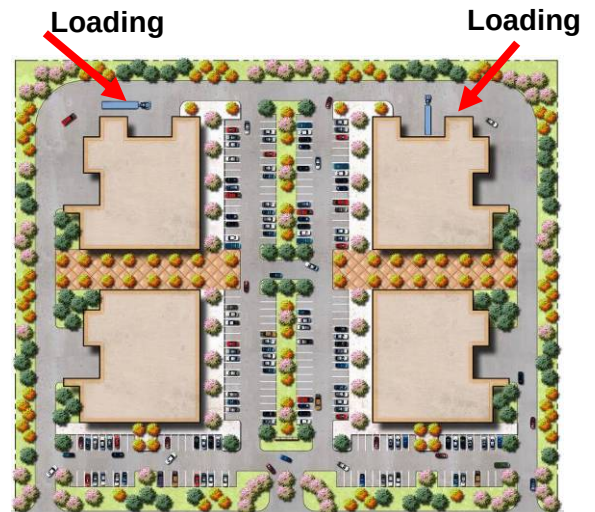


Figure 4. Appropriate location of loading areas.

### Courtyards and Plazas

- Buildings should be arranged to create opportunities for open space amenities (e.g., plazas, courtyards, outdoor eating areas, recreation areas, etc.).

- Business park developments should provide recreational facilities (e.g., bicycle paths, tennis courts, volleyball courts, gymnasiums, etc.).

### 2. Building Orientation

- Multiple building developments should be oriented in a manner that will form gateways through facade enhancement, maximize public view, and capture public interest along adjacent major streets. **See Figure 5.**
- The organization of buildings, parking areas, and landscaping shall recognize the existing characteristics of the site and shall relate to the surrounding development in scale and character.
- Buildings should generally be placed at or near setback lines with development oriented in a manner that will provide visual interest. **See Figure 6.**
- Buildings should be oriented in a manner that takes advantage of passive solar design.
- Buildings shall be oriented to provide a buffer between sensitive uses (i.e. residential, parks, etc.) and outdoor work areas, loading and storage.

### 3. Site Elements

#### Fences and Walls

- Walls and fencing materials shall consist of wrought iron, tubular steel, stone, stucco, or brick, and shall be compatible with the overall design character/style of the development. The use of chain-link fence material is not allowed if visible from the public right-of-way. **See Figure 7.**
- Walls and fences shall be integrated with landscaping along the base of the wall or fence.



Figure 5. Buildings are oriented to create gateway into development.



Figure 6. Buildings are oriented to provide architectural features visible from the public right-of-way.



Figure 7. Tubular steel and stone pillars are appropriate fencing materials.

- Wall heights and surfaces shall be articulated with varying facade depths or pilasters to promote architectural interest, and shall include a cap along the top of the wall.
- Landscaping shall be used in combination with walls and fences to visually soften blank surfaces and to deter graffiti. **See Figure 8.**



Figure 8. Wall is articulated with pillars and incorporates landscaping at the base and vines to deter graffiti.

### Screening

- Loading bays and service areas shall be screened by building placement, decorative walls or landscaping to the fullest extent feasible so that views of loading areas are minimized from adjacent public streets. **See Figure 9.**
- Trash storage enclosures and outdoor mechanical equipment shall be screened from public view.
- Roof-mounted equipment shall be screened from public view through use of parapet walls or other screening devices. Special consideration shall be given to the screening of roof-mounted equipment on building rooftops that are visible from public view. **See Figure 10.**

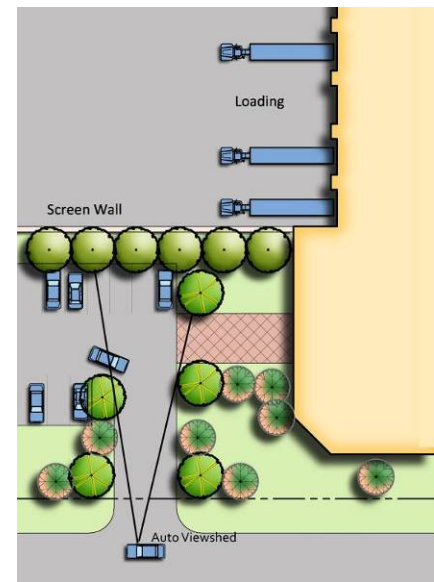


Figure 9. Appropriate placement, orientation and screening of service areas.

### Trash Enclosures

- Trash enclosures shall be incorporated as part of the building design.
- If trash enclosures cannot be located out of public view, the design of trash storage areas shall incorporate architectural screening elements and landscaping compatible with the design of buildings and landscaping on the site. **See Figure 11.**

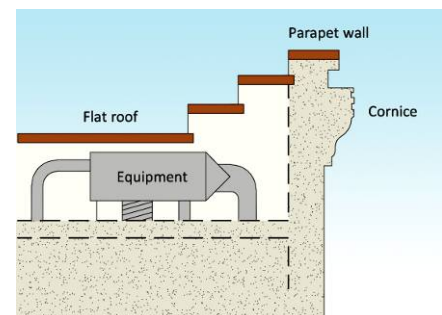


Figure 10. Screening of roof mounted equipment.



- Trash enclosures shall integrate horizontal screening such as trellises. **See Figure 11.**

### Lighting

- Outdoor lighting plans shall take into consideration the location and potential growth pattern of nearby trees (existing and planned) so that appropriate lighting levels are maintained over time.
- Energy efficiency shall be considered through use of proper light location and placement, as well as use of energy-efficient bulbs or fixtures.
- Lighting fixtures shall include hoods or other design techniques to reduce glare and light pollution, especially along major streets and adjacent to residential zones, and to prevent light spill over onto adjacent properties. **See Figure 12.**
- Lighting shall be provided in project entryways, walkways, parking lots, and plazas or courtyards to promote safety. **See Figure 13.**
- Lighting may be mounted on poles or bollards, affixed to building walls, or placed within paved or landscaped areas. Appropriate materials and construction methods shall be used to ensure proper function of project lighting fixtures.
- Decorative light fixtures shall be consistent with the architectural design of the building. **See Figure 14.**
- Truck and truck trailer storage areas shall incorporate lighting to increase real and perceived security.



Figure 11. Trash enclosures with architectural screening elements.



Figure 12. Hooded light fixture directs light downward.



Figure 13. Bollard lighting along pedestrian walkway.



Figure 14. Decorative light fixtures.

#### 4. Parking and Access

##### Parking

- Parking lots shall not be the dominant visual element on the site.
- Parking lots adjacent to and visible from public streets shall be appropriately screened to minimize undesirable visual impacts. **See Figure 15.**
- Surface parking areas shall integrate trees and landscape improvements to reduce the heat island effect. **See Figure 15.**

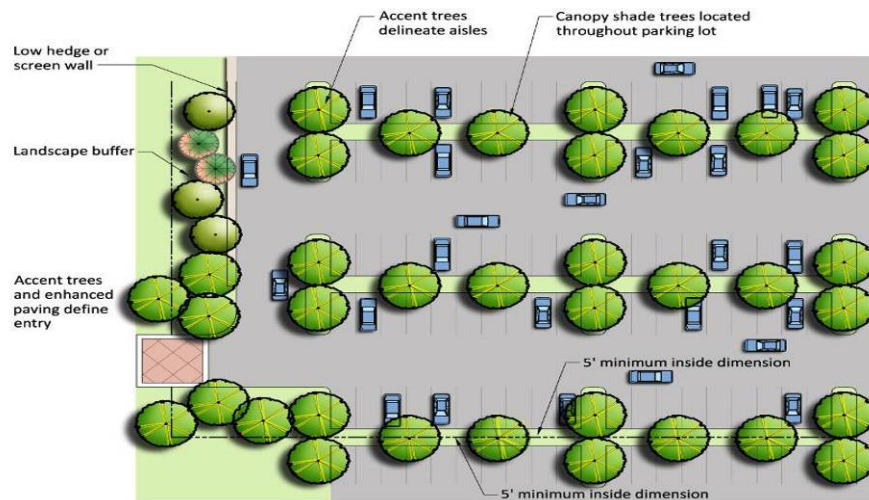


Figure 15. Parking lot landscaping.

- Large parking lots (usually over 100 spaces) shall be divided into multiple, smaller areas and provided with canopy trees located throughout the parking area to reduce the effects of heat and the visual impacts of large parking areas.
- Employee parking areas should be located behind the building or alongside the building so as not to be visible from adjacent streets.
- Internal vehicular and pedestrian circulation within a development involving multiple buildings or lots shall interconnect in an obvious and consistent manner. **See Figure 16.**

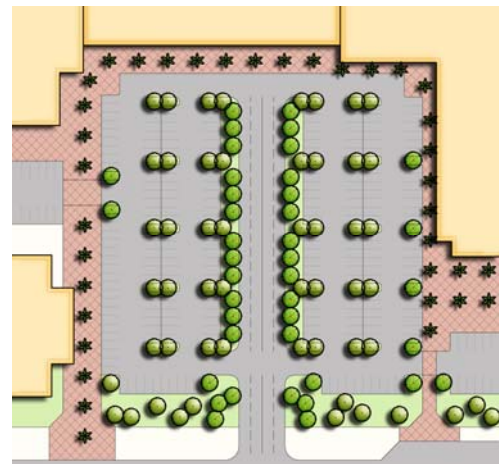


Figure 16. Pedestrian circulation is consistent along perimeter of parking lot.

- Parking shall be provided within walking distance of all tenants and public sidewalks.
- Parking lot design shall include water quality storm water facilities consistent with City standards. **See Figure 17.**



Figure 17. On-site stormwater capture system.

### Access

- The use of common (shared) access points and driveways is encouraged; placement of vehicle access points close to building entries shall be avoided to minimize pedestrian and vehicular conflicts. **See Figure 18.**



Figure 18. Shared parking access.

- Entry drives shall be clearly marked by special features, (e.g., enhanced paving, prominent landscape features, low-level decorative walls, and well-designed monument-type signs). **See Figure 19.**
- Access to each development site shall be clearly visible to pedestrians and motorists.
- Service and loading areas should take access from shared access points to reduce curb cuts along streets.



Enhance project entries with landscaping and special paving for visual impact.

Figure 19. Entry drive.



## 5. Architecture

### Mass and Scale

- The mass and scale of the buildings shall respect the visual and physical relationship to the adjacent buildings and surrounding sensitive uses. Taller building elements should be placed towards the center of the site, with lower elements adjacent to surrounding properties.
- Buildings should be stepped back when adjacent to or in close proximity to sensitive uses.
- Vertical and horizontal offsets shall be provided to reduce the visual bulk of the building. **See Figure 20.**



Figure 20. Incorporation of vertical offsets and material changes.



Figure 21. Façade articulation.

### Building Facades

- Building facades shall incorporate architectural elements such as windows, pillars, wall plane breaks to minimize blank walls and to create visual interest. **See Figure 21.**
- All building elevations, whether front, side, or rear shall be architecturally detailed.
- Architectural accents (e.g., cornices, tiles, trim around windows, grooves in building faces, accent band details, bulkheads, etc.) shall be used to create variation along building facades. **See Figure 22.**
- Higher facades and rooftops should be incorporated at corners and intersections, and appropriate massing and scale shall be considered for the remainder of the building spanning public street frontage. **See Figure 23.**
- The orientation of windows in buildings adjacent to residential zones shall preclude a direct line of sight into residential properties.
- Primary building entries shall be easily identified through the use of prominent



Figure 22. Use of cornices, window trim and grooves.



Figure 23. Enhanced corner elements.

architectural elements, signage, landscaping, lighting, canopies, roof form, hardscape, architectural projections, columns, vertical elements, or other design features that help emphasize a building's entry. **See Figure 24.**



Figure 24. Articulated Entries.

- Roofs shall be designed as an integral component of building form, mass, and facade. Building form should be enhanced by sloped or offset roof planes, eave heights, and rooflines. **See Figure 25.**
- Locate and/or screen rooftop equipment so that it is not visible from the street. Rooftop screening shall be integral to the building's form.

### Color and Materials

- Colors and materials for all structures on-site should consist of earth tones. Use of at least two to three different colors, materials or textures is encouraged.
- Building materials shall be durable and able to withstand long-term exposure to the elements.



Figure 25. Offset roof planes.

- Large expanses of smooth material (e.g., concrete) shall be broken up with expansion joints, reveals, or changes in texture and color. **See Figure 26.**
- To the fullest extent feasible, buildings should use large windows along walls and skylights in rooftop designs to capture natural light during working hours.
- Use of metal as the primary building façade material is subject to approval of a conditional use permit by the Planning Commission.



Figure 26. Use of expansion joints.

## 6. Landscaping

- Landscaping shall be in scale with adjacent structures, streets, and public spaces, and be sized appropriately when fully grown.
- Landscaped areas should incorporate a three-tiered planting system:
  - 1) ground cover and flowering plants;
  - 2) shrubs and vines; and
  - 3) trees.

**See Figure 27.** See Recommended Plant Palette in Section 10.5.



Figure 27. Three-tiered planting system: trees, shrubs, and ground covers.

- Special landscape features, such as specimen trees, shall be provided at major focal points (e.g., project entries, building entries, and pedestrian gathering areas).
- Entry and exit points shall be highlighted through a combination of distinctive landscape and hardscape features. Incorporation of public art is highly encouraged.
- Development on corner lots shall be enhanced with a combination of specimen trees, accent plantings, upgraded perimeter wall surfaces, hardscape treatments and landscape lighting adjacent to the street intersection .

- Drought-tolerant and low-maintenance trees, vines, and groundcovers shall be used on-site. Drip irrigation systems shall be installed where feasible to ensure the highest possible level of water conservation.
- Planting materials shall be used in plaza areas to provide shade and soften the appearance of hard walls. Water features and public art are also encouraged. **See Figure 28.**
- The use of vines is encouraged on walls to soften the appearance of buildings and screen walls, and to help deter graffiti. **See Figure 29.**
- Planting materials shall be installed to provide a buffer against noise and should be integrated with walls or fences to achieve desired sound reduction. **See Figure 30.**



Figure 28. Plaza area.



Figure 29. Wall incorporates landscaping to soften appearance and deter graffiti.

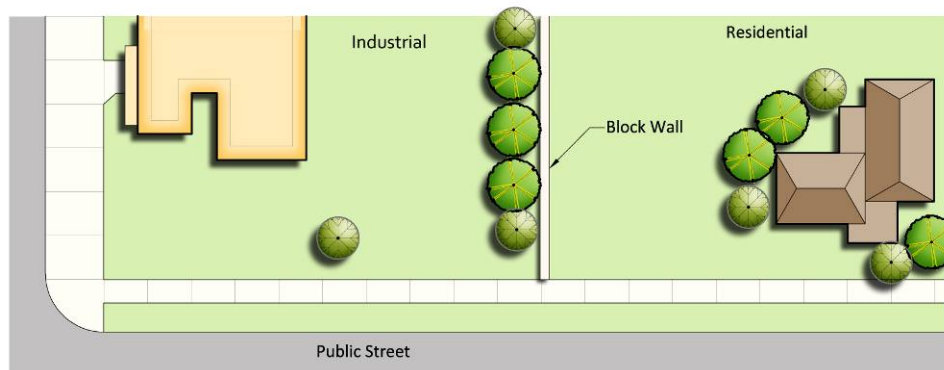


Figure 30. Plant material along buffer wall.

- Landscaping and trellises with vines are encouraged be used for screening trash storage areas, service areas and mechanical equipment.
- Setbacks adjacent to residential zones shall include dense landscaping to provide visual screening and noise abatement.
- Landscaped berms along site edges may be used to screen parking, loading and



Wall, landscaping and berms screen industrial buildings and storage



Figure 31. Landscaped berms.



service areas and to serve as a sound reduction measure. **See Figure 31.**

- Surface parking lots shall be well-landscaped to reduce heat island effect and visually reduce the expanse of paved area. **See Figure 32.**
- Pervious paving materials are strongly encouraged for sidewalks, pathways, parking lots, plazas or gathering areas or other paved surfaces on-site.
- An automatic irrigation system using current equipment and technology shall be provided for planted areas.
- Run-off retention and on-site water filtration/storm water treatment features and bio-swales should be a part of the overall landscape design, and can also serve as buffering methods for adjacent businesses. **See Figure 33.**
- Trees shall be selected and placed to provide canopy and shade for walkways, pedestrian open spaces, and parking areas.
- Landscape material in the setback and visible from the public right-of-way shall blend with and seem a part of the public right-of-way landscaping.
- Tree and shrub planting shall be in large masses.
- Plant material selected shall be suited to the specific soil and micro climatic conditions.
- Trees shall be healthy and have a uniform branching pattern.
- All ground cover shall be healthy and densely foliated and comprised of well rooted cuttings or container plants.
- Availability and specific site conditions should be considered in final selection.



Figure 32. Landscaped parking lot.



Figure 33. On-site water filtration.

Ground cover shall achieve 100% coverage in one year.

- Informal tree masses should be planted in a mix of sizes.

### **D. Commercial Uses**

#### **1. Site Design**

##### **Site Layout**

- The arrangement of multiple buildings and associated circulation and parking shall reflect a well-organized site plan that emphasizes pedestrian connectivity and landscaped areas that enhance publicly-accessible spaces. **See Figure 34.**
- Loading areas, access and circulation driveways, trash enclosures, storage areas, and rooftop equipment shall be located as far as possible from adjacent residences.
- Buildings may be located adjacent to the street with a fully landscaped setback or buildings may be set back with limited parking in front. **See Figure 35.**



Figure 34. Site plan emphasizes pedestrian connectivity.



Figure 35. Limited parking adjacent to street with landscape setback.

## Courtyards and Plazas

- The organization and design of buildings shall encourage and facilitate pedestrian activity.
- Buildings should be organized to create usable open space, courtyards, plazas and dining areas. **See Figure 36.**
- Pedestrian-oriented open spaces, courtyards and plazas shall include a focal element such as a sculpture and/or water feature and sitting areas. **See Figure 37.**

### 2. Building Orientation

- The organization of buildings, parking areas, and landscaping shall recognize the existing characteristics of the site and shall relate to the surrounding development in scale and character.
- Commercial buildings on corner parcels shall establish a strong tie to both streets and should encourage pedestrian activity at corner locations. **See Figure 38.**
- Buildings associated with service retail and restaurant uses shall be pedestrian-scaled, with entries fronting onto streets, plazas or courtyards to reinforce pedestrian orientation.
- Commercial development shall be oriented away from residential streets. At corner locations, if the side street primarily serves a residential neighborhood, development and access shall be oriented away from the side street.

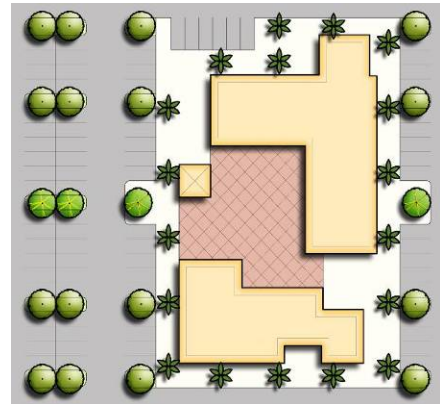


Figure 36. Buildings create courtyard.



Figure 37. Open plaza areas with seating.



Figure 38. Commercial/retail buildings on corners should establish strong tie to the street.

- Buildings adjacent to sensitive uses shall be buffered. This may be accomplished by providing masonry walls, landscaped berms, appropriate building orientation, building height setbacks and limitations on activities adjacent to sensitive uses. **See Figure 39.**

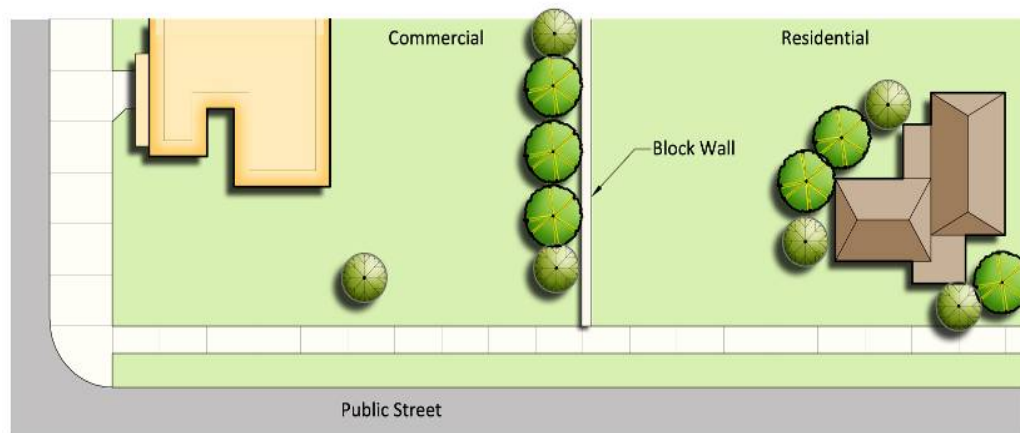


Figure 39. Masonry wall and landscaping separates uses.

- To protect residential privacy and reduce the visual mass of commercial buildings adjoining a residential zone, the commercial building shall be set back and oriented away from the residential zone.
- Commercial and retail buildings should generally be placed at or near setback lines with developments oriented in a manner that will provide visual interest.
- Buildings should be oriented in a manner that takes advantage of passive solar design to the maximum extent feasible.



### 3. Site Elements

#### Fences and Walls

- Wall heights and surfaces shall be articulated with varying façade depths or pilasters to promote architectural interest, and may include a cap along the top of the wall. **See Figure 40.**
- Walls visible from public streets shall be decorative and complement the design of on-site buildings.
- Wall and fencing materials may consist of brick, stone, stucco, wrought iron or tubular steel. Wall and fencing colors should match building colors, with neutral earth tones. **See Figure 41.**
- Walls and fences shall be integrated with landscaping along the base of the wall or fence.
- Electric fences, barbed wire, concertina wire, or other security wire is prohibited.



Figure 40. Wall incorporates pilasters and cap.



Figure 41. Stone wall.

#### Screening

- Service and delivery areas shall be screened by building placement, decorative walls or landscaping to the fullest extent feasible so that views of loading areas are minimized from adjacent public streets. **See Figure 42.**
- Outdoor mechanical equipment should be screened from public view.
- Roof-mounted equipment shall be screened from public view through use of parapet walls or other screening devices. **See Figure 43.**

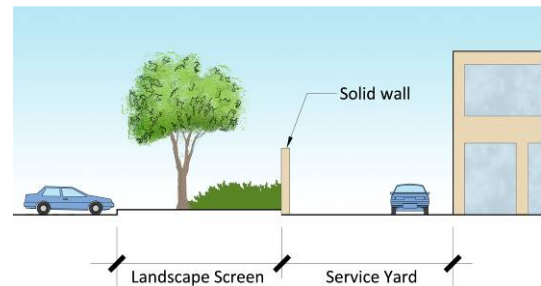


Figure 42. Screened delivery area.

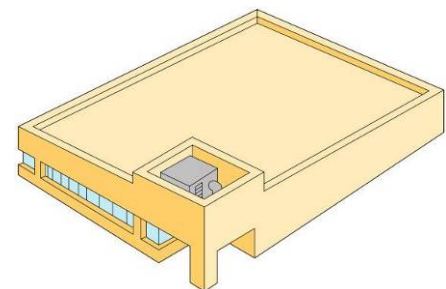


Figure 43. Screening of roof-mounted equipment.

### Trash Enclosures

- Trash enclosures shall be incorporated as part of the building design.
- If trash enclosures cannot be located out of public view, the design of trash storage areas shall incorporate architectural screening elements and landscaping compatible with the design of buildings and landscaping on the site.
- Trash enclosures visible from the public view shall integrate horizontal screening such as trellises.

### Lighting

- Outdoor lighting plans shall take into consideration the location and potential growth pattern of nearby trees (existing and planned) so that appropriate lighting levels are maintained over time.
- Energy efficiency shall be considered through use of proper light location and placement, as well as use of energy-efficient bulbs or fixtures.
- Lighting fixtures shall include hoods or other design techniques to reduce glare and light pollution, especially along major streets and adjacent to residential zones, and to prevent light spillover into adjacent properties. **See Figure 44.**
- Lighting shall be provided in project entryways, walkways, parking lots, and plazas or courtyards to promote safety. **See Figure 45.**
- Lighting may be mounted on poles or bollards, affixed to building walls, or placed within paved or landscaped areas. Appropriate materials and construction methods shall be used to ensure proper function of project lighting fixtures. **See Figure 46.**



Figure 44. Hooded light fixture directs light downward.



Figure 45. Bollard lighting along pedestrian walkway.



Figure 46. Pole mounted light.

- Decorative light fixtures are encouraged, as long as fixtures are consistent with the architectural design of the building. **See Figure 47.**

#### 4. Parking and Access

##### Parking

- Parking lots should be designed with a clear hierarchy of circulation: major access drives with no direct access to parking spaces; major circulation drives with little or no parking; and parking aisles for direct access to parking.
- Large commercial and retail parking areas should be located behind building facades so as not to be visible from major streets.
- Parking lots shall not be the dominant visual element on the site.
- Surface parking areas shall integrate trees and landscape improvements to reduce the heat island effect. **See Figure 48.**
- Large parking lots (usually over 100 spaces) shall be divided into multiple, smaller areas and provided with canopy trees located throughout the parking area to reduce the effects of heat gain and the visual impacts of large parking areas.
- Internal vehicular and pedestrian circulation within a development involving multiple buildings or lots shall interconnect in an obvious and consistent manner. **See Figure 49.**
- Parking lot design shall include water quality stormwater facilities consistent with City standards. **See Figure 50.**



Figure 47. Decorative light fixtures.



Figure 48. Landscaped parking lot.

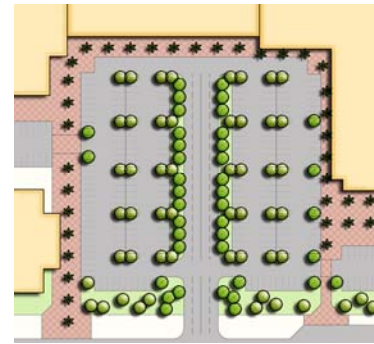


Figure 49. Pedestrian circulation is consistent along perimeter of parking lot.



Figure 50. On-site storm water capture.



## Access - Vehicular

- Site access shall promote safety by providing an adequate stacking distance for vehicles between the back of the sidewalk and the first parking stall or circulation aisle.
- Conflict between vehicles and pedestrians shall be avoided at access driveways by providing a walkway on at least one side of the driveway.
- The number of access driveways shall be minimized and located as far as possible from street intersections.
- Site access locations shall be coordinated with existing or planned median openings and driveways on the opposite side of the roadway.
- Unobstructed line of sight at corners and driveways shall be provided to reduce vehicular conflicts. **See Figure 51.**
- Avoid placing primary vehicle access in close proximity to major building entrances in order to minimize pedestrian and vehicular conflicts. **See Figure 52.**

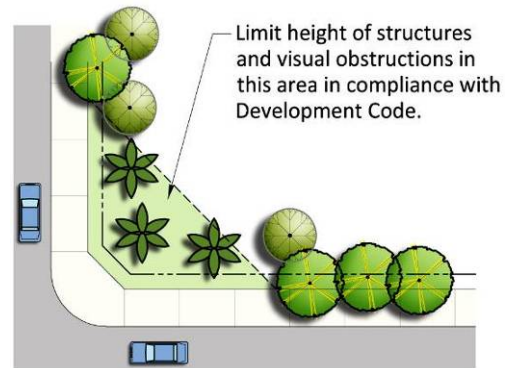


Figure 51. Unobstructed sight lines.



Figure 52. Vehicle access is placed away from building entrances.

## Access - Pedestrian

- Clearly defined pedestrian walkways or paths should be provided from parking areas to primary building entrances. Clear and convenient pedestrian access shall be provided between the public sidewalk and the pedestrian areas of the development. **See Figure 53.**

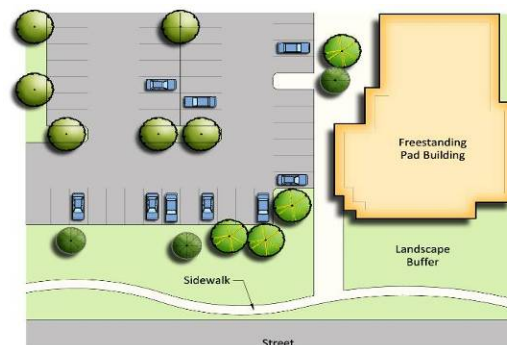


Figure 53. Clearly defined pedestrian walkways.

- Raised walkways, decorative paving, landscaping and/or bollards shall be used to separate pedestrian paths from vehicular circulation areas. **See Figure 54.**
- Parking areas should be designed so that pedestrians walk parallel to moving cars. **See Figure 55.**

### Loading and Delivery

Loading and delivery service areas shall be located and designed to minimize their visibility, circulation conflicts, and adverse noise impacts to the maximum extent feasible.

- Loading and delivery service areas shall be screened with portions of the building, architectural wing walls, freestanding walls or landscape planting.
- When commercial buildings abut a residential zone, loading areas shall not be visible from adjacent residentially-zoned properties.
- Loading areas shall be designed to not interfere with circulation or parking, and to permit trucks to fully maneuver on the property without backing from or onto a public street. **See Figure 56.**
- Service, loading and delivery areas should take access from planned shared access points to reduce curb cuts along project frontages.

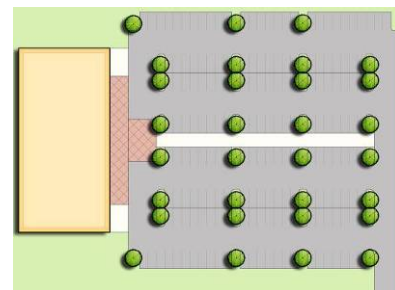
## 5. Architecture

### Mass and Scale

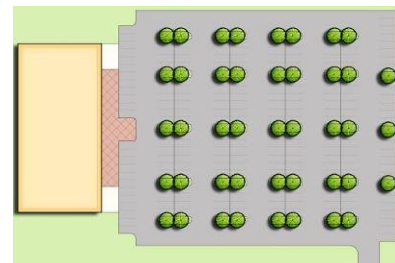
- The mass and scale of new infill developments shall be compatible with the existing, adjacent structures. This can be accomplished by transitioning from the height of adjacent buildings to the tallest elements of the new development by stepping back the upper portions of taller buildings.



Figure 54. Raised walkway and landscaping in parking lot.



Appropriate



Inappropriate

Figure 55. Pedestrian circulation.



Figure 56. Loading area placed behind building outside of circulation lanes.

- Human-scale elements, such as pedestrian-scaled doors, windows and building modules shall be used to emphasize pedestrian orientation.
- The size and location of various building elements (e.g., roofs, parapet walls, wing walls, etc.) shall be in scale to the building as a whole and provide visual interest. **See Figure 57.**

### Building Facades

- Buildings shall include enhanced and articulated facades along public streets.
- Design details shall be continued or repeated upon all building elevations.
- Building entrances should be readily identifiable. The use of recesses, projections, columns, and other design elements to articulate entrances are encouraged. **See Figure 58.**
- Facades shall provide visual interest with vertical and horizontal variations in wall and roof planes, building projections, door and window bays, arcades, and similar elements/techniques. **See Figure 59.**
- Buildings shall undergo a break in façade approximately every 40 feet, to create a varied wall surface along public areas. Higher facades and rooftops should be incorporated at corners and intersections, and appropriate massing and scale should be considered for the remainder of the building spanning public right-of-way frontage.
- Buildings should include vertical elements (e.g., clock tower, building articulation) that create points of visual interest when viewed from the public right-of-way.



Figure 57. Building elements add visual interest.



Figure 58. Building Entry.



Figure 59. Horizontal and vertical articulation.



- Roof designs that are visually interesting and designed to completely screen all rooftop equipment from public streets are required. **See Figure 60.**
- The location of windows in commercial buildings adjacent to residential zones shall preclude a direct line of sight into residential properties.
- Buildings should use large windows along walls and skylights in rooftop designs to capture natural light during operating hours.
- The interior areas of commercial development should have shaded or covered walkways.

#### Storefronts

- Storefronts shall be comprised predominantly of transparent surfaces (windows). **See Figure 61.**
- The use of clear glass on the first floor is strongly encouraged.
- Storefront windows shall be large and a minimum of 24 inches off the ground. The maximum bulkhead (wall plane between the ground and the bottom of the windows) height should be approximately 36 inches.
- Storefront entries should promote a sense of entry into the structure as well as provide a sense of shelter by incorporating elements such as overhangs, canopies, awnings, and recesses. **See Figure 62.**
- If security grilles are necessary, they shall be placed inside the building behind the window display area at a minimum distance of two feet behind the window.
- Product storage racks shall not block views through storefront windows.



Figure 60. Full roof screens all equipment and provides visual interest.



Figure 61. Storefront windows.



Figure 62. Storefront overhangs provide a sense of shelter and entry.

## Colors and Materials

- The use of a coordinated three-color palette for the base color and major and minor trim accents is encouraged.
- Colors for all structures on-site should be varied and should consist of neutral, earth tones. **See Figure 63.**
- Exterior finish materials shall be appropriate for the architectural style and/or theme of the entire development and should contribute towards a high quality image. **See Figure 64.**
- Changes in materials shall occur at inside corners to make building volumes appear substantial.
- Materials shall be varied to provide architectural interest, however, the number of materials shall be limited and not exceed what is required for contrast and accent of architectural features.
- Exterior materials and architectural details shall relate to each other in ways that are traditional and logical. For example, heavy materials should appear to support lighter ones. **See Figure 65.**

## 6. Landscaping

### Plants and Irrigation

- Landscaping should help complete the design of the site and enhance the quality of commercial developments by framing and softening the appearance of buildings, screening undesirable views, and buffering incompatible uses.



Figure 63. Use of neutral, earth tones.



Figure 64. Exterior finish materials.



Figure 65. Heavy materials at base of building with lighter materials above.

- Landscaped areas should generally incorporate planting utilizing a three tiered system:
  - 1) ground covers (including flowering plants—annuals and perennials),
  - 2) shrubs and vines, and
  - 3) trees.

**See Figure 66.**

- Entry and exit points shall be highlighted through a combination of distinctive landscape and hardscape features. **See Figure 67.**
- Planting materials shall be used in plazas or gathering areas to provide shade and soften the appearance of hard surfaces. Water features and public art are also encouraged in these places. **See Figure 68.**
- Trees located along street frontages shall be selected to match or complement existing or proposed street trees in the public right-of-way.
- A minimum five-foot landscape strip shall be used along circulation aisles in parking lots, and along building side/rear elevations if a walkway is not used. A landscape strip is also encouraged in nonpublic areas and service areas between pavement and buildings.
- On-site water filtration features and bio-swales are strongly encouraged, and can also be used as buffering methods for adjacent businesses.
- Drought tolerant and low-water trees, vines, and groundcovers shall be used on-site. When feasible, drip irrigation systems shall be installed to provide on-site vegetation with appropriate irrigation and ensure the highest possible volume of water conservation.
- Planting materials shall be used to provide a buffer against noise, and may be



Figure 66. Example of three tier landscape system.



Figure 67. Highlighting entry points.



Figure 68. Public plaza area within commercial development incorporates water feature.

integrated with walls or fences to achieve desired sound reduction and appearance.

- Tree and shrub planting shall be in large masses.
- Plant material selected shall be suited to the specific soil and micro climatic conditions.
- Trees shall be healthy and have a uniform branching pattern.
- All ground cover shall be healthy and densely foliated and comprised of well rooted cuttings or container plants.
- Availability and specific site conditions should be considered in final selection. Ground cover shall achieve 100% coverage in one year.
- Informal tree masses should be planted in a mix of sizes.

### Site Furniture

- Outdoor furniture and fixtures (e.g., lighting, directional signs, trellises, raised planters, works of art, benches, trash receptacles, fencing, etc.) shall be integral elements of the building and landscape design. **See Figure 69.**
- Outdoor furniture shall be of a sturdy construction to withstand daily use. Wood should be avoided.
- Outdoor furniture shall be located so it will not conflict with the pedestrian and motor vehicle circulation patterns. **See Figure 70.**
- Outdoor seating should be shaded.



Figure 69. Trellis.



Figure 70. Outdoor furniture outside of pedestrian walkway.



## Paving

- Decorative paving shall be incorporated into courtyards, plazas, pedestrian walkways, and crosswalks. **See Figure 71.**
- Paving materials shall complement the architectural design of the building and landscape design of the project. The use of stamped concrete, stone, brick, permeable pavers, exposed aggregate, or colored concrete is encouraged. The use of slippery materials (e.g., polished marble or granite) is prohibited.
- Areas with decorative paving should be sized consistent with the function of the area. At driveway entries, the minimum depth from the back of the sidewalk should be eight feet; however, larger areas may be required.



Figure 71. Enhanced paving in pedestrian areas.

## e. Special Commercial Uses

### 1. Drive-Through Businesses Site Design

- The predominant feature along the street frontage shall be the building, not parking lots or the drive-through aisle.
- The building shall be located to maximize the distance for vehicle queuing while screening the drive-through operations. **See Figure 72.**
- When adjacent to residential zones, outdoor order kiosks, loading/unloading areas, and storage areas shall be located as far as possible from residential properties.

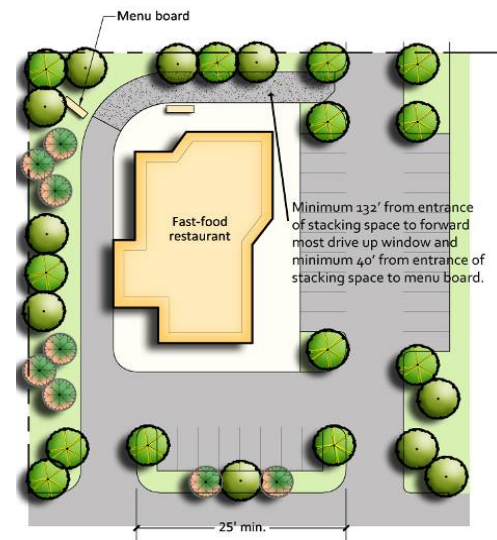


Figure 72. Vehicle queuing.

- Drive-through aisles shall be located in the rear of the building away from the street frontage whenever possible. If the drive-through aisle is located between the building and the street, dense landscaping and landscaped berms or a screen wall (42 inches high or less) shall be provided to screen the drive-through aisle from street view. **See Figure 73.**

### Building Design

- All building elevations shall receive the same level of architectural detailing.
- Buildings shall incorporate roof designs with built-in equipment wells or other built-in screening methods, so that screening devices do not appear added-on.
- If the drive-through facility is a pad building within a shopping center, the architecture shall relate to and be compatible with the design of the center. The only feature that identifies the franchise shall be the company's logo and signs.

## 2. Mini-Storage Facilities

### Site Design

- Offices and customer service areas shall be located adjacent to the street frontage to provide convenient access and help visually break up the front façade.

### Building Design

- Long, flat, unarticulated walls shall be avoided along street frontages. **See Figure 74.**
- Building walls and screen walls shall incorporate substantial articulation, and changes in plane and height to add visual interest.



Figure 73. Example of appropriately landscaped and screened drive-through aisle.



Figure 74. Articulated wall of mini-storage facility.

- A minimum of two different building materials shall be used on building walls and screen walls adjacent to street frontages (e.g., stucco, brick, stone).
- Building materials, textures and landscaping shall be chosen to deter graffiti.

### 3. Parking Garages

#### Site Design

- A minimum 5-foot wide landscaped strip shall be provided on all sides of the parking structure except where ground floor retail space is provided.

#### Building Design

- Parking garages shall be designed to help reduce the mass and scale of the garage and to ensure their compatibility with surrounding uses.
- Conceal view of vehicles in the garage through a combination of screen walls and plantings. **See Figure 75.**
- Avoid a monolithic appearance. This can be accomplished as follows:
  - Minimize horizontal and vertical banding by balancing both horizontal and vertical elements.
  - Use simple, clean geometric forms, and coordinated massing.
  - Step back upper levels of the garage 5 to 10 feet above the first floor. **See Figure 76.**



Figure 75. Parking structure with landscaping.



Figure 76. Horizontal and vertical articulation breaks up parking structure elevation.

- Coordinate openings in the parking garage with the size and modulation of adjacent windows, structural bays, and storefronts if the parking garage contains other uses.
- Size openings in the parking garage to resemble large windows as in an office building.
- Use masonry materials that are predominantly light in color, but avoid unpainted concrete.
- Avoid a sloping ramp appearance by providing level and uniform wall planes between floors.
- Visually define and differentiate between pedestrian and vehicular entrances through appropriate architectural detailing. **See Figure 77.**



Figure 77. Paving differentiates between pedestrian and vehicular entries.

### Access and Circulation

- Vehicle stacking areas for entering and exiting traffic shall be sufficient in length to minimize traffic backup into surrounding streets or within the garage. A minimum of two vehicle lengths of stacking distance shall be provided between the back of the sidewalk and the control gate.
- One inbound lane shall be provided for a garage with a capacity of up to 500 vehicles. At least two inbound lanes shall be provided for garages with a capacity of more than 500 vehicles.
- The maximum aisle length shall not exceed 400 feet without providing a cross aisle.
- Ramp grades shall not exceed 10 percent and parking areas should not exceed a slope of four to five percent.

## Security and Lighting

- The design of the garage shall eliminate possible hiding places and openings that could allow random pedestrian access.
- During periods when parking activity is substantially less than the garage capacity (i.e., during night operations), there shall be a means of securing unused parking levels from use, including stairwells and elevators. If the garage is not operated on a 24-hour basis the entire facility shall be secured from access during hours when the facility is closed.
- For security reasons, at least one or two sides of the stair tower shall include glass running vertically the height of the tower. Elevators shall be provided with glass-back cabs and shafts. **See Figure 78.**
- Stairs and elevators shall be located adjacent to a street on the exterior of the structure where lobbies can be exposed to outside view.
- The use of security cameras is required.
- A minimum of five foot-candles shall be provided inside the structure and a minimum of three foot-candles for exterior parking areas. Higher levels are recommended for remote areas subject to security problems such as stairways, elevators, and other pedestrian access points.
- Lighting levels shall be equally distributed to provide uniform illumination over all parking areas.
- Light sources shall be shielded so that the source of the illumination is not seen from outside the structure.



Figure 78. Glass-back elevator cab and shaft.



## A. Service Stations

### Site Design

- The site shall be designed to accommodate anticipated circulation patterns and those patterns should be defined by paving and by well-placed landscaped areas.
- In areas developed with buildings adjacent to the sidewalk, service stations shall also be oriented to the sidewalk, placing any service bay door and car wash openings on the rear of the structure.
- Where commercial development abuts the service station, two-way vehicular access integrated with the adjacent commercial development shall be provided where feasible.
- The site design for projects located at street corners shall provide a strong design element at the corner to help frame the public right-of-way and anchor the corner. **See Figure 79.**
- Parking spaces for vehicles left for repair shall be located in the least visible areas of the site and screened from public view.
- Service or car wash bays shall not face toward a public street nor toward a residential zone if the building is within 200 feet of a residential zone.
- Work bays shall be oriented so that the interior of the bays are not visible or audible from a public street, adjacent residential zones, or designated open space. **See Figure 80.**
- Each pump island shall include a vehicle stacking area for at least two vehicles (38-feet), on at least one end of the pump island and shall not restrict vehicle circulation and parking areas.



Figure 79. Corner landscaping element.

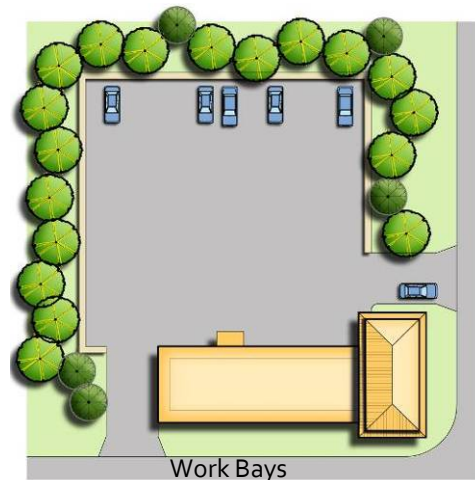


Figure 80. Work bays face interior

- A gasoline tanker truck unloading zone shall be provided and shall not obstruct vehicle circulation and parking areas.

### Building Design

- Service station buildings shall be designed to complement and be compatible with the predominant architectural theme and scale of the area. If located within a multi-use center, the architectural design shall be compatible with the design of the center.
- The design of the building should be clean and simple, and shall relate to surrounding buildings through use of similar scale, materials, colors, and/or detailing.
- Building elevations facing public streets and residential zones shall be architecturally detailed to provide interest and the appearance of quality development.
- The roof design of service stations, including pump island canopies, shall incorporate full, pitched roof treatments with a low to moderate slope. **See Figure 81.**
- Building materials shall have the appearance of substance and permanency (e.g., masonry).



Figure 81. Sloped roof on pump island canopies.

### Landscaping and Walls

- A three-foot high, landscaped berm, a dense hedge, or a low wall shall be provided along all street frontages where parking is provided. **See Figure 82.**
- A minimum six-foot high decorative masonry wall shall be provided along side and rear property lines not abutting public streets. A minimum five-foot wide landscaped planter shall be provided adjacent to the wall in areas accessible to the public.



Figure 82. Landscaped berm.



## Site Elements

- Gates, fencing, and walls shall remain free of signs or other advertisements.
- The use of chain-link fencing is prohibited if visible from a public street.
- Where security is an issue, fencing shall consist of open grille work, and the use of surveillance cameras is encouraged.
- Electric fences, barbed wire, concertina wire, or other security wire is prohibited.

## 5. Shopping Centers

### Site Design

- Commercial sites shall be separated from residentially-zoned properties by streets, landscaped buffers and/or decorative masonry walls.
- Portions of primary buildings and/or freestanding satellite buildings shall be located at the street setback lines to enclose the site and help frame the street. **See Figure 83.**
- Buildings within the center shall have a logical spatial and functional relationship to each other and shall provide for convenient pedestrian circulation throughout the center.
- Parking shall be provided within convenient walking distances of all tenants. Walking paths to buildings from the public street shall be provided. **See Figure 84.**
- To reduce the visual impact of large paved areas, parking lots shall be broken up into smaller areas separated by landscaping, pedestrian circulation areas and drive aisles.



Figure 83. Buildings placed at street setback lines.



Figure 84. Walking paths.

- Storage areas and loading facilities shall be limited in number and shall be designed, located, and screened to minimize their visibility from outside public areas and surrounding streets.

### Building Design

- Buildings, hardscape, landscape, site furnishings and signage should reflect a unified theme. **See Figure 85.**
- Where a shopping center is adjacent to a residential zone, the scale of the shopping center shall be reduced to be compatible with the adjoining use by:
  - Keeping buildings as small as possible, particularly in height;
  - Reducing scale through building wall articulation, added detailing and avoiding large scale design elements;
  - Developing the center as a complex of smaller buildings connected by pedestrian-oriented open spaces; and/or
  - Setting the buildings further away from the residential zone and providing dense landscape screening.
- Long, linear buildings shall be avoided. Where such buildings are unavoidable, their length shall be mitigated by changes in building height, wall plane, and spatial volumes and by varied use of window areas, arcades, roof elements, and building materials. **See Figure 86.**
- If the shopping center contains a large scale building, integration of smaller-scale shops along the exterior of the building with entrances from the exterior of the building are desirable in order to create a more human scale and pedestrian-oriented character.



Figure 85. Unified theme.

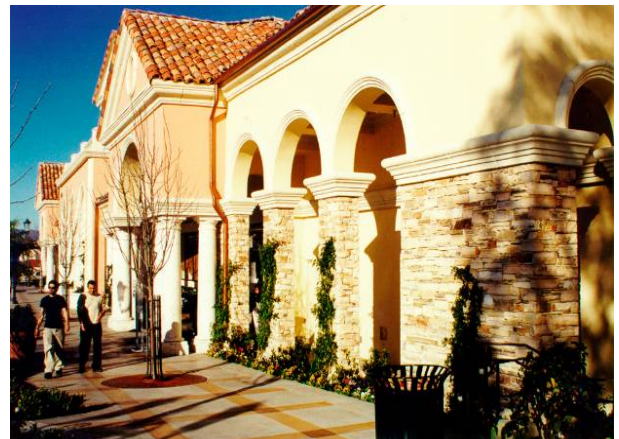


Figure 86. Articulation along wall plane.

- Side and rear elevations of commercial buildings that are visible from residential zones or public rights-of-way shall be architecturally consistent with the front elevations of the building.
- Blank walls adjacent to main pedestrian areas shall be avoided.
- Flat roofs, mansard roofs, and veneer parapets are strongly discouraged in favor of full, pitched roof treatments. In large centers, a combination of flat roofs with decorative cornices and full, pitched roofs may be acceptable if the design presents a balanced appearance. **See Figure 87.**
- All roof-top and ground-mounted equipment shall be screened from view.
- Outdoor sales and storage areas shall be designed to blend with the architecture of the main building. The height of the screening elements shall be tall enough to screen all stored materials. **See Figure 88.**



Figure 87. Appropriate roofing.



Figure 88. Outdoor sales area.

### **10.10 Development Incentives**

This Section offers development incentives to produce greater land use efficiencies and reduce incremental costs for new development.

#### **A. Applicability**

The incentives in this Section shall apply to all new development that meet(s) the applicable eligibility criteria.

#### **B. Definitions**

For the purposes of this Section, lot consolidation has the following meaning:

1. Lot consolidation. A legal action in which a lot line is removed or abandoned; a lot line is adjusted; lots are merged; or other equivalent action is taken, for the purpose of allowing a structure or development to be built so that it extends over what were previously two or more separate lots. A lot consolidation cannot create additional lots and cannot make existing lots nonconforming. All lots must be identical in ownership.

#### **C. Lot Consolidation Incentives**

1. Eligibility requirements. In order to be eligible for the by-right development incentives indicated in Subparagraph 2, below, the minimum consolidated lot size for a development shall be 97,500 square feet.
2. By-right incentives. Eligible projects shall receive one or more of the following incentives:
  - a. Expedited application processing. Applications for eligible projects shall receive expedited project processing (i.e., projects will move to front of line for assignment to a planner for review), irrespective of the number of lots involved.
  - b. Parking Reduction. Required parking standards may be reduced up to a maximum of 20 percent, provided that the adequacy of proposed parking can be demonstrated in a parking study prepared in compliance with Section 10.6 Parking and Loading Standards, as approved by the Director of Community Development.
  - c. Allowable Bonuses. Allowable increases in intensity (i.e., floor area ratio (FAR)) and in maximum height shall be in the amounts listed in Table 10-10 Allowable Bonuses for Lot Consolidation. The intensity and height bonus incentives shall apply to the total gross square footage of the consolidated lots or integrated lots.

| Table 10-10<br>Allowable Bonuses for Lot Consolidation |                                  |                    |                               |
|--------------------------------------------------------|----------------------------------|--------------------|-------------------------------|
| <i>Base Intensity (FAR)</i>                            | <i>Allowable Intensity Bonus</i> | <i>Base Height</i> | <i>Allowable Height Bonus</i> |
| 0.5                                                    | 10%                              | 60 ft              | 15 ft                         |

**D. Green Building Incentives**

1. Eligibility requirements. Projects that are seeking green building certification by a third-party entity (e.g., LEED, etc.) shall be eligible for the by-right development incentives indicated in Subparagraph 2.
2. By-right incentives.
  - a. Expedited application processing. Applications for eligible projects shall receive expedited project processing (i.e., projects will move to front of line for assignment to a planner for review).
  - b. Parking Reduction. Required parking standards may be reduced up to a maximum of 20 percent, provided that the adequacy of proposed parking can be demonstrated in a parking study prepared in compliance with Section 10.6 (Parking and Loading), as approved by the Director of Community Development.
  - c. Allowable Bonuses. Allowable increases in intensity (i.e., floor area ratio (FAR) and in maximum height shall be in the amounts listed in Table 10-11 Allowable Bonuses for Green Building. The intensity and height bonus incentives shall apply to the total gross square footage of the project site.

| Table 10-11<br>Allowable Bonuses for Green Building |                                  |                    |                               |
|-----------------------------------------------------|----------------------------------|--------------------|-------------------------------|
| <i>Base Intensity (FAR)</i>                         | <i>Allowable Intensity Bonus</i> | <i>Base Height</i> | <i>Allowable Height Bonus</i> |
| 0.5                                                 | 10%                              | 60 ft              | 15 ft                         |

**E. Application and Review Process for Incentives**

1. Written submittal. Interested parties shall submit a written request for approval of incentives to the Director of Community Development on forms provided by the Community Development Department.
2. Pre-application hearing. See page 7-110
3. Determination. The Director of Community Development shall determine whether the proposed new development meets the eligibility criteria in Paragraphs C.1. or D.1.

Additional factors to be considered when reviewing applications for incentives shall include the following:

- a. Detriment. The proposal will not detrimentally affect access, design, or other public safety and welfare concerns.
  - b. Covenants or conditions. The proposal will not violate recorded covenants.
  - c. Right-of-way easements. The proposal will not invalidate any easement(s) unless the adjustment establishes replacement easement(s) that is properly filed with the city.
4. Conditions. Conditions may be imposed in connection with the granting of any incentive where the Director of Community Development deems that conditions are necessary to protect the public health, safety, and welfare.

### **10.11 Entitlement Procedures**

#### **A. Purpose**

These administrative procedures have two major purposes:

1. Ensure that development conforms to the SWIP Specific Plan ("Plan").
2. Ensure that the City's review is as expedited as possible while remaining legal and proper.

#### **B. Summary of Processing Procedures**

1. Conformity with the Plan. The Director of Community Development shall review each application for conformity with the development regulations in this Chapter. Conformity has two components:
  - a. Standards. Compliance with the Standards is mandatory and the City may not approve a project that fails to comply with the Standards.
  - b. Guidelines. The City may exercise discretion in evaluating the project's compliance with the Guidelines.
2. Project Review. Applications for development approvals shall be filed with the Department and may be returned for revision. Applicants must meet all items identified as "Standards". Applications must strive to meet the "Guidelines," but applicants may propose alternate ways to achieve the goals of the Guidelines.
3. Timing of Permits and Approvals. Required planning approvals shall be obtained before the issuance of any grading, building, or other construction permit, and before the proposed use is constructed, otherwise established, or put into operation.
4. Processing Requirements. Applications for planning permits shall be processed in compliance with Table 6-12 – Hearing Bodies.
5. Timing of Project Review. Project review shall be required before the issuance of a Building or Grading Permit, Business License, or Certificate of Occupancy for any new structure (not including fences or walls) and/or existing structures to be reconstructed or remodeled (including facade improvements).



Table 6-12 – Hearing Bodies

| Reviewing Bodies                       |        |      |    |    |     | Appeal Bodies |    |
|----------------------------------------|--------|------|----|----|-----|---------------|----|
|                                        | D.A.B. | CD   | PC | CC | PR  | PC            | CC |
| Administrative site plan               | X*     | X    |    |    |     | X             |    |
| Administrative site plan, amendment    | X*     | X    |    |    |     | X             |    |
| Building relocation                    |        | X    |    |    |     |               | X  |
| Certificate of appropriateness         |        |      |    |    |     |               | X  |
| Code of the City of Fontana, Amendment | X      |      | Xf | X  |     |               |    |
| Conditional Use Permit                 | X      |      | X  |    |     |               | X  |
| Density bonus                          | X      | X    | Xf | X  |     |               |    |
| Design review                          | X      |      | X  |    |     |               | X  |
| Design review, amendment               | X      | X    | X  |    |     |               | X  |
| Design review, signs                   |        | X    |    |    |     | X             |    |
| Development agreements                 | X      | X    | Xf | X  |     |               |    |
| Development agreements, amendment      | X      | X    | Xf | X  |     |               |    |
| General plan amendments                | X      | X    | Xf | X  |     |               |    |
| Home occupation                        |        | X    |    |    |     | X             |    |
| Interpretation                         | X*     |      | X  |    |     |               | X  |
| Lot line adjustment                    |        | X*** |    |    |     |               |    |
| Parcel maps, tentative                 | X      | X    | X  |    |     |               | X  |
| Parcel maps, final                     |        | X*** |    |    |     |               |    |
| Pre-Annexation Agreement               |        |      | Xf | X  |     |               |    |
| Specific Plan                          |        |      | Xf | X  | X** |               |    |
| Specific plan, amendment               |        |      | Xf | X  | X** |               |    |
| Tract maps, tentative                  | X      |      | X  |    |     |               | X  |
| Tract maps, final                      |        |      |    | X  |     |               |    |
| Variances                              | X      |      | X  |    |     |               | X  |
| Zone changes                           | X      |      | Xf | X  |     |               |    |
| Administrative Variance                | X      | X    |    |    |     | X             |    |
| Minor Use Permit                       | X      | X    |    |    |     | X             |    |

## Notes:

Decisions of any "Reviewing Body" may be appealed to the City Council, except where State law limits such appeal to the City Engineer. If the Planning Commission is listed above as the "Appeal Body", the Commission must first review an Appeal before it may be forwarded to the City Council for consideration.

DAB—Development Advisory Board

CD—Community Development Director

PC—Planning Commission

CC—City Council

PR—Parks and Recreation Commission

X\*—At the discretion of the Director of Community Development or his/her designee

X\*\*—If Public Park(s) are considered

X\*\*\*—City Engineer has final approval

f—Recommending body to the City Council

**C. Administration and Enforcement.**

The Director of Community Development shall enforce the provisions in this Specific Plan. All officers, employees, and officials of the City of Fontana, who are vested with the duty or authority to issue permits or licenses shall conform with this Specific Plan and shall not issue any permit or license, or approve any use or building, which would be in conflict with this Specific Plan. Any permit, license or approval issued that is in conflict with the requirements of this Specific Plan shall be considered null and void.

**D. Amendments to the Specific Plan.**

The SWIP Specific Plan may be amended utilizing the same procedures by which it was originally adopted. In addition, subsequent amendments to this Specific Plan shall demonstrate the amendment meets the intent of the Specific Plan's existing policy framework, or specific findings to demonstrate the amendment enhances the Plan or is necessary to more effectively implement the Specific Plan. All sections or portions of the Specific Plan proposed to be amended or that may be affected by the amendment must be identified during the amendment process. A concurrent amendment to the General Plan would not be required provided that the Director of Community Development determines that substantive changes would not influence the goals, objectives, policies, or programs of the General Plan.

Allowing flexibility in the administration of the Specific Plan enhances the effectiveness of the Specific Plan as a comprehensive, "living" planning document. The following minor modifications to the Specific Plan qualify for processing as an administrative amendment to the Specific Plan subject to the review and approval of the Director of Community Development:

- Changes in the location of infrastructure and public facilities (e.g., internal roads, drainage facilities, etc.).
- Minor change in roadway alignment.
- Adjustment of planning area boundaries provided the total acreage of the affected planning area does not increase or decrease by more than 20 percent of the total stated in the approved Specific Plan.
- Minor changes to the Design Guidelines, which are intended to be flexible in nature.
- Minor deviations (less than 10 percent) from the development standards in this Chapter.
- Other minor modifications similar to those listed above and deemed minor by the Director of Community Development, which are in keeping with the intent of the SWIP Specific Plan.

**E. Similar Use Determination**

1. **Applicability and Authority.** Unlisted uses in Table 6-2 are prohibited uses, unless the Director of Community Development finds a proposed use to be similar to an expressly allowed use in compliance with this Section. A Similar Use Determination is a process for determining when an unlisted use is similar in nature to a permitted or conditionally permitted use and may be permitted. As specified by Municipal Code Section 30-4 Other Uses to be determined by the Director of Community Development, the Director of Community Development shall have the responsibility and authority to make Similar Use Determinations.
2. **Ministerial Action.** A Similar Use Determination shall constitute a ministerial action.
3. **Application Contents and Filing.** An application for similar use shall be in writing on forms provided by the Director of Community Development.
4. **Determination Findings.** In determining "similarity," the Director of Community Development shall make all of the following findings:
  - a. The characteristics of and activities associated with the proposed use are equivalent to one or more of the listed uses and will not involve a higher level of activity or environmental impacts than the uses listed in the land use district;
  - b. The proposed use will be consistent with the purposes of the applicable land use district; and
  - c. The proposed use will be consistent with the General Plan and this SWIP Specific Plan.
5. **Notice.** A Similar Use Determination shall be made in writing and shall contain the facts that support the determination. The Community Development Department shall maintain all determinations on record for review by the general public upon request. The notice shall include:
  - a. A brief statement explaining the criteria and standards considered relevant to the decision;
  - b. A statement of the standards and facts relied upon in rendering the decision; and
  - c. An explanation of appeal rights and appeal deadlines. The determination of similar use by the Director of Community Development shall be subject to appeal to the Planning Commission.

***F. Dedication and Maintenance of Gateway Intersection Enhancements***

1. When dedication and maintenance is required.
  - a. Whenever a development project is proposed on land that is designated as a location for gateway intersection enhancements in Section 6.8.B Public Right-of-Way Streetscape- Gateways, the developer shall:
    - i. Dedicate any necessary right-of-way area to the City or provide an easement in favor of the City for the installation of gateway intersection enhancements;
    - ii. Construct the gateway intersection enhancements to the standards indicated in Section 6.8., Public Right-of-Way Streetscape; and
    - iii. Enter into an agreement with the City that specifies perpetual maintenance.
  - b. The applicable review authority shall impose the dedication (or easement) requirement as a condition of project approval.
  - c. The City Attorney and the Director of Community Development shall approve the form and content of any dedication or easement instrument used to ensure the installation and perpetual maintenance of the gateway intersection enhancements.

***G. Nonconforming Lots, Structures and Uses***

1. Nonconformance provisions are established to:
  - a. Bring all uses, structures, sites and signs into conformance with the developmental requirements and design guidelines in this Specific Plan;
  - b. Limit the occurrences and extent of nonconformance by prohibiting expansion, intensification, reinstatement, alteration, restoration after destruction, and reestablishment after abandonment; and
  - c. Gradually phase out nonconforming uses, structures, lots and signs.
2. Applicability
  - a. Nonconforming uses, structures, signs and lots may be maintained, expanded, altered and/or abated only in accordance with the provisions of this Specific Plan.
  - b. Any Designated Historic Landmark, or any property listed on the California Register of Historical Resources or National Register of Historic Places, shall be exempt from the provisions of this Section with respect to the restoration and maintenance of structures, provided that any construction plans are approved

through a Certificate of Appropriateness by the Historic Preservation Commission/Planning Commission.

3. Nonconforming Uses. A use that lawfully occupied a building or land at the time this Specific Plan became effective, and that does not conform to the use regulations of the land use district in which it is located, is deemed a "legal nonconforming use." A legal nonconforming use may continue, subject to the following:
  - a. Discontinuation of Use
    - i. Loss of legal nonconforming status. If a legal nonconforming use is discontinued for a period of 90 or more days, regardless of the owner's intent, it shall lose its legal nonconforming status and the continued use of the property shall be required to conform to all provisions of this Specific Plan.
    - ii. Extension of legal nonconforming status. Wherein special circumstances exist, the Director of Community Development may extend the legal nonconforming status of a use, for up to an additional 90-day period. Furthermore, an additional extension may be granted by the Planning Commission, for up to an additional 90-day period. The total time period of all time extensions shall not exceed 180 days.
    - iii. Extension of legal nonconforming use.
      - (1) An application for a Minor Use Permit shall be filed with the Community Development Department on a City application form, together with all required fees, plans, maps, reports, special studies, exhibits, and any other information deemed necessary by the Community Development Department to process the application. The application shall be filed prior to the expiration of the 90-day period.
      - (2) The application shall be reviewed by the Director of Community Development within 30 days following application filing. The Director of Community Development shall notify the applicant, in writing, as to whether the application is complete. If the application is not complete, the Director of Community Development shall specify those parts of the application that are not complete and shall identify the manner by which it can be made complete. If written notification is not provided to the applicant within 30 days following application filing, the application shall be deemed complete.
      - (3) The Director of Community Development shall investigate the facts bearing on the application and provide the information necessary for action on the application, consistent with this Specific Plan and the General Plan. The applicant shall have made a good faith effort through the submittal of documentation and has diligently pursued compliance with this Specific Plan.

- (4) The application shall be reviewed by the Director of Community Development at a duly noticed public hearing, whom shall then approve, modify or deny the application. The decision of the Director of Community Development shall be final and conclusive in the absence of a timely filed appeal to the Planning Commission. An appeal of the Director of Community Development's decision shall be filed within 10 days from the date of the decision. An appeal of the Director of Community Development's decision shall be reviewed by the Planning Commission. The decision of the Planning Commission shall be final and conclusive in the absence of a timely filed appeal to the City Council.
- (5) The applicant may appeal the decision of the Planning Commission to the final deciding body, the City Council. The City Council decision shall be final and conclusive. If the application to extend the legal nonconforming use is approved by the City Council, the extension shall be granted for 90 days from the date of approval.
- (6) If the Director of Community Development or appointed designee has determined that the applicant has failed to show a good faith effort towards continually processing the extension of legal nonconforming use application (i.e., revising plans, withdrawing the application, placing the project on hold, etc.), the legal nonconforming use shall cease within 60 days from the application submittal date.
- (7) In granting an extension of the legal nonconforming status, the Director of Community Development may attach reasonable conditions and restrictions to the request, in addition to those required by this Specific Plan, which will ensure that the use:
  - Will not endanger the public health, safety or general welfare;
  - Will not injure the value of adjoining or abutting property;
  - Will not result in any significant environmental impacts; and
  - Will be in harmony with the area in which it is located.
- (8) In approving an extension of the legal nonconforming status, the Director of Community Development or Planning Commission shall consider and clearly establish the following findings of fact:
  - The non-conforming use has been discontinued within the 90-day period.
  - A physical and/or economic hardship has prevented the nonconforming use from being in compliance prior to the expiration of the 90-day period;
  - Approving the extension will not adversely affect the health, safety or general welfare.

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- The Planning Commission, at a duly noticed public hearing, must find that continuing the nonconforming structure will not result in an annoyance to and/or reduction of any surrounding property; and
- The extent of damage or partial destruction shall be based upon a comparison of the estimated cost of restoring the structure to its condition prior to such damage or partial destruction with its value at the time the structure was damaged or partially destroyed. Estimates for such purpose shall be made by or reviewed by the Building Official; and
- The restoration is commenced within six months and diligently pursued to completion;
- An application for a Nonconforming Structure shall be filed with the Community Development Department on a City application form, together with all required fees, plans, maps, reports, special studies, exhibits, and any other information deemed necessary by the Planning Division to process the application. The application shall be filed prior to the expiration of the 90-day period.
- A structure or development that has been damaged or destroyed by fire, flood, wind, earthquake, or other calamity, or by public enemy, or other cause which is beyond the control of the property owner, and which could not otherwise have been prevented may be reconstructed up to the original size, placement and density, except a multiple family dwelling or development which has been abandoned for a period of 90 or more days prior to being involuntarily damaged or destroyed, or a multiple family dwelling or development constituting a public nuisance prior to being involuntarily damaged or destroyed may not be reconstructed unless the structure is made to comply to all provisions of this Specific Plan.

b. Alterations and Expansion

- i. A nonconforming structure shall not be moved, altered or enlarged so as to increase the discrepancy between existing conditions and the most current standard as prescribed by the land use district in which the structure is located, except alteration and/or enlargement to a single family dwelling conducted pursuant to section (e) "Nonconforming Single-Family Residential Structures".
- ii. Within land use districts, reasonable repairs and alterations may be made to legal nonconforming structures, provided that no structural alterations shall be made which would prolong the life of supporting members of a structure, such as bearing walls, columns, beams or girders. Structural elements may be modified only if such modification or repair is immediately necessary to protect the public health and safety, occupants of the legal nonconforming structure, or adjacent property, as determined by the Building Official. The total cost of such repairs or alterations may not exceed 50 percent of the replacement cost of the nonconforming structure.

- c. New Structures. Any new structure constructed on a lot or parcel with an existing legal nonconforming structure shall be constructed in conformance with all applicable provisions of this Specific Plan. However, in no case may a new nonresidential structure be constructed on the same lot as an existing legal nonconforming residential structure.
        - d. Abatement of Nonconforming Structures Posing a Threat to the Public Health, Safety, and General Welfare. A structure which is nonconforming because of a violation or deficiency that poses a threat to the public health, safety or general welfare, as determined by the Building Official, and which fails to resolve, repair or improve such, or to fully mitigate the hazard involved, shall be abated, condemned or demolished upon the issuance by the City of a nuisance abatement, condemnations, or demolition order.
        - e. Nonconforming Single-Family Residential Structures. In addition to the requirements of subsections a and d above, a nonconforming single family residential lot and/or structure that was lawfully established and maintained before the adoption of this Specific Plan, but which under the provisions of this Specific Plan does not conform with the regulations of the land use district in which it is located with respect to use, design and/or development standards, and which is continuously used and maintained for single family residential purposes, shall be subject to the following:
        - f. Alterations and expansions to structures within nonresidential zones.
          - i. Necessary repairs and desirable alterations, as deemed appropriate by the Director of Community Development, may be made to a legal nonconforming single family residential structure that is nonconforming as to use.
          - ii. A single family dwelling that is nonconforming as to its location within a land use district that does not permit single family dwellings, and in which the residential use was lawfully established and continuously maintained, shall be subject to the development regulations of the Municipal Code Chapter 30 Zoning and Development Code that pertain to the R1 zoning district and off-street parking and loading regulations..- 5. Nonconforming Signs. A sign lawfully existing at the time this Specific Plan became effective, any portion of which does not comply with the requirements of Section 6.7 Sign Standards, is deemed a "legal nonconforming sign." A sign that presents a hazard to public safety, as determined by the City, shall be removed upon the issuance of a notice by the City. A legal nonconforming sign may continue to exist, subject to the following:
  - a. A nonconforming sign may not be altered, enlarged, extended, or moved, except in conformity with the requirements of Section 6.7 Sign Standards, or as otherwise required by law;

- b. Where a use or a structure associated with a nonconforming sign is abandoned or discontinued, any sign associated with a new use of the site shall be in full conformity with the requirements of Section 6.7 Sign Standards.
- 6. Nonconforming to Development Standards. The development that is not in compliance with the site development standards prescribed by the regulations of the zoning district in which the lot or parcel is located, including area, coverage, configuration, dimensions, parking, landscaping, screen walls, fences and enclosure trash receptacles, is deemed "legal nonconforming," provided such development was lawfully created and existing at the time this Specific Plan, which created the nonconformity, became effective.
  - a. A development that is nonconforming as to landscaping, screen walls, fences and enclosure of trash receptacles, shall be altered to comply with the district regulations covering the following standards, or as a condition of any subsequent Development Plan or Conditional Use Permit approval.
- 7. Nonconforming Lots. A lot or parcel that is not in compliance with the site development standards prescribed by the regulations of the land use district in which the lot or parcel is located, including area and configuration is deemed a "legal nonconforming lot," provided such lot or parcel was lawfully created and existing at the time this Specific Plan, which created the nonconformity, became effective.
  - a. A lot or parcel that is nonconforming as to minimum area or dimension shall be granted all development rights and uses of the land use district within which it is located.
    - i. The landscaping of setback areas insofar as a setback exists;
    - ii. The landscaping of parking areas, provided fulfilling the requirement does not reduce off-street parking or loading spaces to fewer than prescribed in this Specific Plan;
    - iii. The screening of storage areas; and
    - iv. The enclosure of trash receptacles.
- 8. Elimination of Nonconforming Adult Business Uses. Nonconforming adult business uses shall be eliminated in compliance with Municipal Code Chapter 30 Zoning and Development Code.
- 9. Abatement of Nonconforming Uses, Structures, Lots and Signs. Whenever a use, structure, site or sign becomes nonconforming because of a change of land use district boundaries or a change of the regulations prescribed for the district in which the site is located, the period of time prescribed in this Specific Plan for the abatement period for the elimination of the use, the removal of the structure or sign, or the improvement of the lot or parcel shall begin on the effective date of the change of district boundaries or regulations.

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## Chapter 11.0 – Slover West Industrial District



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### ***11.1 Purpose***

The Slover West Industrial District (SWD) is intended to promote the continued use and expansion of existing industrial, distribution and logistics-based, and warehousing developments, along with well-placed service commercial uses. Adjacent existing residential uses are buffered from potential adverse impacts of higher intensity uses. General features of this District include:

- Landscape/Streetscape Enhancement
- Preservation and Revitalization of existing industrial uses
- Large-Scale Industrial and Manufacturing Development
- Promotion of lot Consolidation
- Establishment of uses that capitalize on current and future regional market potential, including warehousing and manufacturing uses
- Development that respects adjacent residential development
- Preservation of the view corridor along major roads

## **11.2 Applicability**

### **A. Projects Subject to Development Regulations**

This Chapter contains the development regulations that govern all future private development actions in the SWD, including new construction, additions or renovations to existing structures and/or new land uses proposed for existing facilities.

### **B. Right of Continued Use**

This Chapter shall not require any change in any existing building or structure for which a building permit has been previously issued, or for approved plans on file in the Community Development Department before the effective date of this Specific Plan. Changes in the property's ownership or tenants of legal existing uses shall likewise require no change in any existing building or structure. Nonconforming standards and provisions shall be governed by Section 11.11 Entitlement Procedures.

### **C. Other Requirements**

This Chapter does not eliminate the need for obtaining any other permits required by the City, or any permit, approval or entitlement required by any other applicable special district or agency, and/or the regulations of any State or Federal agency.

### **D. Types of Development Regulations**

The development regulations are of two types – Standards and Guidelines – as follows:

1. Standards address those aspects of development that are essential to achieve the goals of the Specific Plan. They include specifications for allowable land uses and site development (e.g., building height, setbacks, etc.). Conformance with Standards is mandatory. Standards are indicated by use of the words "shall," "must," or "is / is not permitted."
2. Guidelines provide guidance for new development in terms of aesthetics and design details. They are intended to direct building and site design in a way that results in the desired character for the SWD. Whereas conformance with the Standards is mandatory, conformance with the Guidelines is preferred and/or recommended. Provisions that fall into this category are indicated by the use of the words "should," "may" or "are encouraged to." In various cases, the Guidelines provide a choice of treatments that will achieve the desired effect. Developers are permitted to propose alternative design details if they are able to show that such details implement the Specific Plan objectives with respect to the desired character of the SWD.

### **E. Minimum Requirements**

The provisions in this Chapter shall be minimum requirements. When this Chapter provides for discretionary authority on the part of the Director of Community Development, Planning Commission, or City Council, that discretion may be exercised to impose more stringent requirements if deemed necessary to accomplish the overall objectives of the SWD.

**F. Overview of Development Regulations**

1. Relationship of Land Use Districts. The development regulations in this Chapter apply to properties in the SWD. Exhibit 11.1 – Land Use Plan indicates the location of the SWD and its relationship to the other land use districts in the Specific Plan area.
2. Standards, Guidelines, and Procedures. The development regulations are divided into the following sections: 11.3 Allowable Land Uses and Permit Requirements; 11.4 Development Regulations; 11.5 Landscape Standards; 11.6 Parking and Loading Standards; 11.7 Sign Standards; 11.8 Public Right-of-Way Streetscape; 11.9 Design Guidelines; 11.10 Development Incentives; and 11.11 Entitlement Procedures. Projects must meet all development standards in order to achieve approval in the development review process. Projects are encouraged to adhere to the guidelines contained in Section 11.9 Design Guidelines.
3. Steps for Using Chapter. Table 11-1 Process Procedures illustrates the steps for using this Chapter.

**Table 11-1 – Process Procedures**

| <i>Instructions</i>                                                                                                         | <i>Information Source</i>                                | <i>Where to Find in this Chapter</i> |
|-----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|--------------------------------------|
| Locate property and its street frontage                                                                                     | Land Use Plan                                            | Exhibit 11.1                         |
| Identify the allowable uses and refer to the definitions of the uses                                                        | Allowable Land Uses & Permit Requirements Definitions    | Table 11-2<br>Appendix A             |
| Comply with the requirements for intensity, lot dimensions, height limits, and setbacks                                     | Intensity and Dimensional Standards                      | Table 11-3                           |
| Comply with fence, wall, and screening requirements                                                                         | Fence, Wall, and Screening Standards                     | Table 11-4                           |
| Comply with landscaping requirements                                                                                        | Landscape Regulations<br>Public Right-of-Way Streetscape | Section 11.5<br>Section 11.8         |
| Comply with parking requirements                                                                                            | Parking and Loading Standards                            | Section 11.6                         |
| Comply with sign requirements                                                                                               | Sign Standards                                           | Section 11.7                         |
| Review the design guidelines for preferred site layout, building orientation and architectural detail, fencing, and parking | Design Guidelines                                        | Section 11.9                         |
| Determine if development is eligible for incentives                                                                         | Development Incentives                                   | Section 11.10                        |
| Submit project application and proceed through project approval process                                                     | Entitlement Procedures                                   | Section 11.11                        |

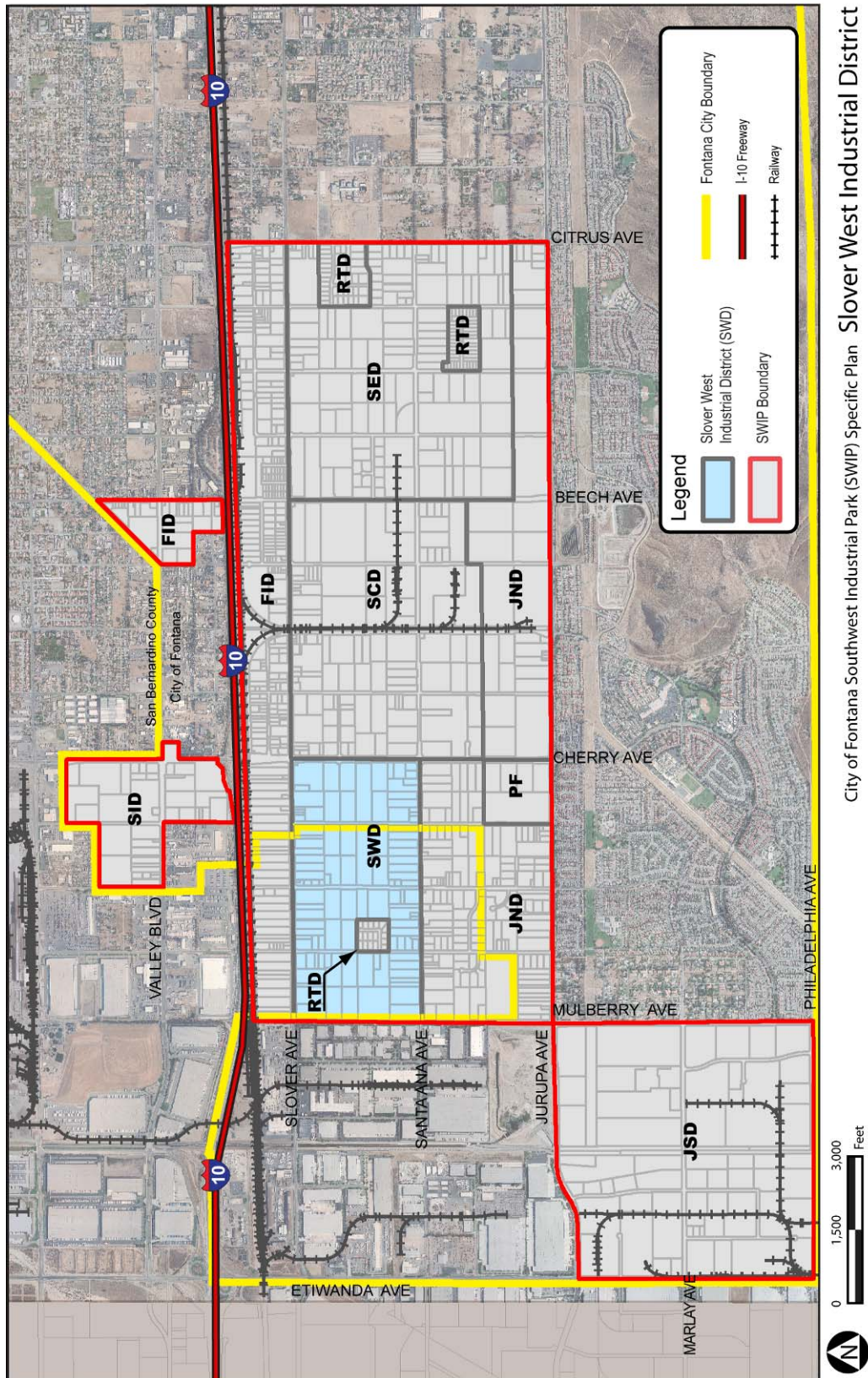


Exhibit 11-1 – Land Use Plan

### **11.3 Allowable Land Uses and Permit Requirements**

This Section identifies allowable land uses and their permit requirements.

#### **A. Allowed Uses**

Table 11-2 Allowable Land Uses and Permit Requirements identifies the types of land uses allowed in the SWD and the permit required to establish each use.

#### **B. Uses Not Listed**

Uses not listed in Table 11-2 are prohibited land uses, until and unless the Director of Community Development makes a similar use determination in compliance with Subsection 11.11.C Entitlement Procedures--Similar Use Determination.

#### **C. Other Applicable Regulations**

The provisions contained in this SWIP Specific Plan constitute the primary land use and development standards for the Specific Plan area. These regulations are in addition to the provisions in the City of Fontana Municipal Code.

This Specific Plan provides all development standards and guidelines necessary to approve subsequent project applications, unless otherwise noted. Permit processing procedures (e.g., noticing, hearing, appeals, and expiration procedures) and enforcement procedures are provided in Municipal Code Chapter 30 (Zoning and Development Code) shall apply, unless otherwise noted. Where there is a conflict between the provisions in this Specific Plan and those in the Zoning and Development Code, the Specific Plan provisions shall prevail to the extent allowable under Federal or State law. Where there is no conflict, both shall be applied concurrently.

#### **D. Definitions**

Definitions for land uses are provided in Appendix A Definitions. If a definition is not provided, the definitions in the Municipal Code shall apply. The Director of Community Development shall interpret the definitions; make a similar use determination in compliance with Subsection 11.11.C Entitlement Procedures—Similar Use Determination; and/or refer any questions to the Planning Commission for its determination. For the purposes of this Specific Plan, the following definitions shall apply:

1. Commercial Use: Activity involving the sale of goods or services carried out for profit.
2. Industrial Use: Those fields of economic activity including construction; manufacturing; transportation, communication, electric, gas, and sanitary services; and wholesale trade.

**Table 11-2 Allowable Land Use and Permit Requirements**

| <i>Land Use</i>                                           | <i>Permit Requirement</i>                                        |
|-----------------------------------------------------------|------------------------------------------------------------------|
|                                                           | "P" = Use Permitted by Right                                     |
|                                                           | "C" = Conditional Use Permit Required                            |
|                                                           | "M" = Minor Use Permit Required                                  |
| <i>Slover West Industrial District</i>                    |                                                                  |
| <b>Entertainment, Recreation and Public Assembly Uses</b> |                                                                  |
| Adult Businesses                                          | Municipal Code §30-11 & Municipal Code Chapter 15, Article XVIII |
| Open Space / Park                                         | P                                                                |
| Public Assembly Facilities                                | C                                                                |
| Recreational Facilities                                   | C                                                                |
| <b>Industry, Manufacturing, and Processing Uses</b>       |                                                                  |
| Handcraft Industry/<br>Small-Scale Manufacturing          | P                                                                |
| Manufacturing, Light                                      |                                                                  |
| • Appliance Manufacturing                                 | P                                                                |
| • Electronics & Equipment                                 | P                                                                |
| • Furniture and Fixture Manufacturing                     | P                                                                |
| • Glass Product Fabrication                               | P                                                                |
| • Machinery Manufacturing                                 | P                                                                |
| • Paper Product Manufacturing                             | P                                                                |
| • Product Assembly and Distribution                       | P                                                                |
| <b>General Manufacturing</b>                              |                                                                  |
| • Plastics, Synthetics, and Rubber Product Manufacturing  | P                                                                |
| • Pulp and Pulp Product Industries                        | P                                                                |
| • Stone and Cut Stone Product Manufacturing               | P                                                                |
| • Structural Clay and Pottery Product Manufacturing       | P                                                                |
| • Textile and Leather Product Manufacturing               | P                                                                |
| Research and Development                                  | P                                                                |
| <b>Residential Uses</b>                                   |                                                                  |
| Caretaker Housing (1)                                     | C                                                                |
| <b>Retail Uses</b>                                        |                                                                  |
| Alcohol Sales, Off-Site/On-Site                           | C                                                                |
| Factory/Warehouse Outlet Store                            | P                                                                |
| Retail Sales, General (2)                                 | P                                                                |
| <b>Service Uses</b>                                       |                                                                  |
| Animal Kennel Services                                    | P                                                                |
| Business Support Services                                 | P                                                                |



Table 11-2 Allowable Land Use and Permit Requirements (continued)

| Land Use                                                                    | Permit Requirement                                      |   |
|-----------------------------------------------------------------------------|---------------------------------------------------------|---|
|                                                                             | "P"= Use Permitted by Right                             |   |
|                                                                             | "C" = Conditional Use Permit Required                   |   |
|                                                                             | "M" = Minor Use Permit Required                         |   |
| Slover West Industrial District                                             |                                                         |   |
| Food Service                                                                |                                                         |   |
| • Outdoor Dining                                                            |                                                         | P |
| • Restaurants                                                               |                                                         | P |
| Industrial Repair                                                           |                                                         | P |
| Mini Storage Facility (2)                                                   |                                                         | P |
| Motor Vehicle                                                               |                                                         |   |
| • Registered Vehicle Storage                                                |                                                         | P |
| • Service Stations (2)                                                      |                                                         | C |
| Distribution, Wholesaling and Warehousing Uses                              |                                                         |   |
| Industrial Equipment, Materials, and Supplies, Truck, Truck Trailer Storage |                                                         | C |
| Logistics and Distribution Facilities                                       |                                                         | P |
| Petroleum/Hazardous Material Storage                                        |                                                         | C |
| Warehousing Facilities                                                      |                                                         | P |
| Transportation, Communications and Infrastructure Uses                      |                                                         |   |
| Antennas                                                                    |                                                         | M |
| Broadcasting Offices or Studios                                             |                                                         | P |
| Parking Facilities (2)                                                      |                                                         | P |
| Recycling Facilities                                                        |                                                         | C |
| Vehicle Auction                                                             |                                                         |   |
| Vehicle Auction                                                             |                                                         | P |
| Other Uses                                                                  |                                                         |   |
| Outdoor Display & Sales                                                     |                                                         | M |
| Public Facilities                                                           |                                                         | P |
| Temporary Uses                                                              | Municipal Code Chapter 30, Division 14 (Temporary Use). |   |

(1) See Section 11.4D

(2) See Section 11.9E

## **11.4 Development Standards**

New land uses and structures and alterations to existing land uses and structures in the SWD shall be designed, constructed, and established in compliance with the requirements in this Section.

### **A. Intensity and Dimensional Standards**

Table 11-3 Intensity and Dimensional Standards provides the required intensity and dimensional standards for proposed development. The Director of Community Development is authorized to approve modifications of 10 percent or less of any land use district setback, lot width, lot depth, building coverage, building height, or wall height standard in compliance with the administrative variance procedures in Municipal Code Section 30-51.6 (Findings necessary for granting a variance). See Exhibit 11-3 – Dimensional Standards.

The Director of Community Development may grant an administrative variance from the requirements of this chapter where practical difficulties, unnecessary hardships, or results contrary to the intent of this chapter would occur from the strict and literal interpretation and enforcement of the Code. An administrative variance may be granted upon conditions which will ensure the protection of the public safety, health and welfare. To grant an administrative variance, the Director of Community Development must find from the facts presented that the following conditions exist.

- (1) That because of circumstances applicable to the property including size, shape, topography, location or surroundings, the strict application of this chapter will deprive the property of privileges enjoyed by other property in the vicinity and under identical zoning classification;
- (2) That the granting of such an administrative variance will be subject to conditions assuring that the variance shall not constitute a grant of special privileges inconsistent with the limitations upon other properties in the vicinity and zoning district in which the property is located;
- (3) That the administrative variance does not authorize a use or activity which is not a specifically allowed use in the zoning district in which the property is located; and
- (4) That the granting of one administrative variance will not be contrary to the general plan.

Table 11-3 - Intensity and Dimensional Standards

## Lot Size and Building Placement

|                                                                                  |                                                      |
|----------------------------------------------------------------------------------|------------------------------------------------------|
| <b>INTENSITY</b>                                                                 |                                                      |
| Floor Area Ratio (3)                                                             | 1.0 max. FAR                                         |
| <b>LOT DIMENSIONS</b>                                                            |                                                      |
| Lot Size                                                                         | 40,000 sq ft min.                                    |
| Lot Width (C)                                                                    | 200 ft min.                                          |
| Lot Depth (D)                                                                    | 175 ft min.                                          |
| <b>BUILDING SETBACKS</b>                                                         |                                                      |
| Front Setback (1)                                                                |                                                      |
| Major Highway (Cherry) (G)                                                       | 30 ft min. (4)                                       |
| Primary Highway (Mulberry and Slover) (F)                                        | 25 ft min. (4)                                       |
| Secondary Highway/Collector Street (Almond, Banana, Calabesh, and Santa Ana) (E) | 20 ft min. (4)                                       |
| Side (Street) Setback (1)                                                        |                                                      |
| Major Highway (Cherry, Citrus, and Valley) (G)                                   | 30 ft min. (4)                                       |
| Primary Highway (Beech, Fontana, Mulberry, and Slover) (F)                       | 25 ft min. (4)                                       |
| Secondary Highway/Collector Street (Poplar) (E)                                  | 20 ft min. (4)                                       |
| Side (Interior) Setback (2)                                                      | None                                                 |
| Rear Setback (2)                                                                 | None                                                 |
| Adjacent to Residential Truck District (2)                                       | 25 ft min.                                           |
| Accessory Building Setbacks                                                      | Comply with setbacks applicable to primary structure |

(Continued)

(See footnotes next page)

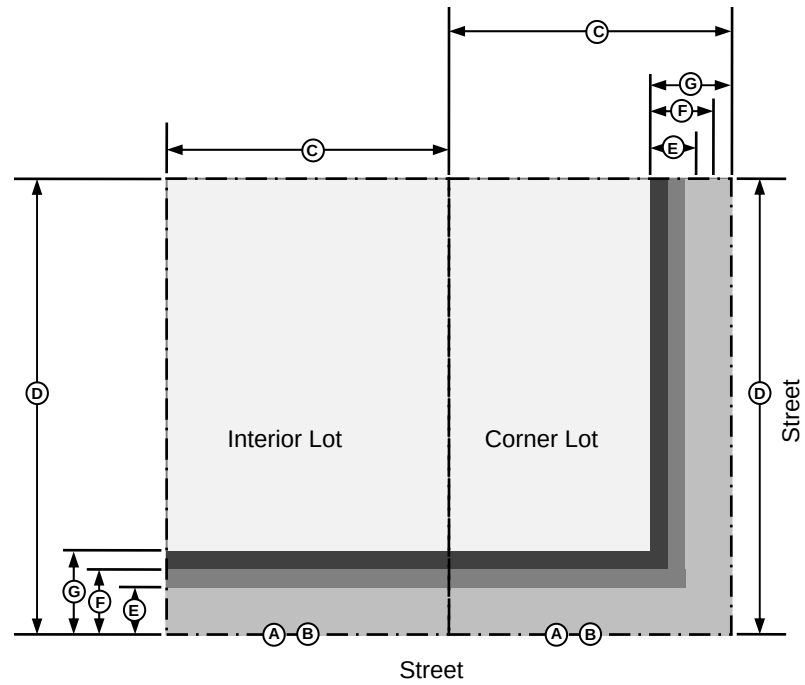
Table 11-3 - Intensity and Dimensional Standards

## Building Height and Mass

|                                                     |                                            |
|-----------------------------------------------------|--------------------------------------------|
| <b>HEIGHT</b>                                       |                                            |
| Primary Building                                    | 60 ft max                                  |
| Accessory Building                                  | 1-story or 14 ft max. to eave/parapet line |
| Interior (Floor-to-Floor, excluding parking levels) | Ground floor – 12 ft min                   |
| <b>UPPER STORY STEPBACKS</b>                        |                                            |
| All buildings regardless of street frontage         | Allowed                                    |

Notes:

- (1) Setback is measured from public right-of-way line.  
 (2) Setback is measured from property line.  
 (3) See Section 11.10 Development Incentives.  
 (4) Corner cut-off setbacks per Specific Plan.



- Ⓐ = Public Right-of-Way Line
- Ⓑ = Property Line
- Ⓒ = Lot Width
- Ⓓ = Lot Depth
- Ⓔ = Front/Side Setbacks – Secondary Highway/Collector Street
- Ⓕ = Front/Side Setback – Primary Highway
- Ⓖ = Front/Side Setback – Major Highway

Exhibit 11-2 – Dimensional Standards.

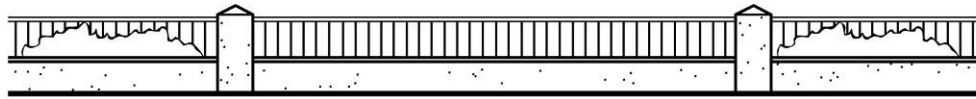
**B. Fences, Walls, and Screening**

1. Standards. Table 11-4 contains standards for fences, walls, and screening.

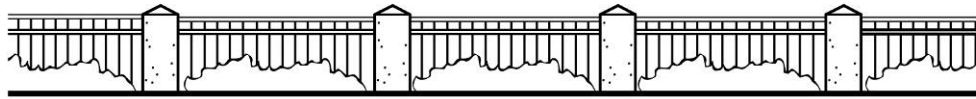
| <b>Table 11-4 – Standards for Fences, Walls, and Screening</b>                                                      |                                                                                                                                                                |                                                                                                           |
|---------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| <i>Location</i>                                                                                                     | <i>Materials<br/>See Section 11.9 Design Guidelines</i>                                                                                                        | <i>Maximum Height</i>                                                                                     |
| Within front setback area                                                                                           | Solid fencing/wall                                                                                                                                             | 36 inches; or<br>42 inches if abutting residential front yard                                             |
|                                                                                                                     | Open fencing/wall                                                                                                                                              | 6 ft                                                                                                      |
| Within street side setback area                                                                                     | Tubular steel construction allowed in required setback area if set back at least 15 ft from lot line. Solid masonry wall not allowed in required setback area. | 8 ft if necessary for security purposes, with 18-inch maximum width pilasters a minimum of 8 ft on center |
| Within interior side setback area                                                                                   | Any type of fence, hedge, or wall allowed, except that if abutting residential zone, solid masonry wall only                                                   | 8 ft                                                                                                      |
| Within rear setback area                                                                                            | Any type of fence, hedge, or wall allowed, except that if abutting residential zone, solid masonry wall only                                                   | 8 ft                                                                                                      |
| Outside of a required setback area                                                                                  | Solid or open fencing/wall                                                                                                                                     | No height limit                                                                                           |
| Screening of outside storage materials and equipment from view from the public right-of-way                         | Solid fencing/wall                                                                                                                                             | 8 ft                                                                                                      |
| At intersections of alleys, streets, and driveways                                                                  | Solid or open fencing/walls                                                                                                                                    | 30 inches                                                                                                 |
| Note: (1) All fences and walls shall meet the City's line of sight regulations, as determined by the City Engineer. |                                                                                                                                                                |                                                                                                           |

2. Materials

- a. Open fencing shall mean fencing with over 50 percent of the surface area open for free passage of light and air and through which the area behind the fence is visible to public view. See Exhibit 11-3 – Open and Solid Fencing.
- b. Solid fencing shall mean fencing with 50 percent or less of the surface area open for free passage of light and air and designed to conceal the area behind the fence from public view. See Exhibit 11-3 – Open and Solid Fencing.
- c. Barbed wire fences, electric fences, or similar fencing material is prohibited.
- d. Chain link fencing is allowed on interior property lines that are not visible from public rights-of-way.

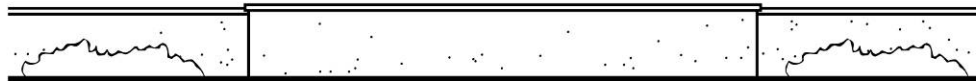


Elevation of Wall / Wrought Iron Combination

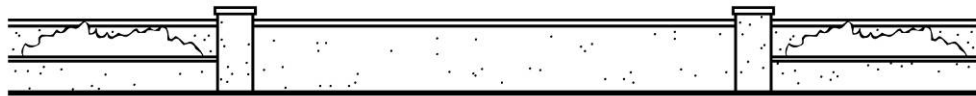


Elevation of Wrought Iron with Pilasters

*Examples of Open Fencing*



Elevation of Staggered Wall



Elevation of Planters / Wall



Elevation of Wall with Breaks

*Examples of Solid Fencing*

Exhibit 11-3 – Open and Solid Fencing.

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3. Screening and buffering

- a. Roof-mounted and ground-mounted mechanical equipment, utilities, storage, and solid waste storage areas shall be screened from adjoining properties and public right-of-ways by a visual barrier (e.g., wall, fence, landscape material, etc.) to the satisfaction of the Director of Community Development. Where only landscaping is used for screening, it shall be planted with five-gallon (minimum size) shrubs spaced to provide a continuous dense screen.
- b. Parking lot perimeters shall be screened and planted in compliance with Section 11.6 Parking and Loading Standards.

**C. Outdoor Activities and Storage**

1. Storage in Setback Areas. Material or equipment shall not be stored anywhere in the front yard area. Temporary storage of construction materials during construction on the same site is allowed. Boats, campers, motor vehicles, trailers, equipment, materials, or antenna may be stored in side and rear yards, provided that they are outside the required side and rear identified in Table 11-3 Intensity and Dimensional Standards.
2. Limitations on Outdoor Uses
  - a. All uses shall be conducted entirely within a completely enclosed building that is attached to a permanent foundation, except approved outdoor dining areas, parking areas, industrial activities, truck trailer storage, and other approved uses that require outdoor activities.
  - b. Areas used for the approved outdoor storage of vehicles, equipment and/or building materials (raw or finished) may use compacted slag, gravel, or other similar material deemed suitable by the Director of Community Development.
3. Outdoor uses. Outdoor uses shall comply with the following:
  - a. A building shall be provided on the same parcel or on an adjacent parcel associated with the same business.
  - b. All display materials, including vehicles, shall be set back five feet from any landscaped area and shall not be located on required parking areas.
  - c. The entire area used for display purposes shall be surfaced with asphalt or an equally serviceable hard pavement surface. The surface shall be maintained in good condition.



- d. Storage of equipment or materials, with the exception of the display of vehicles for sale or rent, shall be screened by a visually solid masonry wall of minimum height six feet. The approving authority may determine through the design review process that the subject use requires a solid masonry wall higher than six feet.
- e. Outdoor display areas shall be maintained in a neat and orderly condition.

***D. Caretaker Housing***

Caretaker housing shall be:

1. Accessory to a principal use;
2. A maximum of 1,500 square feet total floor area unless otherwise approved by the planning commission;
3. Limited to one unit per lot; and
4. Subject to the setback requirements applicable to the principal structure with which it is associated.

***E. Solar Access***

A structure, fence, or wall shall not be constructed or modified, and vegetation shall not be placed or allowed to grow so as to obstruct more than 10 percent of the absorption area of a solar energy system on an abutting or adjacent lot at any time.

***F. Undergrounding of Utilities***

1. Utility service laterals to new development shall be installed underground.
2. Temporary overhead power and telephone facilities are permitted only during construction.
3. Placement, location and screening of utilities of any kind, which cannot be installed underground and must be placed above ground for function and safety reasons, require written approval by the Director of Community Development or the Planning Commission prior to any administrative or discretionary approval.
4. Transformer enclosures shall be designed of durable materials with finishes and colors used that are compatible and harmonious with the overall architectural theme.
5. All utilities including, but not limited to drainage systems, sewers, gas lines, water lines, and electrical, telephone, and communications wires and equipment shall be installed and maintained underground. Placement, location, and screening of utilities of any kind, which cannot be installed underground and must be placed above ground for function and safety reasons, require written approval by the Director of Community Development or the Planning Commission prior to any administrative or discretionary approval.

## G. Registered Vehicle Storage

Registered vehicle storage will be defined as follows:

Registered Vehicle Storage means an off-street, ground level open area that allows parking for the purpose of storage of vehicles, including but not limited to, truck, truck-trailer, buses, boats, construction equipment, recreational vehicles, and automobile storage. These vehicles are to be stored and are not for sale, rental, or leasing. Maintenance or vehicle repair is not permitted at the premises unless otherwise separately allowed and approved under a separate conditional use permit.

Special use regulations are proposed to be applied to Registered Vehicles Storage. All businesses with registered vehicle storage shall comply with the following provisions:

1. The entire storage area shall be surfaced with asphalt, cement or an equivalent material. For specified and delineated storage areas, excluding required drive aisles and required non-storage parking, slag or gravel shall be considered as an equivalent paving material on a case-by-case basis. The surface material shall be striped as required (when feasible) and shall be maintained in good condition.
2. All storage areas shall clearly be identified on the site plan for the property and shall be screened from view from the public right-of-way by one or more decorative block screening walls. All screening walls adjacent to a public right-of-way shall have a minimum height of eight (8) feet and shall not be located in a required landscape setback area. Additional wall height and/or berming may be added as needed to satisfy screening requirements.
3. A line-of-sight analysis clearly demonstrating that all registered vehicles proposed to be located in the storage area(s) are screened from view from all adjacent public rights-of-way at all times shall be required with all proposals and/or applications. For the purpose of the line-of-sight analysis, the assumed height of the vehicles to be stored shall be fourteen feet and six inches (14'6"). To meet this requirement, storage areas shall be set back from required screening walls to provide the required line-of-sight clearance for screening. Storage areas which have been set back to provide the required line-of-sight clearance for screening shall be identified on the site plan and shall be marked and maintained at all times in a manner consistent with the site plan.
4. All vehicles stored on the premises shall have a valid vehicle registration from the State of California or other similar government entity and shall be maintained in an operable condition at all times.
5. Fire access lanes of a minimum twenty-six feet (26') in width shall be required along the interior perimeter of any required decorative block screening wall adjacent to a public right-of-way. Additional fire access lanes shall be provided

- as required by the Fire District. This required fire access lane may be used to meet the line-of-sight clearance set back requirement above.
6. All on-site fire access lanes, drive aisles, required parking, etc., (but not including Identified and marked vehicle storage areas) shall be paved with asphalt, cement or an equivalent material; gravel or slag in these lanes is specifically prohibited.
  7. A guard station or similar structure shall be required near the primary access to the premises. The minimum size of such structure shall be sixteen square feet.
  8. A residence for a caretaker may be permitted and incorporated into the project subject to the approval of a Conditional Use Permit application.
  9. Permanent on-site security lighting shall be required to be designed and installed to the standards and satisfaction of the Police Chief or his/her designee.
  10. Fire hydrants shall be required to the satisfaction of the Fire District.
  11. Vehicles stored on the premises shall not themselves be used as storage containers to store materials in them. With prior 72 hour written notice to the property and/or business owner, any and all stored vehicles shall be open to inspection for the purpose of enforcing this provision.
  12. To provide adequate space dimensions to accommodate the movement off large vehicles on the site, the minimum lot size shall be two (2) acres with a minimum lot width of 300 feet and a minimum lot depth of 300 feet. Irregular or unusually shaped lots may require additional minimums to meet the intent of this regulation, as shall lots with unusual, irregular, or severe topographic features or changes.
  13. Landscaping adjacent to the public right-of-way is required per the Code. Interior lot landscaping shall not be required for any internal area (wall perimeter, parking area, storage area, etc.) enclosed by the required screening walls. Incidental landscaping may be required as needed to satisfy screening and other requirements in interface area(s) open to public view (entry gate, guard station, etc.)

## 11.5 Landscape Standards

### A. Required landscaping

This section provides the required minimum standards for all landscaped areas within any new and rehabilitated private development.

1. Landscaped area means the entire parcel less the building footprint, driveways, nonirrigated portions of parking lots, and hardscapes (such as driveways, approaches and sidewalks). Decorative hardscapes used to enhance the landscape will be considered as part of the landscape area; this would include such things as cobble rock, decomposed granite, brickwork, stamped concrete, gravel, pavers, and water features.
2. Landscape setbacks along public right-of-ways shall incorporate landscape buffers with undulating and variable height earth-mounding (berms), and/or low walls, and required plant materials as shown in Table 11-5 Landscape Standards.
3. Block wall and wrought iron fencing shall be located behind landscape setback area(s).
4. The developer shall submit to the City's Department of Engineering, a Landscape Documentation Package, that conforms to the requirements of the Water Efficient Landscape Ordinance in Municipal Code, Chapter 28Vegetation.
5. All new development landscaping shall comply with the standards shown in Table 11-5 Landscape Standards. Additional guidelines that should be considered are addressed in Section 11.9 Design Guidelines.
6. The Recommended Plant Materials Palette, Table 11-6, can be found immediately after this section. The plant materials palette is provided to ensure the installation of drought-tolerant, water efficient landscaping that will provide wind breaks and thrive in the local climate conditions. In an effort to provide visual elements that distinguish this district from others, please note that turf (grass) does not appear in the Plant Materials Palette, and shall be prohibited, in lieu of drought-tolerant ground covers.
7. Public right-of-way improvements, including street improvements, streetscape/landscape (parkway) improvements, and street tree requirements, are in Section 11.8 Public Right-of-Way Streetscape.

**Table 11-5 Landscape Standards (1)**

*Note: The Community Development Director may require additional setbacks.*

|                                                                                                      |                                                                                                                                                                                                                                                                                                                        |
|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Minimum Landscaped Area<br>Mixture of ground cover, shrubs, trees, and decorative hardscape features | 15% of total site area, not including areas covered by buildings, structures, or areas used for approved outside storage, loading, or other activities.<br><br>25% of total site area, for hotels, not including areas covered by buildings, or areas used for approved outside storage, loading, or other activities. |
| Decorative hardscape features<br>Brick, stone, art, fountains, ponds, etc.                           | Maximum 15 % of the total 15 % landscaping of site area                                                                                                                                                                                                                                                                |
| Minimum plant sizes in landscaped areas                                                              | Minimum Ratio 1 tree/500 SF of landscape area                                                                                                                                                                                                                                                                          |
| Trees                                                                                                | 50% - 15-gallon<br>40% - 24-inch box<br>10% - 30-inch box or greater                                                                                                                                                                                                                                                   |
| Shrubs                                                                                               | 50% - 5-gallon<br>50% - 1-gallon                                                                                                                                                                                                                                                                                       |
| Groundcover                                                                                          | 12-inch maximum on center spacing that will cover area within one year of initial planting                                                                                                                                                                                                                             |
| Street trees in parkways per Master Plan of Parkway Trees                                            | 1 tree of not less than 24-inch box size for each 30 linear feet of street frontage<br><br>In parkways of inadequate width, street trees shall be planted in abutting setback/yard, in addition to the required buffer landscaping in setback area                                                                     |
| Landscape buffer in front setback area                                                               | 1 tree for each 20 linear feet minimum of street frontage and three 5-gallon shrubs for each tree<br><br>Undulating earth berms with informal tree and shrub massing and/or low decorative walls may be utilized.<br><br>Maximum slope: 3:1 for berms                                                                  |
| Additional landscape requirements                                                                    | 1 tree for each 800 square feet minimum of other required landscaped area and 8 shrubs for each tree.                                                                                                                                                                                                                  |
| Landscape Buffer in front setback requirements from right-of-way                                     | Major Highway: 30 ft minimum width<br>Primary Highway: 25 ft minimum width<br>Collector/Local Streets: 20 ft minimum width                                                                                                                                                                                             |
| Landscape buffer in any side or rear yard abutting a residential zone                                | 20 ft minimum width with 1 tree for each 20 linear feet of lot line, and 3 shrubs per tree                                                                                                                                                                                                                             |

**B. Recommended Plant Materials Palette**

Table 11-6 Recommended Plant Materials Palette provides a listing of primarily drought-tolerant trees, shrubs, and ground covers to provide water efficient landscaping in new projects. The limited selection of landscape material in the palette is envisioned to assist the user in incorporating sustainable landscaping into the project, while including enough variety of size, form, and density, to meet the requirements within buffer setbacks and screening techniques. Final selection shall be approved by the City. The Director of Community Development shall approve artificial turf.

**Table 11-6 (a) – Recommended Plant Materials Palette**  
**Recommended Trees**



**Aleppo Pine**  
*Pinus halepensis*



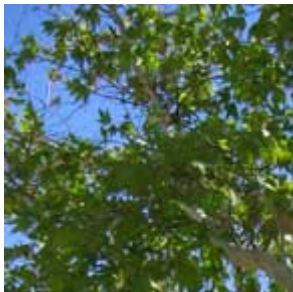
**Chitalpa**  
*Chitalpa tashkentensis*



**African Sumac**  
*Rhus lancea*



**Desert Willow**  
*Chilopsis linearis*



**Arizona Sycamore**  
*Platanus wrightii*



**Honey Locust**  
*Gleditsia triacanthos*

**Table 11-6 (a) – Recommended Plant Materials Palette**  
**Recommended Trees (continued)**



**Bottle Tree**  
*Brachychiton populneus*

**Table 11-6 (b) – Recommended Plant Materials Palette**  
**Recommended Shrubs**



**Agave**  
*Agave species*



**Gray-Leaved Euryops**  
*Euryops pectinatus*



**Bougainvillea**  
*Bougainvillea species*



**Kangaroo Paw**  
*Anigozanthus hybrids*



**Coffeeberry**  
*Rhamnus californicus*



**Purple Fountain Grass**  
*Pennisetum setaceum*  
'Cupreum'



**Table 11-6 (b) – Recommended Plant Materials Palette**  
**Recommended Shrubs (continued)**



**Coyote Brush**  
*Baccharis pilularis*



**Redberry**  
*Rhamnus croceus*



**Desert Spoon**  
*Dasylirion species*



**Red Hot Poker**  
*Kniphofia uvaria*



**Rosemary**  
*Rosmarinus officinalis*  
*cultivars*



**Yaupon**  
*Ilex vomitoria*



**Texas Ranger**  
*Leucophyllum species*



**Yucca**  
*Yucca species*

**Table 11-6 (c) – Recommended Plant Materials Palette**  
**Recommended Groundcovers**



**Moss Verbena**  
*Verbena tenuisecta*



**Prostrate Myoporum**  
*Myoporum parvifolium*



**Peruvian Verbena**  
*Verbena peruviana*



**Rosea Ice Plant**  
*Drosanthemum floribundum*



**Poverty Weed**  
*Iva hayesiana*



**Trailing Lantana**  
*Lantana montevidensis*

## **11.6 Parking and Loading Standards**

### **A. Applicability**

This section contains regulations for off-street parking and loading. Regulations identify required number of parking and loading spaces for all new development projects and those proposing substantial modification to existing buildings. Please refer to Municipal Code Chapter 30 Zoning and Development Code for all parking and loading regulations not specifically addressed in this section.

### **B. General Parking and Loading Regulations**

1. Methods of Calculation.
  - a. Multiple Uses. If more than one use is located on a site, the total number of required off-street parking and loading spaces shall be the sum of the requirements for the various uses computed separately. If individual uses on the same site have a floor area less than that for which loading spaces would be required, then the total gross floor area of all uses on the site or lot shall be used in determining the required number of loading spaces.
  - b. Fractional Number. Whenever the computation of the required number of off-street parking or loading spaces results in a fractional number, one additional space shall be required for a fraction of more than one-half, but shall not be required for a fraction of one-half or less.
2. Off-Site Location. Required off-street parking spaces shall be located on the same property as the use that they are intended to serve. Where the required parking spaces cannot be accommodated on the same property, they may be located in a separate off-site parking facility that is not more than 300 feet from the use(s) they serve, subject to approval by the Director of Community Development.
3. Shared Use. Required off-street parking and loading spaces shall not be considered as providing parking or loading spaces for any other use, except where shared use facilities are approved in compliance with Subparagraph 5 Adjustments to Parking Requirements, below.
4. Uses Not Specified. For uses not specified, the Director of Community Development shall determine parking requirements based upon the requirements of the most similar use. See Subsection 11.11.C Entitlement Procedures-- Similar Use Determination.
5. Adjustments to Parking Requirements.
  - a. Administrative Variance. The Director of Community Development is authorized to approve alternate parking plans involving a modification of 10 percent or less of any of the off-street parking and loading standards in compliance with Section 30-51.5 of Municipal Code Chapter 30.

- b. **Parking Study Option.** An applicant may submit a separate parking and loading study for new development to the Director of Community Development for review. A parking and loading study shall provide sufficient data and information to justify the need for adjustments to the parking and loading requirements and shall analyze whether:
  - i. Adequate off-street parking will be provided for the project;
  - ii. The project demonstrates the use of creative design concepts, including but not limited to shared parking facilities, transit accessibility, pedestrian amenities, and bicycle amenities;
  - iii. Environmental impacts associated with the project will not be increased by the modification of standards; and
  - iv. Traffic safety and pedestrian safety will be enhanced by the modifications.
- c. **Shared Use Facility.** Required off-street parking and loading spaces may be considered as providing parking or loading spaces for another use where joint facilities serving more than one use contain no less than the total number of spaces deemed necessary for each individual use added together with other uses. Where adjoining uses on the same site have different hours of operation with minimal conflict, the Director of Community Development may determine that some or all of the same spaces may be counted as satisfying the requirements for both uses, provided that the number of spaces shall not be less than the prescribed for the use requiring the greater number.

**C. Required Number of Parking Spaces**

Each land use shall provide the number of off-street parking spaces indicated in Table 11-7 Parking Requirements by Land Use, except where adjustment has been granted in compliance with Subparagraph 11.6.B.5 Adjustments to Parking Requirements, above. For the purposes of this Section, the following definitions shall apply:

- 1. **Commercial Use:** Activity involving the sale of goods or services carried out for profit.
- 2. **Industrial Use:** Those fields of economic activity including construction; manufacturing; transportation, communication, electric, gas, and sanitary services; and wholesale trade.

**Table 11-7 – Parking Requirements by Land Use**

| <b>Land Use</b>                                                                   | <b>GFA—Gross Floor Area</b>                                                                                                                                                                                                                                                                                             |                                                                        |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|
|                                                                                   | <b>Slover West Industrial District</b>                                                                                                                                                                                                                                                                                  |                                                                        |
|                                                                                   | <b>Vehicle Spaces (Minimum #)</b>                                                                                                                                                                                                                                                                                       | <b>Bicycle Spaces (Minimum #)</b>                                      |
| <b>Entertainment, Recreation and Public Assembly Uses</b>                         |                                                                                                                                                                                                                                                                                                                         |                                                                        |
| Adult Businesses                                                                  | Subject to Parking Plan required by Municipal Code §15-918                                                                                                                                                                                                                                                              |                                                                        |
| Open Space / Park                                                                 | Public - Determined by Parks and Recreation Department<br>Private - .25 spaces/1,000 sq ft of total park area                                                                                                                                                                                                           | 1 space/ 33 vehicle parking spaces                                     |
| Public Assembly Facilities                                                        | With fixed seats – 1 space/3 fixed seats;<br>Without fixed seats – 25 spaces/1,000 sq ft of seating area;<br>and<br>4 spaces/1,000 sq ft GFA outside assembly area                                                                                                                                                      | 1 space/33 vehicle parking spaces                                      |
| Recreational Facilities – Indoor, except for the following:                       | 1 space/each 4 persons of the facility's allowed maximum capacity, unless otherwise modified in compliance with Section 11.6.B.5. Adjustments to Parking Requirements                                                                                                                                                   |                                                                        |
| Amusement Arcade                                                                  | 1 space/each 4 persons of the facility's allowed maximum capacity                                                                                                                                                                                                                                                       | 1 space/ 3 games up to 20 games; and 1 space/5 games for over 20 games |
| Athletic Club/Gym                                                                 | 4 spaces/1,000 sq ft GFA;<br>20 spaces/1,000 sq ft of exercise floor area;<br>3 spaces/outdoor ball court                                                                                                                                                                                                               | .4 spaces/1,000 sq ft GFA                                              |
| Bowling Alley                                                                     | 4 spaces/lane, and<br>additional spaces required for restaurant and other accessory uses                                                                                                                                                                                                                                | 1 space/33 vehicle parking spaces                                      |
| Dancing                                                                           | 14 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                               |                                                                        |
| Pool/Billiard Hall                                                                | 2 spaces/table                                                                                                                                                                                                                                                                                                          | 1 space/5 tables                                                       |
| Skating Rink                                                                      | 14 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                               | 1 space/33 vehicle parking spaces                                      |
| Recreational Facilities – Outdoor, except for the following:                      | 1 space/each 4 persons of the facility's allowed maximum capacity, unless otherwise modified in compliance with Section 11.6.B.5 –Adjustments to Parking Requirements                                                                                                                                                   |                                                                        |
| • Golf driving range, batting cage                                                | 1 space/tee, cage, or similar; and<br>1 space/employee at maximum shift                                                                                                                                                                                                                                                 | 1 space/33 vehicle parking spaces                                      |
| • Swimming pools                                                                  | 14 spaces/1,000 sq ft of water surface area                                                                                                                                                                                                                                                                             | 1 space/33 vehicle parking spaces                                      |
| <b>Industry, Manufacturing, and Processing Uses</b>                               |                                                                                                                                                                                                                                                                                                                         |                                                                        |
| Handcraft Industry/ Small-Scale Manufacturing                                     | 2 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                                | None                                                                   |
| Light Manufacturing<br>All uses listed under "Manufacturing, Light" in Table 11-2 | 1.85 spaces/1,000 sq ft GFA;<br>4 spaces/1,000 sq ft GFA of office space, sales, or similar use where those uses exceed 10% GFA; and<br>1 space/1 facility vehicle<br>Where multiple tenants and or uses occupy the same building, the parking shall be calculated based upon the floor area used by each tenant or use | 1 space/33 vehicle parking spaces                                      |

**Table 11-7 – Parking Requirements by Land Use (continued)**

| <b>Land Use</b>                                                                                         | <b>GFA—Gross Floor Area</b>                                                                                                                                                                                                                                                                                                |                                   |
|---------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
|                                                                                                         | <b>Slover West Industrial District</b>                                                                                                                                                                                                                                                                                     |                                   |
|                                                                                                         | <b>Vehicle Spaces (Minimum #)</b>                                                                                                                                                                                                                                                                                          | <b>Bicycle Spaces (Minimum #)</b> |
| General Manufacturing<br>All uses listed under “General Manufacturing” in Table 11-2                    | 1.85 spaces/1,000 sq ft GFA;<br>4 spaces/1,000 sq ft GFA of office space, sales, or similar use where those uses exceed 10% GFA; and<br>1 space/1 facility vehicle<br>Where multiple tenants and or uses occupy the same building, the parking shall be calculated based upon the floor area used by each tenant or use.   | 1 space/50 vehicle parking spaces |
| Research and Development                                                                                | 2 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                                   | 1 space/33 vehicle parking spaces |
| <b>Residential Uses</b>                                                                                 |                                                                                                                                                                                                                                                                                                                            |                                   |
| Caretaker Housing                                                                                       | 2 spaces in an enclosed garage                                                                                                                                                                                                                                                                                             | None                              |
| <b>Retail Uses</b>                                                                                      |                                                                                                                                                                                                                                                                                                                            |                                   |
| Alcohol Sales, Off-Site/On-Site                                                                         | Same as required spaces for the underlying use (e.g., restaurant, public assembly facility, retail store, etc.), unless otherwise modified in compliance with Section 11.6.B.5 –Adjustments to Parking Requirements                                                                                                        |                                   |
| Factory/Warehouse Outlet Store                                                                          | 5 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                                   | None                              |
| <b>Retail Sales, General</b>                                                                            |                                                                                                                                                                                                                                                                                                                            |                                   |
| Not in shopping center or factory/warehouse outlet mall)                                                | 4 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                                   | 1 space/33 vehicle parking spaces |
| Shopping Center                                                                                         | 5 spaces/1,000 sq ft GFA for the initial 10,000 sq ft; and<br>4 spaces/1,000 sq ft GFA for over 10,000 sq ft                                                                                                                                                                                                               | 1 space/33 vehicle parking spaces |
| <b>Service Uses</b>                                                                                     |                                                                                                                                                                                                                                                                                                                            |                                   |
| Animal Kennel Services                                                                                  | 4 spaces/1,000 sq ft GFA; and<br>1.25 spaces/1,000 sq ft of boarding area                                                                                                                                                                                                                                                  | None                              |
| Business Support Services                                                                               | 4 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                                   | None                              |
| <b>Food Service:</b>                                                                                    |                                                                                                                                                                                                                                                                                                                            |                                   |
| <ul style="list-style-type: none"> <li>Fast food restaurant with drive through, walk-in area</li> </ul> | Indoor Seating: 13 spaces/1,000 sq ft GFA*<br><i>*GFA shall not include play areas without seating.</i><br>Outdoor Seating (patio area):<br>Less than 50% of indoor area: 6.5 spaces/1,000 sq ft<br>50% or more of indoor area: 13 spaces/1,000 sq ft                                                                      | 4 spaces                          |
| <ul style="list-style-type: none"> <li>Other restaurant</li> </ul>                                      | Indoor Seating: 10 spaces per 1,000 sq ft GFA<br>Outdoor Seating (patio area):<br>Less than 50% of indoor area: 5 spaces/1,000 sq ft<br>50% or more of indoor area: 10 spaces/1,000 sq ft                                                                                                                                  | 2 spaces                          |
| Industrial Repair                                                                                       | 2 spaces/1,000 sq ft GFA for the initial 40,000 sq ft<br>1.3 spaces/1,000 sq ft additional GFA greater than 40,000 sq ft<br>4 spaces/1,000 sq ft GFA of office space, where those uses exceed 10% of GFA<br><b>OR</b><br>1 space for each employee on the maximum shift as determined by Director of Community Development | None                              |

Table 11-7 – Parking Requirements by Land Use (continued)

| Land Use                                                                             | GFA—Gross Floor Area                                                                                                                                                                                                                                                                                                                                                       |                                      |
|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
|                                                                                      | Slover West Industrial District                                                                                                                                                                                                                                                                                                                                            |                                      |
|                                                                                      | Vehicle Spaces (Minimum #)                                                                                                                                                                                                                                                                                                                                                 | Bicycle Spaces (Minimum #)           |
| Mini-Storage Facility                                                                | 1.75 spaces/100 units; and<br>1 space/employee                                                                                                                                                                                                                                                                                                                             | None                                 |
| <b>Motor Vehicle</b>                                                                 |                                                                                                                                                                                                                                                                                                                                                                            |                                      |
| Car Wash/<br>Detailing                                                               | 1 space/employee;<br>1 space per wash lane                                                                                                                                                                                                                                                                                                                                 | None                                 |
| • Car Wash<br>Full-Service                                                           | 1 space/employee;<br>Stacking for 5 vehicles for car wash lane<br>Reserve spaces equal to 3 times the wash lane capacity                                                                                                                                                                                                                                                   | None                                 |
| • Car Wash<br>Self-Service                                                           | 2 spaces/bay                                                                                                                                                                                                                                                                                                                                                               | None                                 |
| • Motor Vehicle<br>Rental, Sales,<br>and Leases                                      | Indoor display/sale/service = 3.3 spaces/1,000 sq ft GFA;<br>Outdoor display/sale = .40 spaces/1,000 sq ft GFA; and<br>1 space/employee                                                                                                                                                                                                                                    | None                                 |
| • Service Stations                                                                   |                                                                                                                                                                                                                                                                                                                                                                            |                                      |
| With<br>convenience<br>market                                                        | 5 spaces/1,000 sq ft GFA; and 5 spaces/service bay                                                                                                                                                                                                                                                                                                                         | 1 space/10 vehicle<br>parking spaces |
| Without<br>convenience<br>market                                                     | 3.3 spaces/1,000 sq ft or 5 spaces/service bay, whichever is<br>more; minimum of 4 spaces                                                                                                                                                                                                                                                                                  | None                                 |
| School, Commercial                                                                   | 1 space/teaching and non-teaching position on maximum<br>shift; and<br>1 space/2 students on maximum enrollment                                                                                                                                                                                                                                                            | 1 space/33 vehicle<br>parking spaces |
| School, Trucking                                                                     | 1 truck parking space/truck operated by or for school;<br>1 space/teaching and nonteaching staff member on maximum<br>shift;<br>1 space/2 students on maximum enrollment<br>additional spaces required for accessory lodging                                                                                                                                               | 1 space/<br>4 classrooms             |
| Vehicle Auctions                                                                     | <b>Automobile or boat sales (new/used/auction)</b><br>1 space/300 sq ft of indoor display, sales, or service area;<br>1 space/2,500 sq ft of outdoor sales or display area; and<br>1 space/employee<br><b>Truck sales/services (new/used/auction)</b><br>1 space/250 sq ft of sales area;<br>1 space/3,000 sq ft of outdoor sales or display area; and<br>1 space/employee | None                                 |
| <b>Distribution, Wholesaling and Warehousing Uses</b>                                |                                                                                                                                                                                                                                                                                                                                                                            |                                      |
| Industrial Equipment,<br>Materials, and<br>Supplies, Truck,<br>Truck Trailer Storage | 2 spaces/3 employees on maximum working shift;<br>1 space for visitor parking on the basis of each 10 employees<br>on maximum working shift, or a minimum of 3 spaces,<br>whichever is greater; and<br>1 truck/trailer storage space/very truck to be stored                                                                                                               | None                                 |
| Logistics and<br>Distribution Facilities<br>(High Cube)                              | <b>Vehicle Parking:</b><br>1 space/1,000 sq ft GFA for the first 20,000 sq ft;<br>1 space/2,000 sq ft for the second 20,000 sq ft;<br>1 space/5,000 sq ft for that portion over 40,000 sq ft.<br>No add'l spaces if office area less than 10% GFA.<br>Office space rate if office area over 10% GFA.<br><b>Truck and Trailer Parking:</b>                                  | None                                 |



Table 11-7 – Parking Requirements by Land Use (continued)

| Land Use                                                      | GFA—Gross Floor Area                                                                                                                                                                                                                            |                            |
|---------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
|                                                               | Slover West Industrial District                                                                                                                                                                                                                 |                            |
|                                                               | Vehicle Spaces (Minimum #)                                                                                                                                                                                                                      | Bicycle Spaces (Minimum #) |
|                                                               | 1 oversized truck space/5,000 sq ft GFA*<br>*Truck docks shall not be included in this calculation.                                                                                                                                             |                            |
| Petroleum/Hazardous Material Storage                          | 1 space/employee on maximum shift                                                                                                                                                                                                               | None                       |
| Warehousing Facilities                                        | 2 spaces/3 employees on maximum working shift;<br>No additional spaces if office area is less than 10% GFA.<br>Office space rate if office area over 10% GFA.<br>Space to accommodate all trucks and other vehicles used in connection with use | None                       |
| <b>Transportation, Communications and Infrastructure Uses</b> |                                                                                                                                                                                                                                                 |                            |
| Antennas                                                      | 1 space                                                                                                                                                                                                                                         | None                       |
| Broadcasting Offices or Studios                               | 5 spaces/1,000 sq ft GFA                                                                                                                                                                                                                        | None                       |
| Recycling Facilities                                          | 1 space/employee;<br>1 space/facility vehicle; and<br>Sufficient spaces to accommodate all visitors to establishment at any one time under normal operating conditions                                                                          | None                       |
| <b>Other Uses</b>                                             |                                                                                                                                                                                                                                                 |                            |
| Drive-Through                                                 | Stacking for 7 vehicles at each bay, window, lane, ordering station, or machine                                                                                                                                                                 | None                       |
| Outdoor Display & Sales                                       | 1 space/1,000 sq ft of outdoor merchandise areas                                                                                                                                                                                                | None                       |
| Public Facilities                                             | Per Public Agency                                                                                                                                                                                                                               |                            |
| Temporary Uses                                                | Per Temporary Use Permit                                                                                                                                                                                                                        |                            |

Note: Sources consulted to compile the table entries include the Municipal Code; The Dimensions of Parking, ULI and National Parking Association, 5th Edition, 2010; Recommended Zoning Ordinance Provisions, National Parking Association, December 2006; and Parking Standards, APA Planning Advisory Service Report 510/511; November 2002.

**D. Required Number of Loading Spaces**

Each land use shall provide the number of off-street loading spaces indicated in Table 11-8 Loading Space Requirements by Land Use. Requirements for uses not specifically listed shall be determined by the Director of Community Development based upon the requirements for comparable uses and upon the particular characteristics of the proposed use. For other standards (e.g., size of loading spaces, location, turning radius, etc.), refer to Article XI Off-Street Parking and Loading Standards, Division 4 Loading Area Regulations, in Municipal Code Chapter 30 Zoning and Development Code.

| Table 11-8 – Loading Space Requirements by Land Use                                     |                                                                                                                                                                                            |                 |
|-----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| Land Use                                                                                | Loading Spaces (Minimum #)                                                                                                                                                                 | Type (1)        |
| Entertainment, Recreation and Public Assembly Uses                                      |                                                                                                                                                                                            |                 |
| Public Assembly Facilities                                                              | 1 space; and<br>Additional spaces as required by design review                                                                                                                             | Van             |
| Recreational Facilities                                                                 | 0 - 29,999 sq ft: 1 space<br>30,000 - 99,999 sq ft: 2 spaces<br>Over 100,000 sq ft: 3 spaces                                                                                               | Truck           |
| Industry, Manufacturing, and Processing Uses                                            |                                                                                                                                                                                            |                 |
| Handcraft Industry/<br>Small-Scale<br>Manufacturing                                     | 5,000 - 30,000 sq ft: 1 space; and<br>1 additional space for each additional 30,000 sq ft                                                                                                  | Truck           |
| All uses listed under<br>“Light<br>Manufacturing” in<br>Table 3.3-2                     |                                                                                                                                                                                            |                 |
| All uses listed under<br>“General<br>Manufacturing” in<br>Table 3.3-2                   |                                                                                                                                                                                            |                 |
| Research and<br>Development                                                             |                                                                                                                                                                                            |                 |
| Retail Uses                                                                             |                                                                                                                                                                                            |                 |
| Retail Sales, General<br>and<br>Factory/Warehouse<br>Outlet Store                       | Up to 10,000 sq ft: 1 space                                                                                                                                                                | Truck           |
|                                                                                         | 10,001 - 30,000 sq ft: 1 space<br>30,001 - 90,000 sq ft: 2 spaces<br>Over 90,000 sq ft: 2 spaces; and 1 additional space for each<br>additional 50,000 sq ft over the initial 90,000 sq ft | Tractor Trailer |
| Service Uses                                                                            |                                                                                                                                                                                            |                 |
| All uses listed under<br>“Service Uses” in<br>Table 3.2-2; except<br>for the following: | Up to 10,000 sq ft: 1 space                                                                                                                                                                | Truck           |
|                                                                                         | 10,001 - 30,000 sq ft: 1 space<br>30,001 - 90,000 sq ft: 2 spaces<br>Over 90,000 sq ft: 2 spaces; and 1 additional space for each<br>additional 50,000 sq ft over the initial 90,000 sq ft | Tractor Trailer |

**Table 11-8 – Loading Space Requirements by Land Use (continued)**

| <b>Land Use</b>                                       | <b>Loading Spaces (Minimum #)</b>                                                         | <b>Type (1)</b> |
|-------------------------------------------------------|-------------------------------------------------------------------------------------------|-----------------|
| Industrial Repair                                     | 5,000 - 30,000 sq ft: 1 space; and<br>1 additional space for each additional 30,000 sq ft | Truck           |
| Motor Vehicle                                         |                                                                                           |                 |
| • Motor Vehicle Rental, Sales, and Leases             | 1 space                                                                                   | Tractor Trailer |
| • Service Stations                                    | 1 space                                                                                   | Tractor Trailer |
| School, Commercial                                    | 1 space; and additional spaces required by design review                                  | Van             |
| <b>Distribution, Wholesaling and Warehousing Uses</b> |                                                                                           |                 |
| Warehousing Facilities                                | 5,000 - 30,000 sq ft: 1 space; and<br>1 additional space for each additional 30,000 sq ft | Tractor Trailer |

**Notes:**

- (1) A van loading space shall be a minimum of 12 ft wide by 19 ft long with a minimum 10 ft overhead clearance.  
A truck loading space shall be a minimum of 12 ft wide by 45 ft long with a minimum 14 ft overhead clearance.  
A tractor trailer loading space shall be a minimum of 12 ft wide by 70 ft long with a minimum 14 ft overhead clearance.

**E. Landscaping Standards for Parking Areas**

Within any parking area, one tree shall be planted for every five single-row parking stalls or 10 double-row parking stalls. Eighty percent of these shall be 15 gallons in size and the remaining 20 percent shall be 24-inch box or larger in size. If for some reason the contractor is unable to distribute trees in the interior of the parking area in compliance with these standards, the Director of Community Development may approve the placement of no more than 40 percent of the trees within the perimeter of the parking area. Planters shall not have a dimension less than four feet, excluding the thickness of the curbing. These requirements may be reduced for industrial parking areas that are screened from public view.

1. Parking areas shall contain a minimum landscape area equivalent to 30 percent of the total required 15 percent landscaping for the total site area.
2. Parking area perimeter landscaping.
  - a. Parking areas for nonresidential uses abutting or adjacent to residentially zoned property shall provide a landscape strip that is a minimum of 10 feet in width, excluding overhang, curb, and walkways, between the parking area and the common property line bordering the residentially zoned property. Parking areas shall be screened from the residentially zoned property by a solid decorative masonry wall that is a minimum of six feet in height.
  - b. Parking areas for nonresidential uses abutting or adjacent to non-residentially zoned property or a street shall install a landscape strip that is a minimum of five feet in width, excluding overhang, curb, and walkways, between the parking area and the common property line, or the parking area and the street right-of-way. This

requirement may be reduced or modified if a joint access agreement exists that is satisfactory to the Director of Community Development. Parking areas shall be screened from streets through combinations of plant materials, earth berms, raised planters, grade separations, or low walls. Slopes shall not exceed three to one or exceed 36 inches in height measured from the parking lot surface.

- c. Plant materials, walls, or structures within a traffic sight area shall not block sight lines from driveways to streets and shall not exceed 36 inches in height.
  - d. End of aisle spaces adjacent to landscape finger shall be two feet wider for step out area.
3. Parking area interior landscaping.
- a. Tree number and location. One tree shall be provided for each four parking spaces and shall be evenly spaced throughout the interior parking area at a rate of one tree for every eight parking spaces. See Exhibit 11-4 – Parking Lot Landscaping. The required number of trees in the interior area shall not include trees required around the parking area perimeter. Trees are not required for tractor-trailer parking. A minimum of one cluster of trees shall be provided for each 100 feet of a row or double row of parking spaces. Trees shall be located in planters that are bounded on at least two sides by parking area paving. Planters shall have a minimum exterior dimension of five feet.

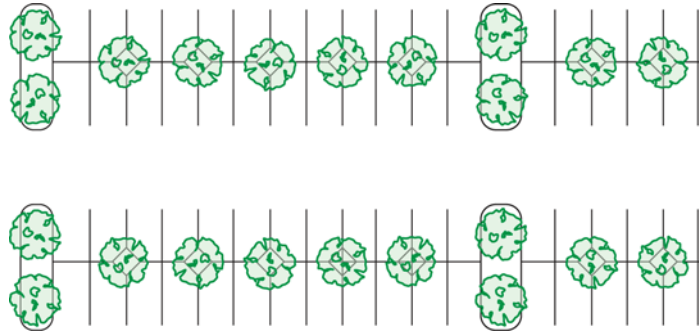


Exhibit 11-4 – Parking Lot Landscaping.

- b. Tree size. All trees within the parking area shall be a minimum 24-inch box container at time of planting.
- c. Landscape protection. Landscaping shall be protected by concrete curbs of at least six inches in height. An end-of-aisle planter shall be provided at the ends of all parking aisles. Finger aisle planters shall be a minimum of nine feet wide and end-of-aisle planters shall be a minimum of seven feet wide, as measured from the inside of the curb. The parking space side of finger and end-of-aisle planters shall have a 24-inch wide concrete surface measured from the face of the curb. Planters shall be landscaped with a mixture of trees, shrubs, and ground cover. Planting areas shall have round corners instead of 90 degree corners and shall be shaped to

allow vehicle movements. The Director of Community Development may approve alternative barriers designed to protect landscaped areas from vehicle damage. Wheel stops may be placed to allow for two feet of vehicle overhang area within the dimension of the parking space. To increase the parking lot landscaped area, a maximum of two feet of the parking stall depth may be landscaped with low-growth, hardy materials in-lieu of paving, allowing a bumper overhang while maintaining the required parking dimensions. However, the overhang area shall not be counted as part of the minimum landscape area required by paragraph (1) above, and when adjacent to a required landscaping strip shall be in addition to the minimum required width. Fixtures (e.g., lights, sprinklers) that are higher than the curb are prohibited within a bumper overhang area. Curbing that creates a bumper overhang barrier shall not exceed a height of five inches.

- d. Parking areas with more than 100 spaces shall provide an appropriate entry feature consisting of a concentration of landscape elements, including trees, flowering plants, enhanced paving, and project identification.
4. Parking structures. A landscaping strip 10 feet wide shall be provided on all sides of a parking structure. One tree shall be provided for each 20 to 40 feet of perimeter of the structure, based on species selected. These trees shall be distributed evenly throughout the subject landscape area.

## 11.7 Sign Standards

### A. Applicability

This section contains standards and guidelines for signage to ensure that signs are consistent with the overall quality and character of anticipated new development. Regulations identify permitted sign types; provide standards for number of signs, size, and location; and provide design guidelines for color, materials, and illumination. Please refer to the Fontana Municipal Code for all sign-related information or regulations not specifically addressed in this section.

### B. Standards and Guidelines

1. Standards. The following standards shall apply to all signs, regardless of type:
  - a. Sign types not listed in this Section are not permitted.
  - b. Linear Frontage Ratio. For each establishment, one and one-half (1 ½) square feet of total sign area shall be allowed for each linear foot of building frontage ("Linear Frontage Ratio"). Unless otherwise noted, all signs (including temporary signs) shall count toward the total sign area permitted based on the Linear Frontage Ratio. For multi-tenant buildings, each establishment shall be calculated individually. For corner establishments, each facade shall be calculated individually. Permitted sign area based on the linear frontage of one establishment or facade shall not be placed on another establishment or facade.
  - c. Signs shall not be animated.
  - d. Commercial messages that identify, advertise, or attract attention to a business, product, service, or event or activity sold, existing, or offered elsewhere than upon the same property where the sign is displayed are expressly prohibited.
  - e. In the event of a conflict between this Section and any other City regulation, the provisions of this Section shall apply.
  - f. All issues not specifically addressed herein (e.g., signage in the public right-of-way, exempt signs, permit processing, etc.) shall be addressed pursuant to the Fontana Municipal Code.
2. Guidelines. The following guidelines shall apply to all signs, regardless of type.
  - a. Design Compatibility
    - Provide signage that is compatible with the building architecture and coordinate sign materials and colors with the building facade/storefront design.
    - Place signs in accordance with facade rhythm, scale, and proportion.

- Ensure that signs associated with multi-tenant buildings are complementary to one another. A consistent location for tenant identification signs is recommended.
- b. Location
  - Signs shall be placed at or near the public entrance to a building or main parking area to indicate the most direct access to the business.
  - Signs shall not be located so that they cover or interrupt the architectural details or ornamentation of a building's facade.
  - Signs shall not project above the edge of the rooflines and shall not obstruct windows and/or doorways.
- c. Sign Legibility
  - Avoid hard-to-read, intricate typefaces. Typefaces that are difficult to read reduce the sign's ability to communicate.
  - Avoid spacing letters and words too close together. Lettering shall not occupy more than 75 percent of the sign face.
  - Limit the number of lettering styles in order to increase legibility. Signs shall be limited to no more than two styles for small signs (generally up to 10 square feet) and three styles for larger signs.
  - Use significant contrast through incorporating light colored letters and a darker, contrasting background to provide the most visible and best-looking image.
  - Incorporate business identity symbols and logos.
  - Logo means any symbol or any combination thereof adopted and used by an individual or corporation to identify goods made or sold or services rendered by an individual or corporation and to distinguish them from goods made or sold or services rendered by others and that is nationally or State of California registered.
- d. Color and Materials
  - Bright day-glo (fluorescent) colors shall be avoided as they are distracting and do not blend well with other background colors.
  - Sign colors shall relate to and complement the materials or color scheme of the buildings, including accent and trim colors.
  - Sign materials shall be selected with consideration for the architectural design of the building's facade and also contribute to the legibility of the sign.
  - Construct signs of durable, high-quality materials.
  - Wood, paper, and cloth signs, and painted wall signs are prohibited.
- e. Illumination
  - Individually illuminated letters, either internally illuminated or back-lighted solid letters (reverse channel), are a preferred alternative to internally illuminated plastic-faced cabinet signs.



- Signs shall be comprised of individual letters.
- The use of backlit, individually cut letter signs is strongly encouraged for all types of business and signs, including monument-type signs.
- Whenever indirect lighting fixtures are used, care shall be taken to properly shield the light source.

f. Electrical Raceways and Conduits

- Electrical transformer boxes and raceways shall be concealed from public view.
- If raceways are necessary, they shall be as thin and narrow as possible and shall never extend in width or height beyond the area of the sign's lettering or graphics.
- All exposed conduit and junction boxes shall be appropriately concealed from public view.

### C. Sign Types

For the purposes of this plan, Table 11-9 Sign Types indicates the signs that are allowed in the Slover West Industrial District.

| Table 11-9 – Sign Types |                                                                                                              |
|-------------------------|--------------------------------------------------------------------------------------------------------------|
| 1                       | <b>Grand Wall Sign</b><br>Non-residential uses with unfenestrated wall areas of 2,000 square feet or greater |
| 2                       | <b>Wall Sign</b><br>Non-residential uses with a dedicated ground floor entrance                              |
| 3                       | <b>Projecting Sign</b><br>Non-residential uses with a dedicated ground floor entrance                        |
| 4                       | <b>Awning Valance Sign</b><br>Non-residential uses with a dedicated ground floor entrance                    |
| 5                       | <b>Awning Side Sign</b><br>Non-residential uses with a dedicated ground floor entrance                       |
| 6                       | <b>Canopy Fascia Sign</b><br>Non-residential uses with a dedicated ground floor entrance                     |
| 7                       | <b>Under-Awning or Under-Canopy Sign</b><br>Non-residential uses with a dedicated ground floor entrance      |
| 8                       | <b>Recessed Entry Sign</b><br>Non-residential uses with a dedicated ground floor entrance                    |
| 9                       | <b>Window Sign</b><br>Non-residential uses with a dedicated ground floor entrance                            |
| 10                      | <b>Temporary Window Sign</b><br>Non-residential uses with a dedicated ground floor entrance                  |
| 11                      | <b>Temporary Wall Sign</b><br>Non-residential uses with a dedicated ground floor entrance                    |
| 12                      | <b>Monument Sign</b><br>Any building with continuous linear street frontage of 200 feet or greater           |
| 13                      | <b>Directional Sign</b><br>Each vehicle entrance                                                             |
| 14                      | <b>Accessory Sign</b><br>Identified specific uses                                                            |

## **D. Sign Type Standards and Guidelines**

This section provides Standards and Guidelines for each Sign Type.

### **1. Grand Wall Sign**

Grand Wall Signs are large signs located on, and parallel to, large unfenestrated building wall areas.

#### **a. Standards**

- i. A Grand Wall Sign shall only be located on unfenestrated wall areas of 2,000 square feet in size or greater.
- ii. Only one (1) Grand Wall Sign shall be permitted per establishment.
- iii. The Grand Wall Sign area shall not count towards the total sign area permitted based on the Linear Frontage Ratio.
- iv. A Grand Wall Sign shall not exceed 1,000 square feet or 25 percent of the total wall area, whichever is less.
- v. Grand Wall Signs shall project no more than one (1) foot from the façade of the building.

#### **b. Commercial Guidelines**

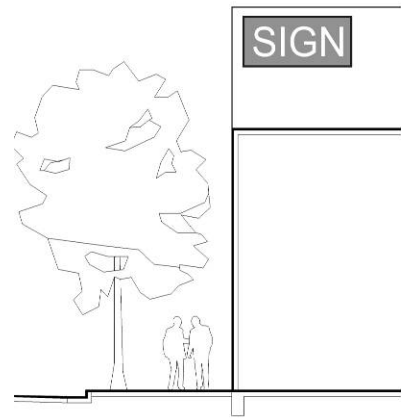
- i. Materials used in Grand Wall Signs shall be wood, ceramic or metal.
- ii. Grand Wall Signs shall be illuminated by external illumination only.

#### **c. Industrial Guidelines**

- i. Materials used in Grand Wall Signs shall be ceramic or metal.
- ii. Grand Wall Signs shall be illuminated by external illumination only.

### **2. Wall Sign**

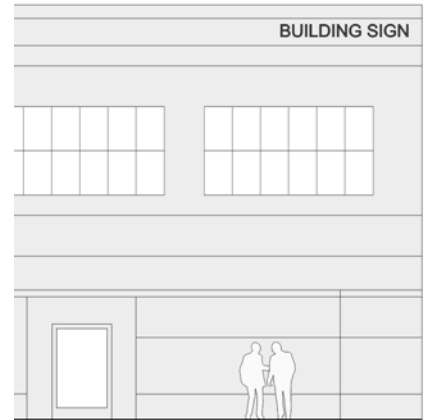
Wall Signs are signs that are located on, and parallel to, a building wall. Business Identification Wall Signs are signs that announce the name of a business within a building and Building Identification Wall Signs are signs that announce the name of a building. Both are located on, and parallel to, a building wall.



1) Grand Wall Sign.

a. Standards

- i. Wall Signs shall be located below the second floor and within the middle 50 percent of the building or tenant frontage measured from lease line to lease line. Building Identification Wall Signs shall be located only on the frieze or fascia (articulated banding across the top of every building floor) area of storefront level; frieze, fascia, parapet of the uppermost floor; or above the entrance to main building lobby.
- ii. No Wall Sign shall exceed 150 square feet in size. Building Identification Wall Signs shall be no taller than 24 inches in height.
- iii. Wall Signs shall count towards the total sign area permitted based on the Linear Frontage Ratio, except that the area of Building Identification Wall Signs shall not count towards the total sign area permitted based on the Linear Frontage Ratio.
- iv. Wall Signs shall project no more than one (1) foot from the façade of the building.



b. Commercial Guidelines

- i. Materials used in wall signs shall be wood, ceramic, and/or metal. Wall signs may also be inscribed into the façade of the building. Building Identification Wall Signs shall be inscribed into the façade or constructed of individual metal letters.
- ii. Wall Signs shall be illuminated by external illumination or halo illumination only.
- iii. Where individual letters are used, letters shall be three-dimensional, created by raised letter forms mounted to the building façade or sign panel, or by incised openings cut out from the sign panel.
- iv. New wall signs for individual businesses in a shopping center shall be placed consistent with the location of signs for other businesses in the center. This will establish visual continuity among storefronts and create a unified appearance for the center.
- v. When signs that are attached to a wall are removed, holes and other disfigurations of the wall's surface shall be patched and painted to match surrounding areas.

2) Building Identification Wall Sign.



2) Business Identification Wall Sign.

c. Industrial Guidelines

- i. Materials used in wall signs should be ceramic, and/or metal. Wall signs may also be inscribed into the façade of the building. Building Identification Wall Signs should be inscribed into the façade or constructed of individual metal letters.
- ii. Wall signs shall be illuminated by external illumination, exposed neon tube illumination, exposed incandescent bulb illumination, or halo illumination only. Building Identification Wall Signs shall be illuminated by external illumination or halo illumination only.
- iii. Where individual letters are used, letters shall be three-dimensional, created by raised letter forms mounted to the building façade or sign panel, or by incised openings cut out from the sign panel.
- iv. When signs that are attached to a wall are removed, holes and other disfigurements of the wall's surface shall be patched and painted to match surrounding areas.

3. **Projecting Sign**

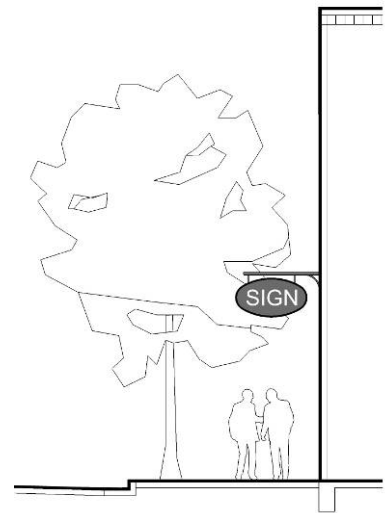
Projecting Signs are signs that are oriented perpendicularly to the building façade and are either (1) suspended under a bracket, armature, or other mounting device or (2) are cantilevered (i.e., structurally affixed to the building).

a. Standards

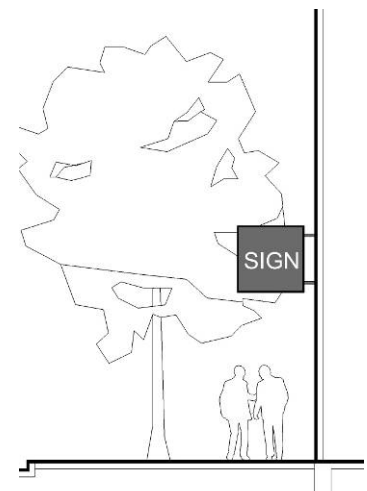
- i. Projecting Signs shall only be mounted on the wall area below the second floor.
- ii. No Projecting Sign shall exceed 16 square feet in size.
- iii. Projecting Signs shall project no more than four feet from the façade of the building.
- iv. No portion of a Projecting Sign shall be lower than eight feet above the level of the walkway over which it projects.

b. Commercial and Industrial Guidelines

- i. Projecting Signs that are suspended under a bracket, armature, or other mounting device shall be metal only and shall be illuminated by external illumination only.
- ii. Projecting Signs that are cantilevered signs shall be metal and illuminated by external illumination or halo illumination only.



3) Suspended Projecting Sign.



3) Cantilevered Projecting.

- iii. Sign supports and brackets shall be compatible with the design and scale of the sign and the architectural design of the building.

#### 4. ***Awning Valance Sign***

Awning Valance Signs are signs applied to the awning valance and are contained completely within the valance.

- a. Standards
  - i. Lettering for Awning Valance Signs shall include one (1) line of lettering not to exceed two-thirds (2/3) the height of the valance or 12 inches, whichever is less.
  - ii. Awning Valance Signs shall project no farther from the building than its associated awning.
  - iii. No portion of an Awning Valance Sign shall be less than eight feet above the level of the walkway over which it projects.
- b. Commercial and Industrial Guidelines
  - i. Awning Valance Signs shall consist of metal, or vinyl or paint applied directly to the awning.
  - ii. Awning Valance Signs shall be illuminated by external illumination only.
  - iii. The shape, design, and color of awnings shall be carefully designed to coordinate with, and not dominate, the architectural style of the building. Where multiple awnings are used on the building, the design and color of the sign awnings shall be consistent with all other awnings.
  - iv. The use of temporary signs/letters on awnings is not allowed. Only permanent signs that are an integral part of the awning or canopy shall be used.
  - v. The use of adhesive/press on lettering is not allowed. Awning signs shall be painted directly on the canvas awning.
  - vi. To avoid having to replace awnings or paint out previous tenant signs when a new tenant moves in to a building, the use of replaceable valances shall be considered.

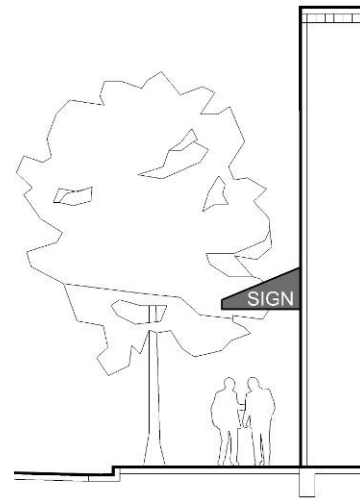


4) Awning Valance Sign.

#### 5. ***Awning Side Sign***

Awning Side Signs are signs applied to the side panel of an awning.

- a. Standards
  - i. The area of Awning Side Signs shall not count towards the total sign area permitted based on the Linear Frontage Ratio.
  - ii. Lettering for Awning Side Signs shall not exceed 12 inches in height with total sign area not to exceed 20 percent of the area of the awning side area.
  - iii. Awning Side Signs shall project no farther from the building than its associated awning.
  - iv. No portion of an Awning Side Sign shall be less than eight feet above the level of the walkway over which it projects.
- b. Commercial and Industrial Guidelines
  - i. Awning Side Signs shall consist of vinyl or paint applied directly to the awning.
  - ii. Awning Side Signs shall be illuminated by external illumination only.
  - iii. The shape, design, and color of awnings shall be carefully designed to coordinate with, and not dominate, the architectural style of the building. Where multiple awnings are used on the building, the design and color of the sign awnings shall be consistent with all other awnings.
  - iv. The use of temporary signs/letters on awnings is not allowed. Only permanent signs that are an integral part of the awning or canopy shall be used.
  - v. The use of adhesive/press on lettering is not allowed. Awning signs shall be painted directly on the canvas awning.
  - vi. To avoid having to replace awnings or paint out previous tenant signs when a new tenant moves in to a building, the use of replaceable valances shall be considered.

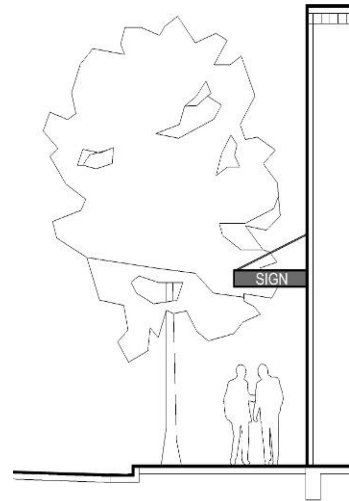


5) Awning Side Sign.

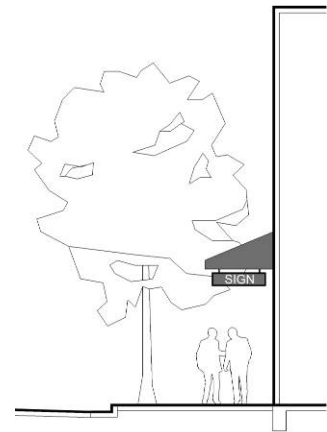
## 6. *Canopy Fascia Sign*

Canopy Fascia Signs are signs that are mounted to the front or side fascia of a canopy and contained completely within that fascia.

- a. Standards
  - i. The height of Canopy Fascia Signs shall not exceed two-thirds ( $2/3$ ) the height of the fascia or 12 inches, whichever is less.
  - ii. The width of Canopy Fascia Signs shall not exceed two-thirds ( $2/3$ ) of the canopy width.
  - iii. Canopy Fascia Signs shall project no farther from the building than its associated canopy.
  - iv. No portion of a Canopy Fascia Sign shall be less than eight feet above the level of the walkway over which it projects.
  - v. Canopy Fascia Signs shall consist of only one (1) line of lettering articulated as individual letters mounted directly to the canopy.
- b. Commercial and Industrial Guidelines
  - i. Materials used in Canopy Fascia Signs shall be metal and paint only.
  - ii. Canopy Fascia Signs shall be illuminated by external illumination only.



6) Canopy Fascia Sign.

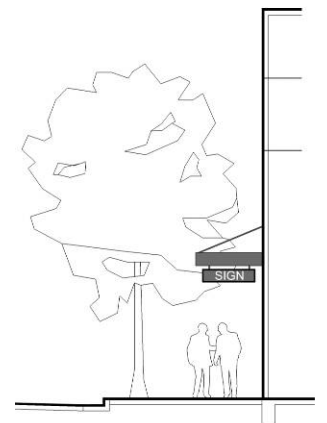


7) Under-Awning Sign.

## 7. *Under-Awning or Under-Canopy Sign*

Under-Awning or Under-Canopy Signs are signs that are suspended under an awning or canopy, perpendicular to the building facade.

- a. Standards
  - i. Under-Awning or Under-Canopy Signs shall be located adjacent to a public entrance.
  - ii. No more than one (1) Under-Awning or Under-Canopy Sign shall be permitted per establishment per façade.
  - iii. The area of Under-Awning or Under-Canopy Signs shall not count towards the total sign area permitted based on the Linear Frontage Ratio.
  - iv. Under-Awning or Under-Canopy Signs shall not exceed three (3) square feet in area.



7) Under-Canopy Sign.

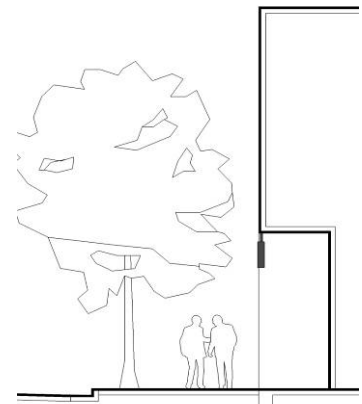


- v. Under-Awning or Under-Canopy Signs shall project no farther from the building than its associated awning or canopy.
- vi. No portion of an Under-Awning or Under-Canopy Sign shall be less than eight feet above the level of the walkway over which it projects.
- b. Commercial Guidelines
  - i. Materials used in Under-Awning or Under-Canopy Signs shall be wood, metal, and paint only.
  - ii. Under-Awning or Under-Canopy Signs shall be illuminated by external illumination only.
- c. Industrial Guidelines
  - i. Materials used in Under-Awning or Under-Canopy Signs shall be metal and paint only.
  - ii. Under-Awning or Under-Canopy Signs shall be illuminated by external illumination only.

#### **8. Recessed Entry Sign**

Recessed Entry Signs are signs that are oriented parallel to the building façade and that are suspended over a recessed entry.

- a. Standards
  - i. No Recessed Entry Sign shall exceed twenty (20) square feet in size.
  - ii. Recessed Entry Signs shall not project beyond the façade of the building.
  - iii. No portion of a Recessed Entry Sign shall be lower than eight feet above the level of the walkway.
- b. Commercial Guidelines
  - i. Materials used in Recessed Entry Signs shall be wood, metal, and paint only.
  - ii. Recessed Entry Signs shall be illuminated by external illumination only.
- c. Industrial Guidelines
  - i. Materials used in Recessed Entry Signs shall be metal and paint only.
  - ii. Recessed Entry Signs shall be illuminated by external illumination only.



8) Recessed Entry Sign-Section View.



8) Recessed Entry Sign-Elevation View.

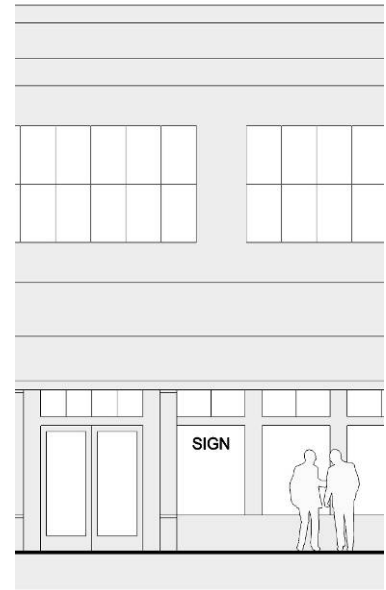
## 9. Window Sign

Window Signs are signs that are applied directly to a window or mounted or suspended directly behind a window.

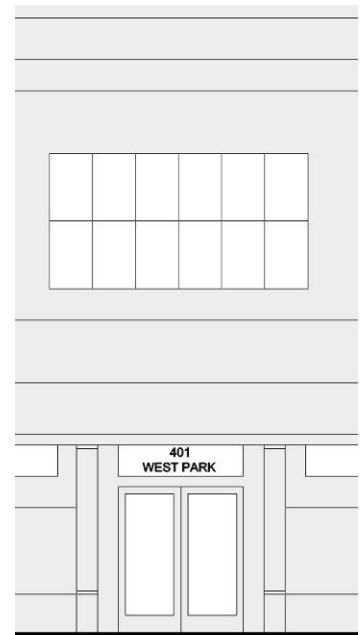
- a. Standards
  - i. Window Signs shall be permitted on windows below the second floor level only. A Window Sign that only identifies a building shall be located on a transom window above a primary entrance, or the glazed area of primary door.
  - ii. Window signs shall count towards total sign area permitted based on the Linear Frontage Ratio, except that the area of a Window Sign that only identifies a building shall not count towards the total sign area permitted based on the Linear Frontage Ratio. One (1) Window Sign that only identifies a building shall be permitted per building per street-facing façade.
  - iii. No more than 25 percent of any individual window area shall be covered or otherwise occupied by signage.
  - iv. The letter height of each Window Sign shall not exceed 12 inches and shall be taller than four inches.
- b. Commercial and Industrial Guidelines
  - i. Ground-floor Window Signs shall consist of vinyl or paint applied to the glass, neon mounted or suspended behind the glass, or framed and mounted paper signs. Window Signs that only identify a building shall consist of vinyl or paint applied to the glass only.
  - ii. Ground floor Window Signs shall not be illuminated.

## 10. Temporary Window Sign

Temporary Window Signs are signs that are applied directly to a window or mounted or suspended directly behind a window and are designed, constructed, and intended for display on private property for a period of not more than 90 consecutive days per year. Examples include “grand opening”, “special sale,” and seasonal signage.



9) Window Sign – Business Identification.



9) Window Sign – Building Identification.

a. Standards

- i. Temporary Window Signs shall be located only on ground floor windows on building facades that face a public street or a parking lot.
- ii. Temporary Window Signs shall not exceed six square feet in size.
- iii. Temporary Window Signs shall not cause the total amount of the window area covered with signage to exceed 25 percent.
- iv. Temporary Window Signs that satisfy the above standards and General Standards do not require a permit.

b. Commercial and Industrial Guidelines

- i. Temporary Window Signs shall be constructed of paint applied directly to the glass or framed paper signs placed behind the glass.
- ii. Temporary Window Signs shall not be illuminated.
- iii. Temporary Window Signs that satisfy the above guidelines and General Guidelines do not require a permit.



10) Temporary Window Sign.

**11. Temporary Wall Sign**

Temporary Wall Signs are signs that are located on, and parallel to, a building wall and are designed, constructed, and intended for display on private property for a period of not more than ninety (90) consecutive days per year. Examples include "grand opening", "special sale," and seasonal temporary banner signage.

a. Standards

- i. Temporary Wall Signs shall only be mounted on a wall area below the second floor level that faces a public street or a parking lot.
- ii. A maximum of one (1) Temporary Wall Sign is allowed per establishment.
- iii. No Temporary Wall Signs shall exceed 32 square feet in area.
- iv. Temporary Wall Signs shall project no more than one (1) foot from the façade of the building.



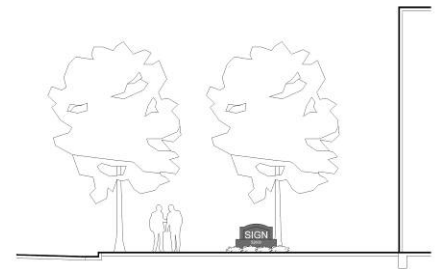
11) Temporary Wall Sign.

- b. Commercial and Industrial Guidelines
  - i. Materials used in Temporary Wall Signs shall consist of a flexible vinyl material with grommet holes installed around the edges to accommodate attachment to a building.
  - ii. Temporary Wall Signs shall not be illuminated.

## 12. Monument Sign

A Monument Sign is a freestanding sign supported by a solid architectural element at its base.

- a. Standards
  - i. A maximum of one Monument Sign is allowed per street frontage for single-purpose buildings, multi-tenant buildings or complexes and shopping centers on a -parcel with one or more street frontages of at least 100 feet.
  - ii. A Monument Sign shall not exceed eight feet in length or six feet in height.
  - iii. Monument Signs shall be placed perpendicular or parallel to the street. The base of a Monument Sign shall be set back a minimum of five feet from any public right-of-way or interior property line; a minimum of 10 feet from the edge of a driveway; and a minimum of 50 feet and from any Monument Signs or Pylon Signs on adjoining sites. Monument Signs shall not block sight lines at entry driveways and circulation aisles.
  - iv. The sign copy for a Monument Sign shall only identify the name of the center, complex, or building and the address; however, the name of the primary tenant, if any, may be included in the copy. The minimum letter size allowed shall be six inches. Sign copy shall not be located closer than one half-letter height to the sign edge or other line of copy. Between 5 to 10 percent of the sign area should be dedicated to identification of the street address.
  - v. The area of Monument Signs shall not count towards the total sign area permitted based upon Linear Frontage.
  - vi. Monument Signs shall not project over any on-site driveway or vehicle circulation area.
  - vii. Landscaping with automatic irrigation shall be provided at the base of the supporting structure equal to twice the area of one face of the sign or 75 square feet, whichever is greater. For example, 40 sq. ft. of sign area = 80 sq. ft. of landscaped area.



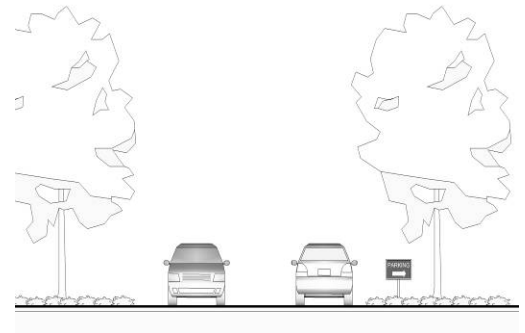
12) Monument Sign.

- b. Commercial and Industrial Guidelines
  - i. Monument Signs may be illuminated, however the sign copy should be the only portion of the sign face that is illuminated. The sign background or field shall be opaque with a nonglossy, nonreflective finish.
  - ii. The sign area and height of the sign shall be in proportion to the site and surrounding buildings. Signs shall not be overly large so as to be a dominant feature of the site.
  - iii. Monument Signs shall incorporate architectural elements, details, and articulation as follows:
    - Provide a solid architectural base that supports the sign. The base shall be a minimum of one-foot in height.
    - Provide architectural elements on the sides and top to frame the sign pane(s). Use columns, pilasters, cornices, and similar details to provide design interest.
    - Incorporate materials and colors into the sign support structures to match or be compatible with materials and colors of the development the sign serves so it does not appear out of scale with its adjacent building(s).
    - Keep the overall size of the sign in proportion with the development it serves so it does not appear out of scale with its adjacent building(s).

### **13. Directional Sign**

A Directional Sign is an on-premise sign giving directions, instructions, or facility information of an establishment (e.g., parking signs, exit and entrance signs, etc.).

- a. Standards
  - i. One (1) directional sign for each vehicle entry to a site with a maximum area of three square feet per sign. Maximum sign height shall be four feet. Additional directional signs may be allowed with approval of a Comprehensive Sign Program.



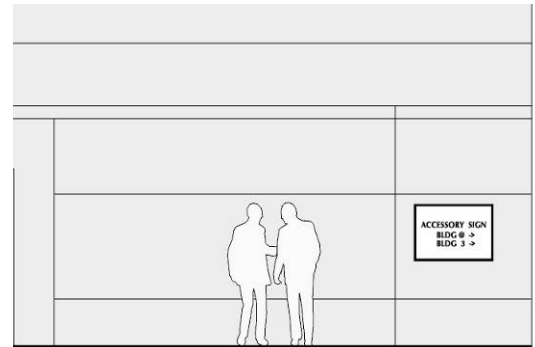
13) Directional Sign.

- b. Commercial and Industrial Guidelines
  - i. Directional signs and their supports shall use the same color palette of the proposed building.
  - ii. Directional signs shall be located to maintain sight lines along major circulation routes and shall be illuminated for visual clarity and safety.
  - iii. Directional signs shall be designed with easy-to-read fonts, contrasting colors from the surrounding support panels, and durable materials.
  - iv. Double-sided parking directional signs shall incorporate messaging and direction arrows on both sides of sign.
  - v. Parking directional signage shall be used consistently throughout each individual development.

#### 14. Accessory Signs

Accessory Signs are signs that provide incidental information about a project site or a business and its goods or services. For the purposes of this plan, Accessory Signs include:

- Directory Sign. A sign listing the tenants or occupants of a building or building complex.
- Nameplate Sign. A sign indicating the name and/or address of a building or occupant.
- Restaurant Menu Sign. Menus displayed on the exterior premises of a restaurant.



14) Accessory Sign.

- a. Standards
  - i. The area of Accessory Signs shall not count towards the total sign area permitted based upon Linear Frontage.
  - ii. Directory Signs: Limited to a total sign area of 10 square feet.
  - iii. Nameplate Sign: One non-illuminated sign not to exceed one square foot in area.
- b. Commercial and Industrial Guidelines
  - i. Materials used in Accessory Signs shall be wood and metal.
  - ii. Accessory Signs shall be illuminated by internal or external illumination as appropriate.

### **11.8 Public Right-of-Way Streetscape**

This section establishes standards for streetscape landscaping improvements within the public rights-of-way along the major highways, primary highways, and secondary highways as identified in the General Plan, Circulation Master Plan, as well as district gateway/intersection enhancements. The intent of these streetscape improvement concepts and gateway enhancements is to provide a “sense of place” or identity, while interweaving the standards and tree palettes that may be provided by any overriding City Master Street Tree Plan.

#### **A. Street Classifications**

Streets within the SWD are classified as follows:

1. Major highways:
  - a. Six-lane major highway – Cherry Avenue.
  - b. Modified six-lane residential adjacent major highway – none within SWD.
  - c. Modified six-lane no median major highways – none within SWD.
  - d. Eight-lane major highways – none within SWD.
2. Primary highways – Mulberry Avenue and Slover Avenue.
3. Secondary highways – Santa Ana Avenue.
4. Collector streets – Almond Avenue, Banana Avenue, and Calabash Avenue.

#### **B. General Design Guidelines**

1. Landscaping should be used to accentuate and frame important view corridors.
2. Landscaping shall employ a common three-tiered approach to design:
  - a. Trees
  - b. Shrubs, vines and tall grass-like materials
  - c. Groundcovers (does not include turf)
3. Landscaping should be consistent and accentuated along arterial corridors and gateway intersections to emphasize district areas.
4. Street trees on major highways and primary highways shall consist of on-center planting of deciduous trees in medians (whenever medians are required) and evergreen trees in parkways to provide seasonal variations of views during fall and winter months (clearer air and snow-capped peaks).
5. Secondary highways shall provide single species of evergreen trees planted in parkways.

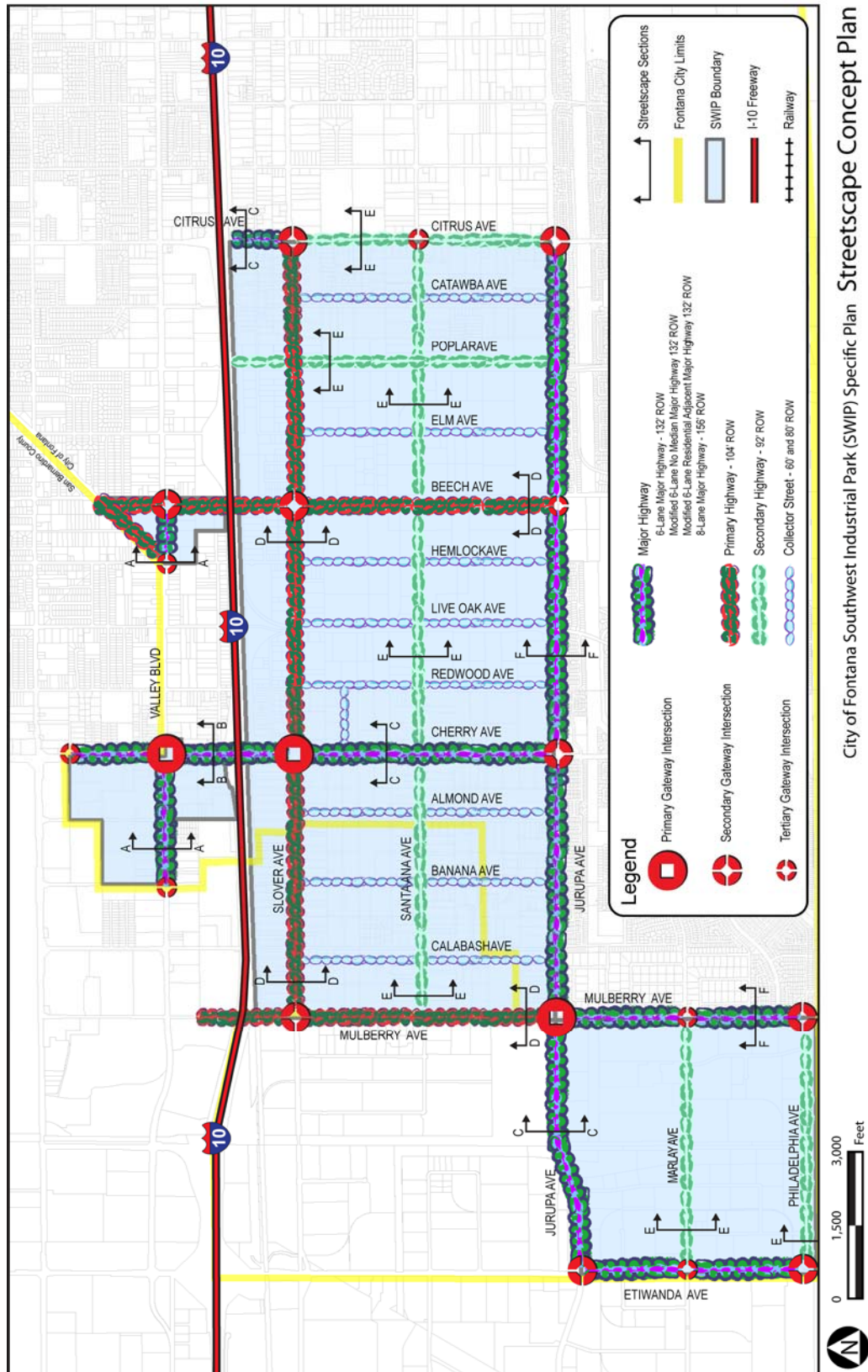


6. Gateway intersection enhancements should incorporate the adjacent property tree species (used in buffer setback) in order to provide background and screening, and be enhanced with accent trees selected for their character and shape.
7. Primary and secondary gateways will include thematic monumentation for district identification and reflect elements of local identity (i.e. river rock, concrete, City logo, etc.).
8. All gateway intersection enhancements shall incorporate decorative paving at corner areas and plant materials that promote the best of water-efficient landscaping.

### **C. Streetscape Concept**

The Streetscape Concept Plan for the entire Specific Plan area is shown on Exhibit 11.4. The plan identifies major, primary, and secondary highways, as well as collector streets and the gateway intersections within the Specific Plan area. Roadway classifications are consistent with the General Plan, Circulation Master Plan.

1. **Major Highway Streetscape.** Major highway streetscapes define the image of the City and its districts, while providing arterial linkages within and beyond the City. There are four streetscape concepts for major highways: Six-Lane Major Highway, Modified Six Lane No Median Major Highway, Modified Six Lane Residential Adjacent Major Highway, and Eight-Lane Major Highway. These major highway streetscapes are designed in response to special design needs, right-of-way, and adjacencies. The only major highway within the SWD is Cherry Avenue. A streetscape cross-section is shown in Exhibit 11-6.
2. **Primary/Secondary Streetscape.** Primary/Secondary highway streetscapes define the areas within the Specific Plan and its districts, and connect to the major thoroughfares throughout the City. Primary highways within the SWD are Mulberry Avenue and Slover Avenue. The only secondary highway in the SWD is Santa Ana Avenue. Streetscape cross-sections for these streets are shown in Exhibits 11-7 and 11-8.



City of Fontana Southwest Industrial Park (SWIP) Specific Plan Streetscape Concept Plan

Exhibit 11-5 – Streetscape Concept Plan

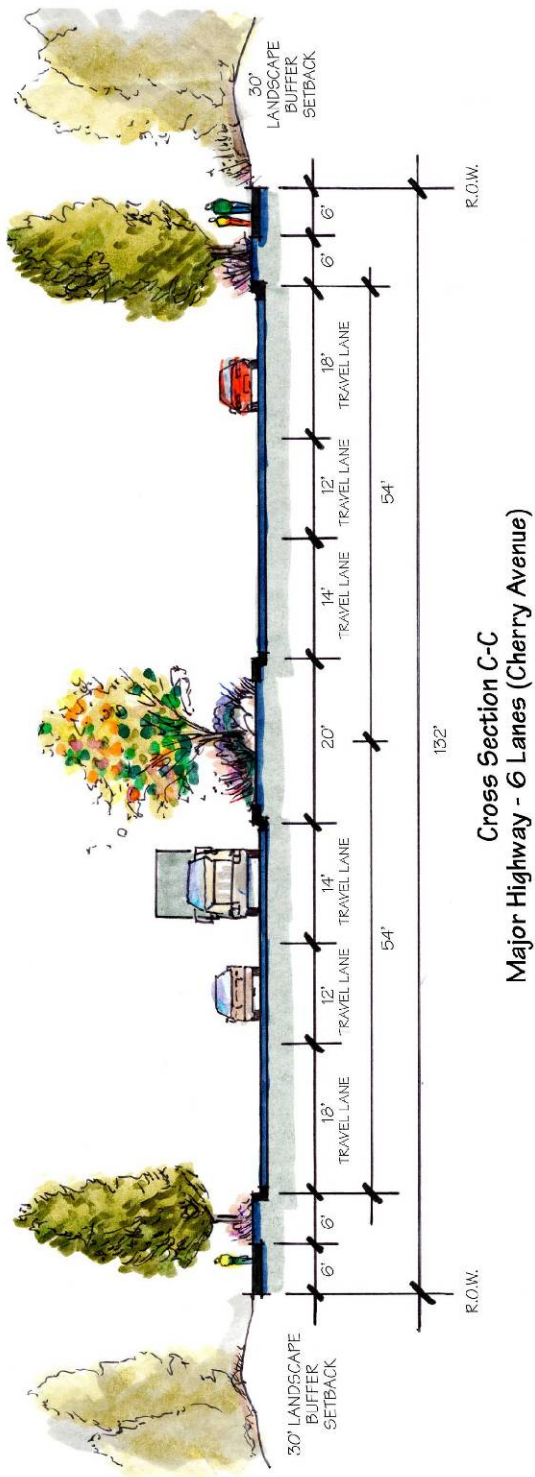


Exhibit 11-6 – Major Highway – 6 Lanes – Cross Section C-C (Cherry Avenue)

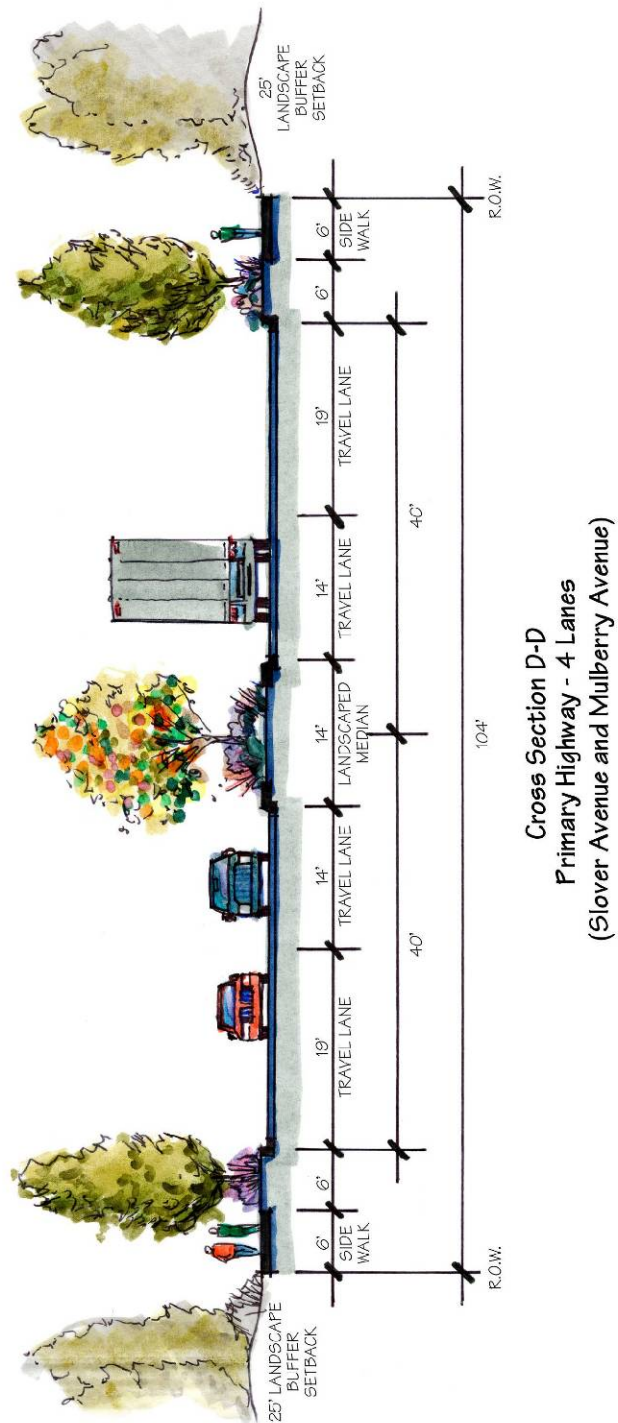
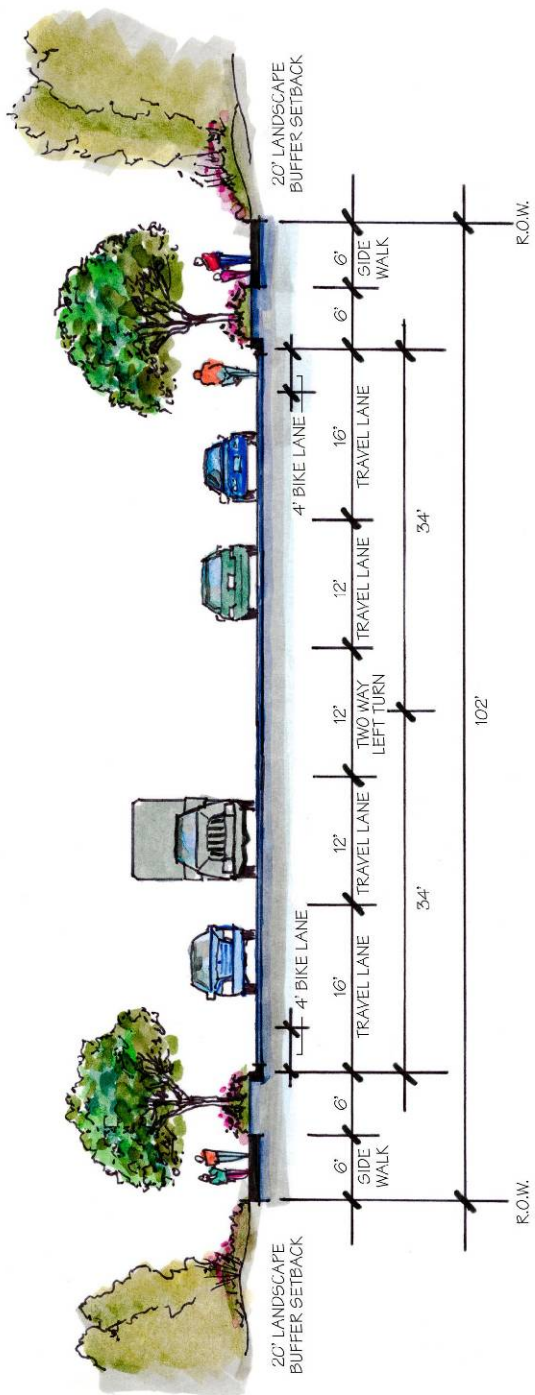


Exhibit 11-7 – Primary Highway – 4 Lanes – Cross Section D-D (Mulberry Avenue and Slover Avenue)



Cross Section E-E  
Secondary Highway - 4 Lanes (Santa Ana Avenue)  
\*Santa Ana Avenue will have bike lanes.

Exhibit 11.8 – Secondary Highway – 4 Lanes – Cross Section E-E (Santa Ana Avenue)

### **3. Gateways**

#### **A. Concept Plan**

The Streetscape Concept Plan Exhibit 11-4 identifies a hierarchy of primary, secondary, and tertiary gateways. The intent of the gateway intersection enhancements is to provide a visual statement that you are within the Specific Plan area.

The gateway intersection enhancements should all incorporate uniform treatments (to varying degrees) within expanded corner setback areas (45 degree diagonal ROW). Depending on the hierarchy level, each gateway shall include special corner/sidewalk paving, planting schemes that highlight drought tolerant species, and monumentation signage. Monument signs are optional on tertiary gateway intersections.

Each corner planting scheme shall incorporate the three-tiered planting concept, consisting of accent trees, shrubs, or tall grass-like plant material, and a ground cover. Dense planting of evergreen tree species consistent with adjacent buffer setback plantings shall provide a background/screen for each corner setback area.

Gateway conceptual designs with typical dimensions (plan views) are illustrated in Exhibits 11-11-9, and 11-10. The monument sign concept as it would appear in front of the planting treatment is illustrated in Exhibit 11-11.

Gateway enhancements and monument sign enhancements shall meet the City's line of sight regulations, as determined by the City Engineer. Dimensions of monument signs shall comply with Section 11.6.D.12.

#### **B. Dedication and Maintenance of Gateway Intersection Enhancements**

1. When dedication and maintenance is required.
  - a. Whenever a development project is proposed on land that is designated as a location for gateway intersection enhancements in Section 6.8.B Public Right-of-Way Streetscape-Gateways, the developer shall:
    - i. Dedicate any necessary right-of-way area to the City or provide an easement in favor of the City for the installation of gateway intersection enhancements;
    - ii. Construct the gateway intersection enhancements to the standards indicated in Section 6.8., Public Right-of-Way Streetscape; and
    - iii. Enter into an agreement with the City that specifies perpetual maintenance.
  - b. The applicable review authority shall impose the dedication (or easement) requirement as a condition of project approval.
  - c. The City Attorney and the Director of Community Development shall approve the form and content of any dedication or easement instrument used to ensure

the installation and perpetual maintenance of the gateway intersection enhancements.



## Southwest Industrial Park Specific Plan

Slover West Industrial District

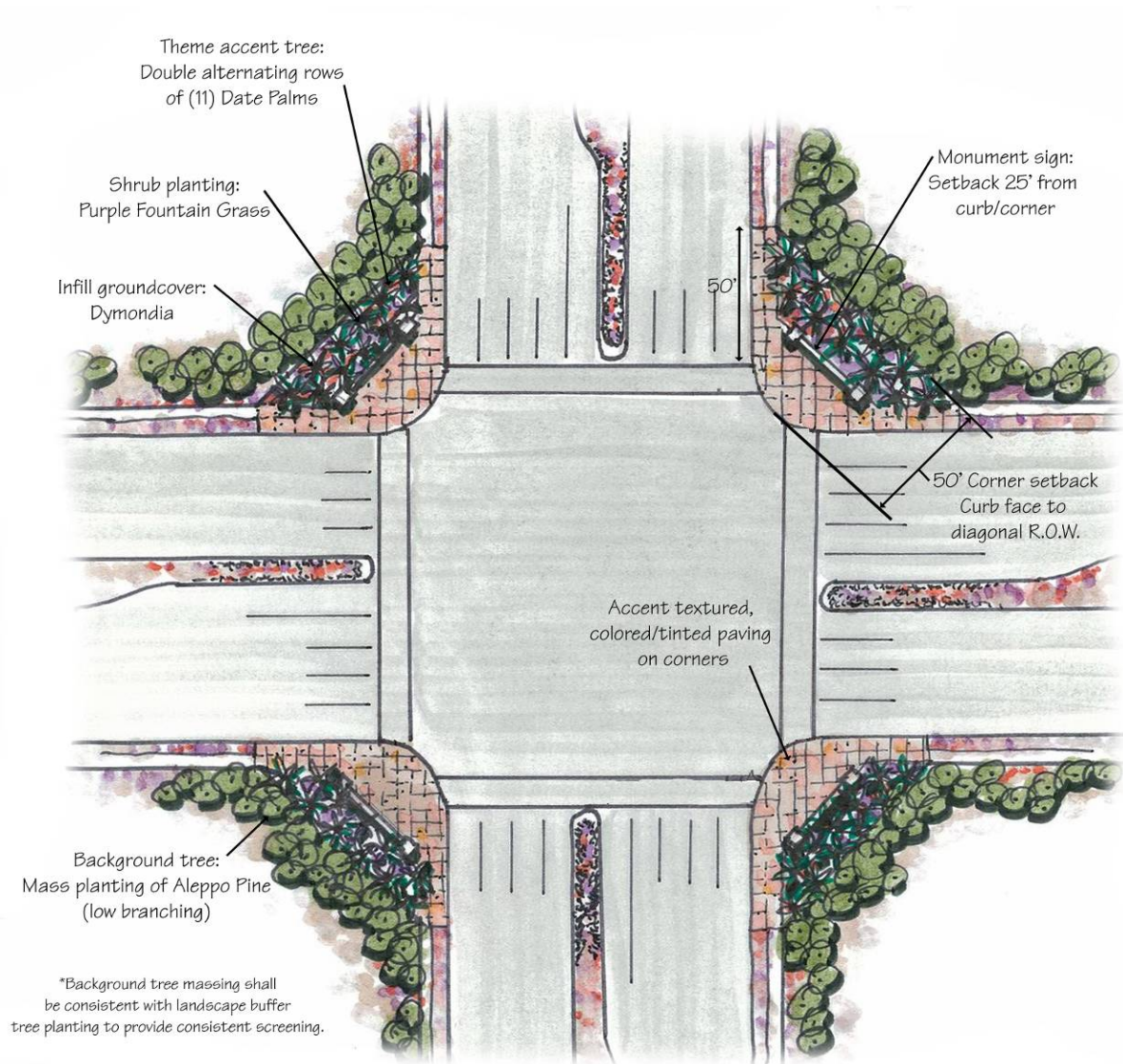


Exhibit 11-9 – Primary Gateway Intersection Enhancement Concept

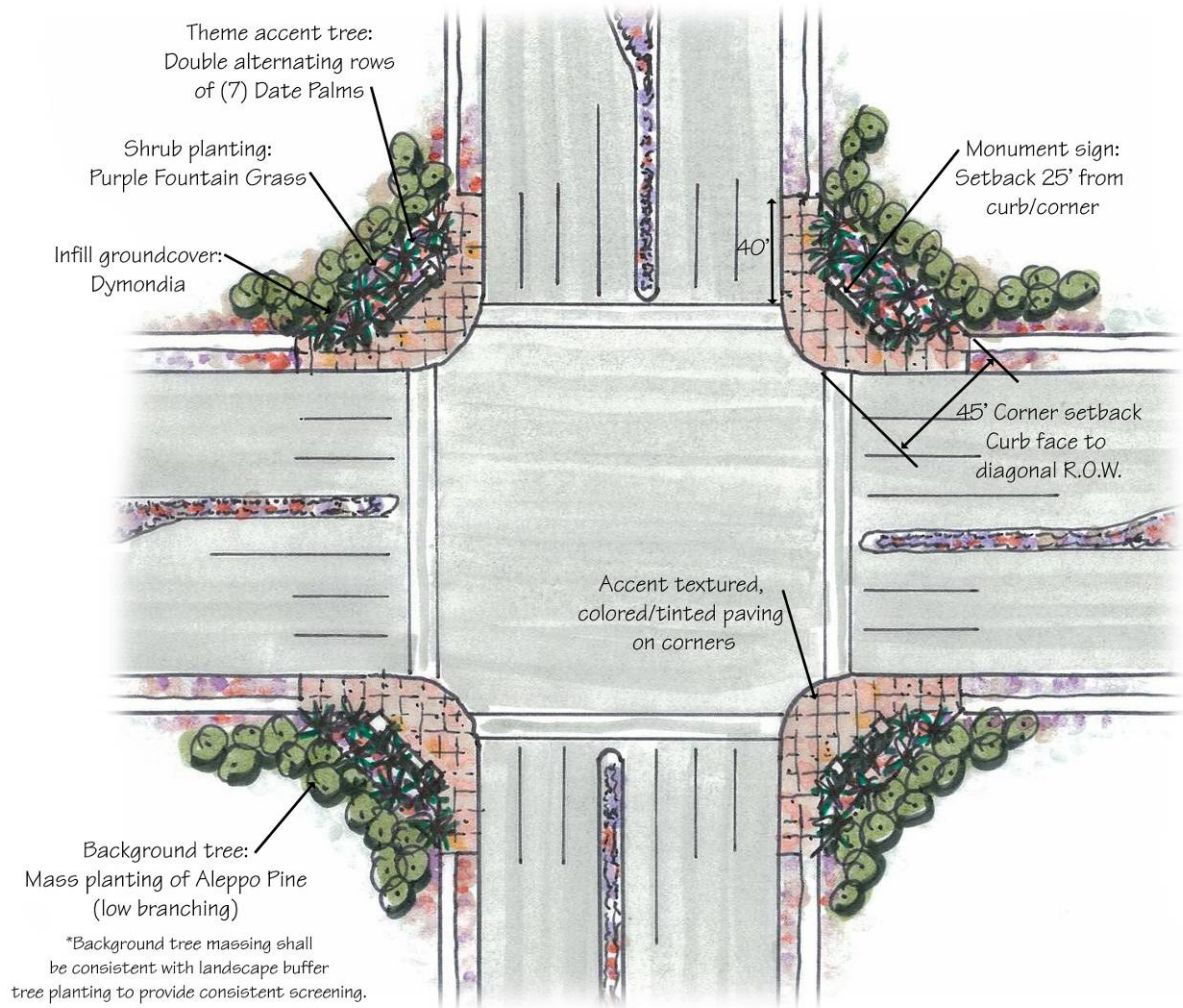


Exhibit 11-10 – Secondary Gateway Intersection Enhancement Concept

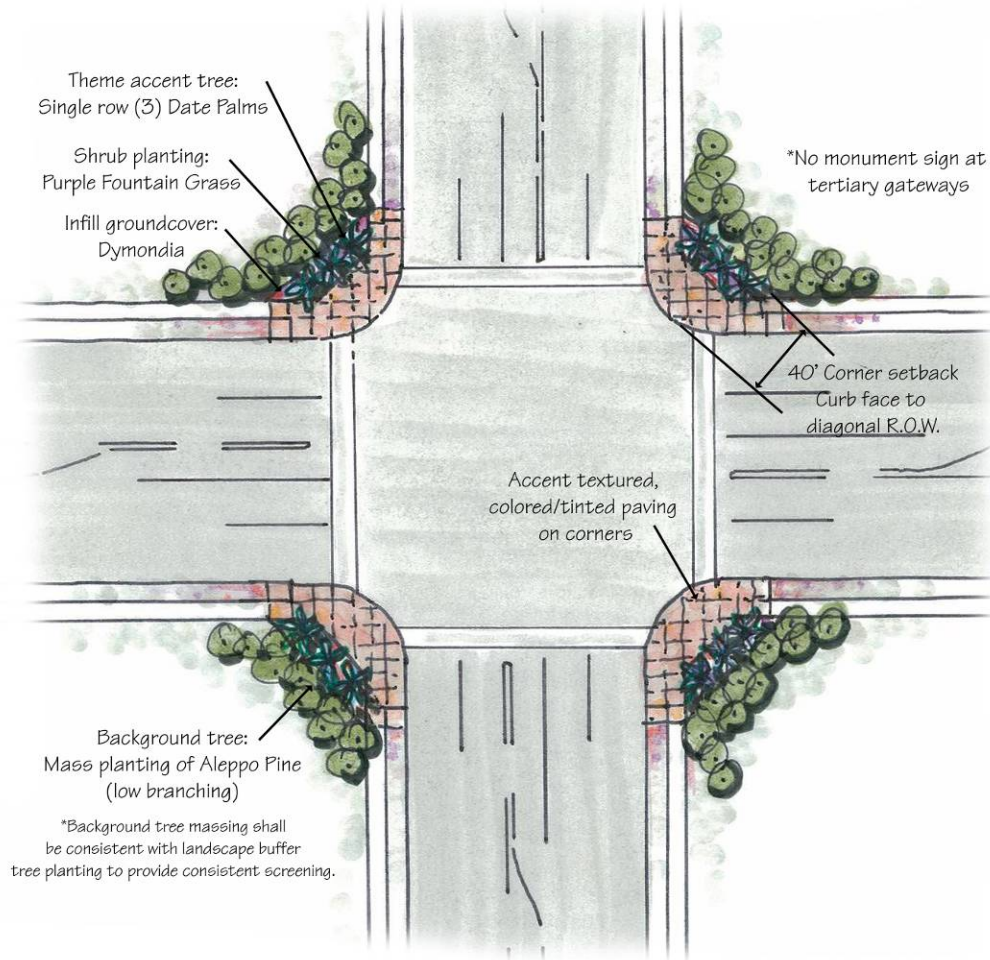


Exhibit 11-11 – Tertiary Gateway Intersection Enhancement Concept



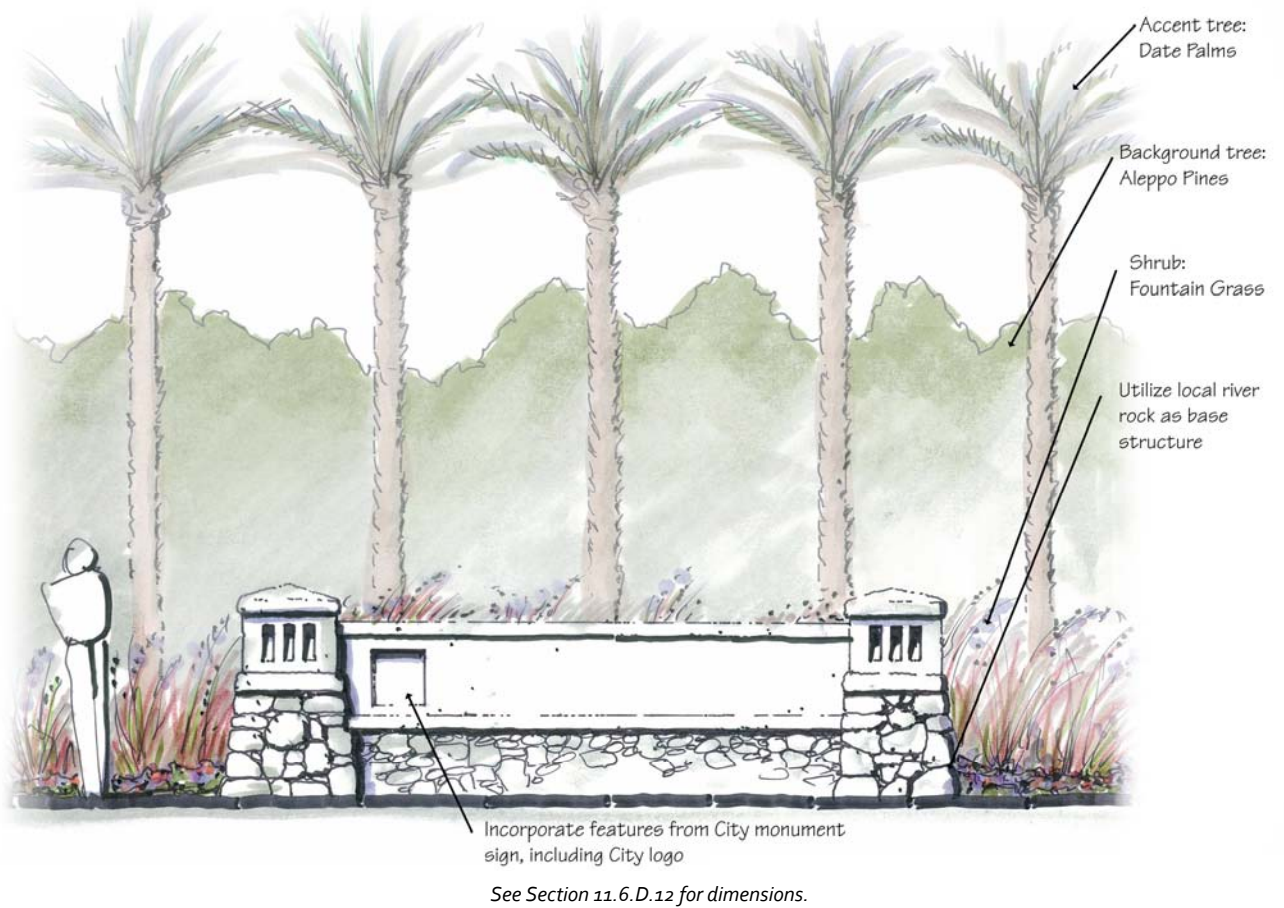


Exhibit 11-12 – Monument Sign Concept

4. Street Furniture. Exhibit 11-12 – Street Furniture Palette identifies recommended street furniture components, including lighting, trash receptacles, and benches, for the district. The palette is intended to ensure a unified visual identity for the district, which is distinct from the other districts within the Specific Plan area.



**Wall/building lighting  
Domus Series Lighting  
by Phillips Lumec  
DMS 55 - SG**



**Pole/pedestrian and parking lot lighting**



**Chase Park Series trash receptacle and bench  
by Landscape Forms**



**Exhibit 11-13 – Street Furniture Palette**

### ***11.9 Design Guidelines***

#### ***A. Design Objectives***

The Design Guidelines will promote and reinforce the City's commitment to high quality development. In general, the guidelines are intended to ensure that development preserves or improves the positive characteristics of the City's image. The objectives of these guidelines are to:

- Promote orderly development by implementing the SWIP Specific Plan objectives, policies, and principles found in Chapter 2 Policy Framework.
- Protect and enhance property values by ensuring that development fits properly within the context of its surroundings and does not negatively impact adjacent uses.
- Encourage individual creativity and innovative solutions by allowing flexibility in how a particular guideline is met as long as the intent of the guideline is achieved.
- Ensure functional pedestrian and motor vehicle circulation within a project and convenient pedestrian linkages to and from adjacent residential, commercial, industrial, and school areas.

#### ***B. Design Intent***

The design intent of the SWD is to provide for high-quality industrial, warehousing and logistics developments that utilize innovative architectural and site design. Important considerations in design of development within the SWD are the interface with adjacent commercial and residential areas balanced with the functional needs of the uses within the district.

#### ***C. Industrial, Distribution, and Business Park Uses***

The design guidelines in this Subsection shall apply to all industrial, distribution, and business park development within this land use district.

## 1. Site Design

### Site Layout

- The arrangement of multiple buildings and associated circulation, and parking areas should reflect a well-organized site plan that emphasizes pedestrian connectivity and landscaped areas responsive to the public realm.
- Site development may utilize variations on building placement and landscaping adjacent to the public street. Appropriate configurations may include, but are not limited to the following:
  - Fully landscaped setback between building and street.
  - Parking in front of building with a landscape buffer between parking and street. **See Figure 1.**



Figure 1. Appropriate building and landscape placement adjacent to public street.

- Visitor parking may be located at the front of the building adjacent to the main entry while employee parking and service areas are located at the sides and rear of the building. **See Figure 2.**

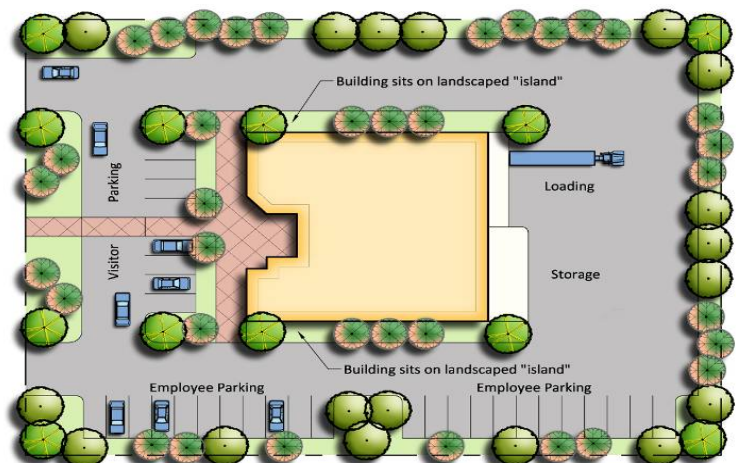


Figure 2. Parking layout.



- Service and loading should not be located on building side(s) adjacent to a public street.
- When buildings abut residential properties, parking and loading areas shall be located at the side of the building instead of the rear. The rear setback area shall be fully landscaped. **See Figure 3.**
- The design and location of accessory buildings (e.g., security kiosks, maintenance buildings, and outdoor equipment enclosures) shall be incorporated into and be compatible with the overall design of the project and the main buildings on the site.
- With the exception of security kiosks, accessory buildings shall be located as far back from the front and street side setback area as possible.
- Sea/train-type metal is prohibited.
- Noise generating activities and storage areas shall be located as far as possible from adjacent properties, especially residential zones. Sound attenuation walls shall be used where appropriate to reduce noise.
- Outdoor storage, work, and loading areas shall be incorporated within the building design and located to the rear or side of buildings and screened from view from adjacent public streets. **See Figure 4.**



Figure 3. Fully landscaped setback adjacent to residential.

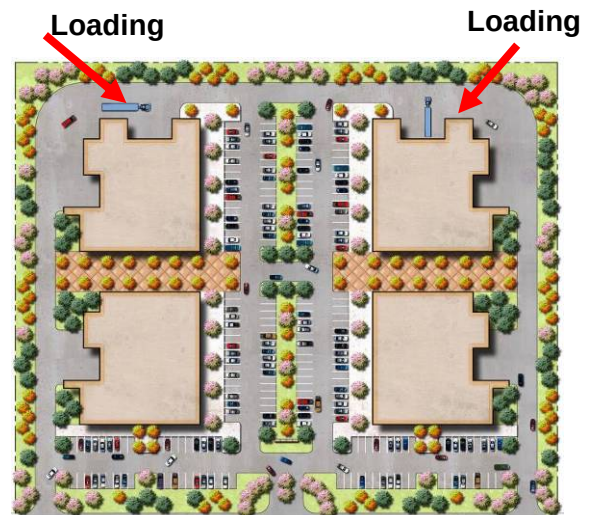


Figure 4. Appropriate location of loading areas.

### Courtyards and Plazas

- Buildings should be arranged to create opportunities for open space amenities (e.g., plazas, courtyards, outdoor eating areas, recreation areas, etc.).
- Business park development should provide recreational facilities (e.g., bicycle paths, tennis courts, volleyball courts, gymnasiums, etc.).

## 2. Building Orientation

- Multiple building developments should be oriented in a manner that will form gateways through facade enhancement, maximize public view, and capture public interest along adjacent major streets. **See Figure 5.**
- The organization of buildings, parking areas, and landscaping shall recognize the existing characteristics of the site and shall relate to the surrounding development in scale and character.
- Buildings should generally be placed at or near setback lines with development oriented in a manner that will provide visual interest. **See Figure 6.**
- Buildings should be oriented in a manner that takes advantage of passive solar design.
- Buildings shall be oriented to provide a buffer between sensitive uses (i.e. residential, parks, etc.) and outdoor work areas, loading and storage.



Figure 5. Buildings are oriented to create gateway into development.



Figure 6. Buildings are oriented to provide architectural features visible from the public right-of-way.

## 3. Site Elements

### Fences and Walls

- Walls and fencing materials shall consist of wrought iron, tubular steel, stone, stucco, or brick, and shall be compatible with the overall design character/style of the development. The use of chain-link fence material is not allowed if visible from the public right-of-way. **See Figure 7.**
- Walls and fences shall be integrated with landscaping along the base of the wall or fence.



Figure 7. Tubular steel and stone pillars are appropriate fencing materials.

- Wall heights and surfaces shall be articulated with varying facade depths or pilasters to promote architectural interest, and shall include a cap along the top of the wall. **See Figure 8.**
- Landscaping shall be used in combination with walls and fences to visually soften blank surfaces and to deter graffiti. **See Figure 8.**

### Screening

- Loading bays and service areas shall be screened by building placement, decorative walls or landscaping to the fullest extent feasible so that views of loading areas are minimized from adjacent public streets. **See Figure 9.**
- Trash storage enclosures and outdoor mechanical equipment shall be screened from public view.
- Roof-mounted equipment shall be screened from public view through use of parapet walls or other screening devices. Special consideration shall be given to the screening of roof-mounted equipment on building rooftops that are visible from public view. **See Figure 10.**

### Trash Enclosures

- Trash enclosures shall be incorporated as part of the building design.
- If trash enclosures cannot be located out of public view, the design of trash storage areas shall incorporate architectural screening elements and landscaping compatible with the design of buildings and landscaping on the site. **See Figure 11.**



Figure 8. Wall is articulated with pillars and incorporates landscaping at the base and vines to deter graffiti.

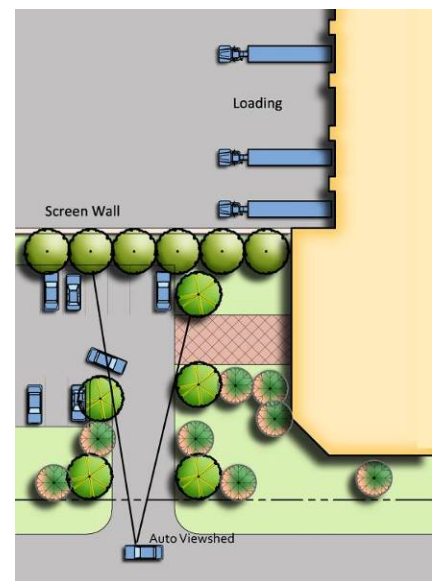


Figure 9. Appropriate placement, orientation and screening of service areas.

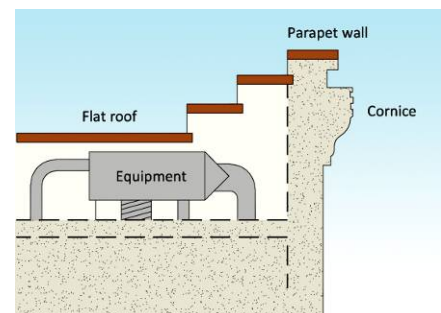


Figure 10. Screening of roof mounted equipment.

- Trash enclosures shall integrate horizontal screening such as trellises. **See Figure 11.**

### Lighting

- Outdoor lighting plans shall take into consideration the location and potential growth pattern of nearby trees (existing and planned) so that appropriate lighting levels are maintained over time.
- Energy efficiency shall be considered through use of proper light location and placement, as well as use of energy-efficient bulbs or fixtures.
- Lighting fixtures shall include hoods or other design techniques to reduce glare and light pollution, especially along major streets and adjacent to residential zones, and to prevent light spillover onto adjacent properties. **See Figure 12.**
- Lighting shall be provided in project entryways, walkways, parking lots, and plazas or courtyards to promote safety. **See Figure 13.**
- Lighting may be mounted on poles or bollards, affixed to building walls, or placed within paved or landscaped areas. Appropriate materials and construction methods shall be used to ensure proper function of project lighting fixtures.
- Decorative light fixtures shall be consistent with the architectural design of the building. **See Figure 14.**
- Truck and truck trailer storage areas shall incorporate lighting to increase real and perceived security.



Figure 11. Trash enclosures with architectural screening elements.



Figure 12. Hooded light fixture directs light downward.



Figure 13. Bollard lighting along pedestrian walkway.



Figure 14. Decorative light fixtures.



#### 4. Parking and Access

##### Parking

- Parking lots shall not be the dominant visual element on the site.
- Parking lots adjacent to and visible from public streets shall be appropriately screened to minimize undesirable visual impacts. **See Figure 15.**
- Surface parking areas shall integrate trees and landscape improvements to reduce the heat island effect. **See Figure 15.**

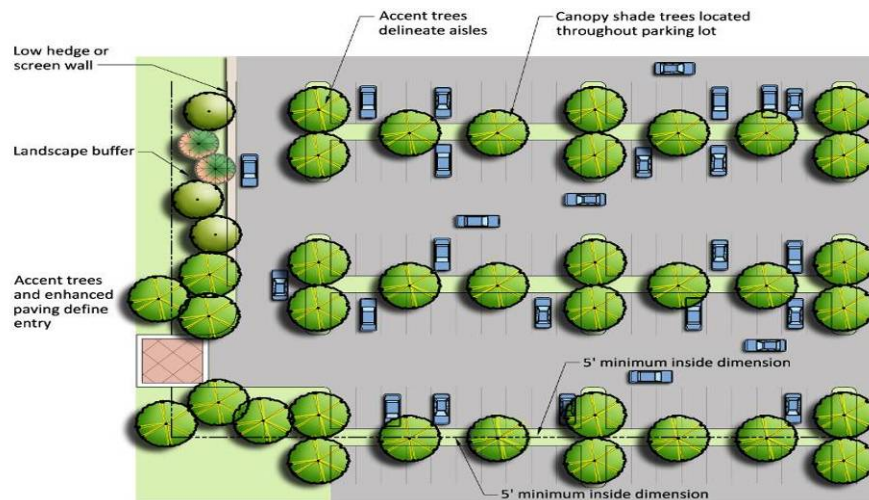


Figure 15. Parking lot landscaping.

- Large parking lots (usually over 100 spaces) shall be divided into multiple, smaller areas and provided with canopy trees located throughout the parking area to reduce the effects of heat and the visual impacts of large parking areas.
- Employee parking areas should be located behind the building or alongside the building so as not to be visible from adjacent streets.
- Internal vehicular and pedestrian circulation within a development involving multiple buildings or lots shall interconnect in an obvious and consistent manner. **See Figure 16.**

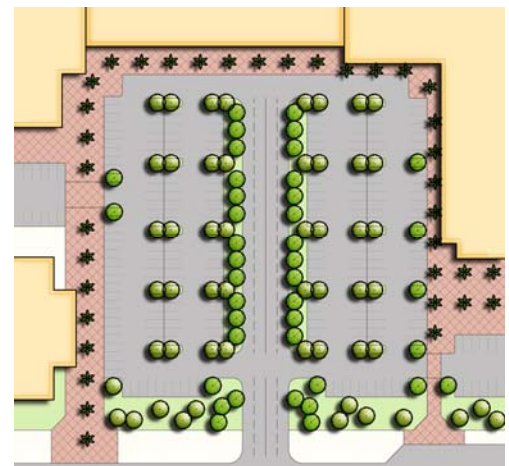


Figure 16. Pedestrian circulation is consistent along perimeter of parking lot.

- Parking shall be provided within walking distance of all tenants and public sidewalks.
- Parking lot design shall include water quality stormwater facilities consistent with City standards. **See Figure 17.**

### Access

- The use of common (shared) access points and driveways is encouraged; placement of vehicle access points close to building entries shall be avoided to minimize pedestrian and vehicular conflicts. **See Figure 18.**

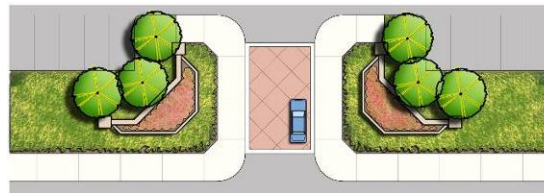


Figure 17. On-site stormwater capture system.



Figure 18. Shared parking access.

- Entry drives shall be clearly marked by special features, (e.g., enhanced paving, prominent landscape features, low-level decorative walls, and well-designed monument-type signs). **See Figure 19.**
- Access to each development site shall be clearly visible to pedestrians and motorists.
- Service and loading areas should take access from shared access points to reduce curb cuts along streets.



Enhance project entries with landscaping and special paving for visual impact.

Figure 19. Entry drive.

## 5. Architecture

### Mass and Scale

- The mass and scale of the buildings shall respect the visual and physical relationship to the adjacent buildings and surrounding sensitive uses. Taller building elements should be placed towards the center of the site, with lower elements adjacent to surrounding properties.
- Buildings should be stepped back when adjacent to or in close proximity to sensitive uses..
- Vertical and horizontal offsets shall be provided to reduce the visual bulk of the building. **See Figure 20.**

### Building Facades

- Building facades shall incorporate architectural elements such as windows, pillars, wall plane breaks to minimize blank walls and to create visual interest. **See Figure 21.**
- All building elevations, whether front, side, or rear shall be architecturally detailed.
- Architectural accents (e.g., cornices, tiles, trim around windows, grooves in building faces, accent band details, bulkheads, etc.) shall be used to create variation along building facades. **See Figure 22.**
- Higher facades and rooftops should be incorporated at corners and intersections, and appropriate massing and scale shall be considered for the remainder of the building spanning public street frontage. **See Figure 23.**



Figure 20. Incorporation of vertical offsets and material changes.



Figure 21. Façade articulation.



Figure 22. Use of cornices, window trim and grooves.



Figure 23. Enhanced corner elements.



- The orientation of windows in buildings adjacent to residential zones shall preclude a direct line of sight into residential properties.
- Primary building entries shall be easily identified through the use of prominent architectural elements, signage, landscaping, lighting, canopies, roof form, hardscape, architectural projections, columns, vertical elements, or other design features that help emphasize a building's entry. **See Figure 24.**



Figure 24. Articulated Entries.

- Roofs shall be designed as an integral component of building form, mass, and facade. Building form should be enhanced by sloped or offset roof planes, eave heights, and rooflines. **See Figure 25.**
- Locate and/or screen rooftop equipment so that it is not visible from the street. Rooftop screening shall be integral to the building's form.

### Color and Materials

- Colors and materials for all structures on-site should consist of earth tones. Use of at least two to three different colors, materials or textures is encouraged.
- Building materials shall be durable and able to withstand long-term exposure to the elements.



Figure 25. Offset roof planes.

- Large expanses of smooth material (e.g., concrete) shall be broken up with expansion joints, reveals, or changes in texture and color. **See Figure 26.**
- To the fullest extent feasible, buildings should use large windows along walls and skylights in rooftop designs to capture natural light during working hours.
- Use of metal as the primary building façade material is subject to approval of a conditional use permit by the Planning Commission.



Figure 26. Use of expansion joints.

## 6. Landscaping

- Landscaping shall be in scale with adjacent structures, streets, and public spaces, and be sized appropriately when fully grown.
- Landscaped areas should incorporate a three-tiered planting system:
  - 1) ground cover and flowering plants;
  - 2) shrubs and vines; and
  - 3) trees.

**See Figure 27.** See Recommended Plant Palette in Section 11.8.



Figure 27. Three-tiered planting system: trees, shrubs, and ground covers.

- Special landscape features, such as specimen trees, shall be provided at major focal points (e.g., project entries, building entries, and pedestrian gathering areas).
- Entry and exit points shall be highlighted through a combination of distinctive landscape and hardscape features. Incorporation of public art is highly encouraged.
- Development on corner lots shall be enhanced with a combination of specimen trees, accent plantings, upgraded perimeter wall surfaces, hardscape treatments and landscape lighting adjacent to the street intersection.

- Drought-tolerant and low-maintenance trees, vines, and groundcovers shall be used on-site. Drip irrigation systems shall be installed where feasible to ensure the highest possible level of water conservation.
- Planting materials shall be used in plaza areas to provide shade and soften the appearance of hard walls. Water features and public art are also encouraged. **See Figure 28.**
- The use of vines is encouraged on walls to soften the appearance of buildings and screen walls, and to help deter graffiti. **See Figure 29.**
- Planting materials shall be installed to provide a buffer against noise and should be integrated with walls or fences to achieve desired sound reduction. **See Figure 30.**



Figure 28. Plaza area.



Figure 29. Wall incorporates landscaping to soften appearance and deter graffiti.

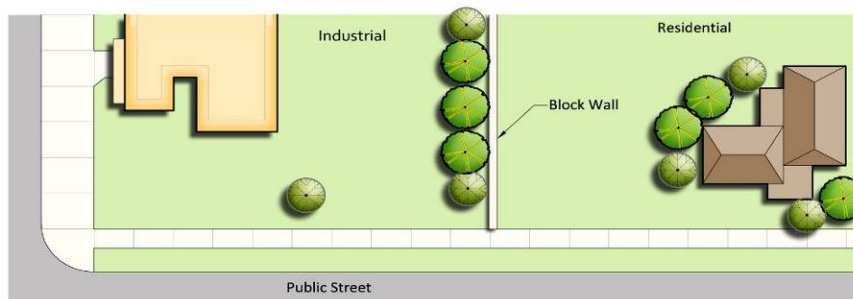


Figure 30. Plant material along buffer wall.

- Landscaping and trellises with vines are encouraged be used for screening trash storage areas, service areas and mechanical equipment.
- Setbacks adjacent to residential zones shall include dense landscaping to provide visual screening and noise abatement.



Figure 31. Landscaped berms.

- Landscaped berms along site edges may be used to screen parking, loading and service areas and to serve as a sound reduction measure. **See Figure 31.**

- Surface parking lots shall be well-landscaped to reduce heat island effect and visually reduce the expanse of paved area. **See Figure 32.**
- Pervious paving materials are strongly encouraged for sidewalks, pathways, parking lots, plazas or gathering areas or other paved surfaces on-site.
- An automatic irrigation system using current equipment and technology shall be provided for planted areas.
- Run-off retention and on-site water filtration/storm water treatment features and bio-swales should be a part of the overall landscape design, and can also serve as buffering methods for adjacent businesses. **See Figure 33.**
- Trees shall be selected and placed to provide canopy and shade for walkways, pedestrian open spaces, and parking areas.
- Landscape material in the setback and visible from the public right-of-way shall blend with and seem a part of the public right-of-way landscaping.
- Tree and shrub planting shall be in large masses.
- Plant material selected shall be suited to the specific soil and micro climatic conditions.
- Trees shall be healthy and have a uniform branching pattern.
- All ground cover shall be healthy and densely foliated and comprised of well rooted cuttings or container plants.
- Availability and specific site conditions should be considered in final selection. Ground cover shall achieve 100% coverage in one year.



Figure 32. Landscaped parking lot.



Figure 33. On-site water filtration.



- Informal tree masses should be planted in a mix of sizes.

#### D. Commercial Uses

##### 1. Site Design

##### Site Layout

- The arrangement of multiple buildings and associated circulation and parking shall reflect a well-organized site plan that emphasizes pedestrian connectivity and landscaped areas that enhance publicly-accessible spaces. **See Figure 34.**
- Loading areas, access and circulation driveways, trash enclosures, storage areas, and rooftop equipment shall be located as far as possible from adjacent residences.
- Buildings may be located adjacent to the street with a fully landscaped setback or buildings may be set back with limited parking in front. **See Figure 35.**

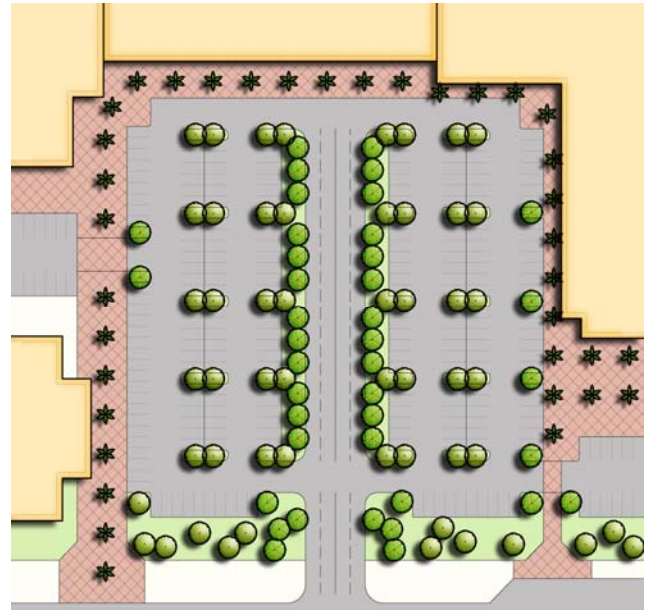


Figure 34. Site plan emphasizes pedestrian connectivity.



Figure 35. Limited parking adjacent to street with landscape setback.

## Courtyards and Plazas

- The organization and design of buildings shall encourage and facilitate pedestrian activity.
- Buildings should be organized to create usable open space, courtyards, plazas and dining areas. **See Figure 36.**
- Pedestrian-oriented open spaces, courtyards and plazas shall include a focal element such as a sculpture and/or water feature and sitting areas. **See Figure 37.**

### 2. Building Orientation

- The organization of buildings, parking areas, and landscaping shall recognize the existing characteristics of the site and shall relate to the surrounding development in scale and character.
- Commercial buildings on corner parcels shall establish a strong tie to both streets and should encourage pedestrian activity at corner locations. **See Figure 38.**
- Buildings associated with service retail and restaurant uses shall be pedestrian-scaled, with entries fronting onto streets, plazas or courtyards to reinforce pedestrian orientation.
- Commercial development shall be oriented away from residential streets. At corner locations, if the side street primarily serves a residential neighborhood, development and access shall be oriented away from the side street.

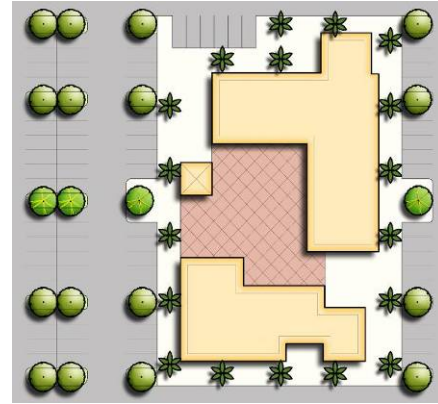


Figure 36. Buildings create courtyard.



Figure 37. Open plaza areas with seating.



Figure 38. Commercial/retail buildings on corners should establish strong tie to the street.



- Buildings adjacent to sensitive uses shall be buffered. This may be accomplished by providing masonry walls, landscaped berms, appropriate building orientation, building height stepbacks and limitations on activities adjacent to sensitive uses. **See Figure 39.**

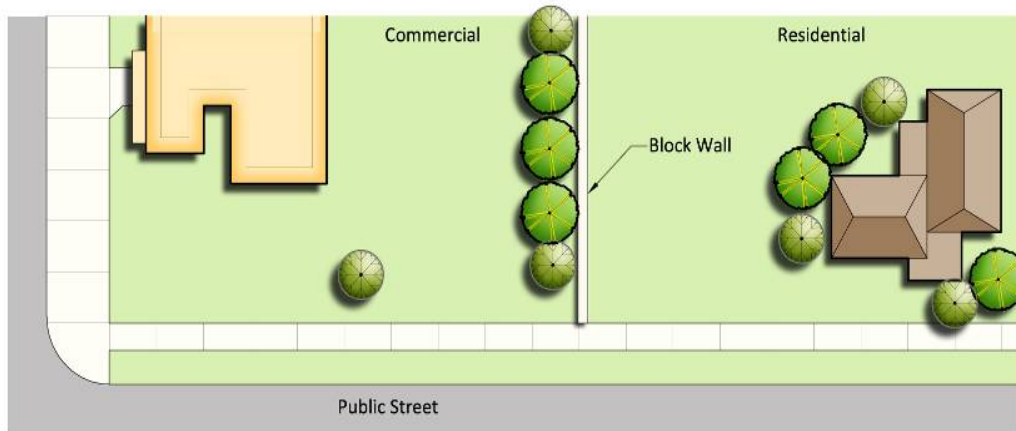


Figure 39. Masonry wall and landscaping separates uses.

- To protect residential privacy and reduce the visual mass of commercial buildings adjoining a residential zone, the commercial building shall be set back and oriented away from the residential zone.
- Commercial and retail buildings should generally be placed at or near setback lines with developments oriented in a manner that will provide visual interest.
- Buildings should be oriented in a manner that takes advantage of passive solar design to the maximum extent feasible.

### 3. Site Elements

#### Fences and Walls

- Wall heights and surfaces shall be articulated with varying façade depths or pilasters to promote architectural interest, and may include a cap along the top of the wall. **See Figure 40.**
- Walls visible from public streets shall be decorative and complement the design of on-site buildings.
- Wall and fencing materials may consist of brick, stone, stucco, wrought iron or tubular steel. Wall and fencing colors should match building colors, with neutral earth tones. **See Figure 41.**
- Walls and fences shall be integrated with landscaping along the base of the wall or fence.
- Electric fences, barbed wire, concertina wire, or other security wire is prohibited.



Figure 40. Wall incorporates pilasters and cap.



Figure 41. Stone wall.

#### Screening

- Service and delivery areas shall be screened by building placement, decorative walls or landscaping to the fullest extent feasible so that views of loading areas are minimized from adjacent public streets. **See Figure 42.**
- Outdoor mechanical equipment should be screened from public view.
- Roof-mounted equipment shall be screened from public view through use of parapet walls or other screening devices. **See Figure 43.**

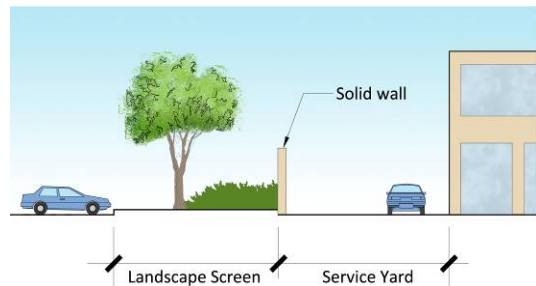


Figure 42. Screened delivery area.

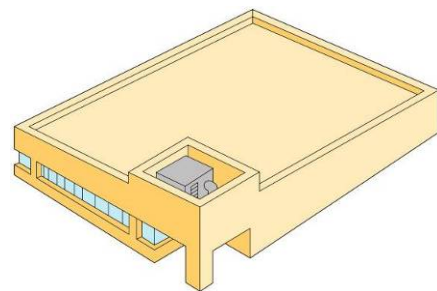


Figure 43. Screening of roof-mounted equipment.

## Trash Enclosures

- Trash enclosures shall be incorporated as part of the building design.
- If trash enclosures cannot be located out of public view, the design of trash storage areas shall incorporate architectural screening elements and landscaping compatible with the design of buildings and landscaping on the site.
- Trash enclosures visible from the public view shall integrate horizontal screening such as trellises.

## Lighting

- Outdoor lighting plans shall take into consideration the location and potential growth pattern of nearby trees (existing and planned) so that appropriate lighting levels are maintained over time.
- Energy efficiency shall be considered through use of proper light location and placement, as well as use of energy-efficient bulbs or fixtures.
- Lighting fixtures shall include hoods or other design techniques to reduce glare and light pollution, especially along major streets and adjacent to residential zones, and to prevent light spillover into adjacent properties. **See Figure 44.**
- Lighting shall be provided in project entryways, walkways, parking lots, and plazas or courtyards to promote safety. **See Figure 45.**
- Lighting may be mounted on poles or bollards, affixed to building walls, or placed within paved or landscaped areas. Appropriate materials and construction methods shall be used to ensure proper function of project lighting fixtures. **See Figure 46.**



Figure 44. Hooded light fixture directs light downward.



Figure 45. Bollard lighting along pedestrian walkway.



Figure 46. Pole mounted light.

- Decorative light fixtures are encouraged, as long as fixtures are consistent with the architectural design of the building. **See Figure 47.**

#### 4. Parking and Access

##### Parking

- Parking lots should be designed with a clear hierarchy of circulation: major access drives with no direct access to parking spaces; major circulation drives with little or no parking; and parking aisles for direct access to parking.
- Large commercial and retail parking areas should be located behind building facades so as not to be visible from major streets.
- Parking lots shall not be the dominant visual element on the site.
- Surface parking areas shall integrate trees and landscape improvements to reduce the heat island effect. **See Figure 48.**
- Large parking lots (usually over 100 spaces) shall be divided into multiple, smaller areas and provided with canopy trees located throughout the parking area to reduce the effects of heat gain and the visual impacts of large parking areas.
- Internal vehicular and pedestrian circulation within a development involving multiple buildings or lots shall interconnect in an obvious and consistent manner. **See Figure 49.**
- Parking lot design shall include water quality stormwater facilities consistent with City standards. **See Figure 50.**



Figure 47. Decorative light fixtures.



Figure 48. Landscaped parking lot.

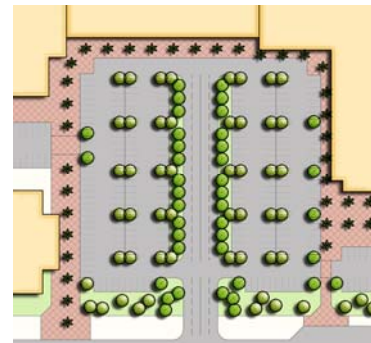


Figure 49. Pedestrian circulation is consistent along perimeter of parking lot.



Figure 50. On-site storm water capture.



### Access - Vehicular

- Site access shall promote safety by providing an adequate stacking distance for vehicles between the back of the sidewalk and the first parking stall or circulation aisle.
- Conflict between vehicles and pedestrians shall be avoided at access driveways by providing a walkway on at least one side of the driveway.
- The number of access driveways shall be minimized and located as far as possible from street intersections.
- Site access locations shall be coordinated with existing or planned median openings and driveways on the opposite side of the roadway.
- Unobstructed line of sight at corners and driveways shall be provided to reduce vehicular conflicts. **See Figure 51.**
- Avoid placing primary vehicle access in close proximity to major building entrances in order to minimize pedestrian and vehicular conflicts. **See Figure 52.**

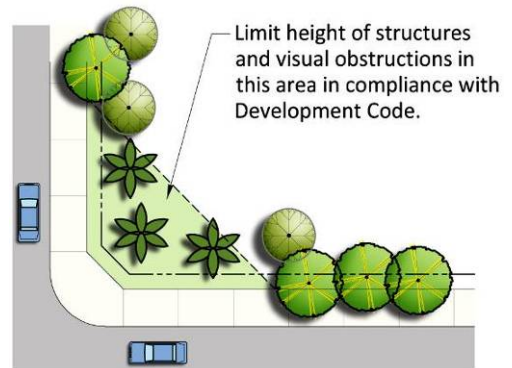


Figure 51. Unobstructed sight lines.



Figure 52. Vehicle access is placed away from building entrances.

### Access - Pedestrian

- Clearly defined pedestrian walkways or paths should be provided from parking areas to primary building entrances. Clear and convenient pedestrian access shall be provided between the public sidewalk and the pedestrian areas of the development. **See Figure 53.**

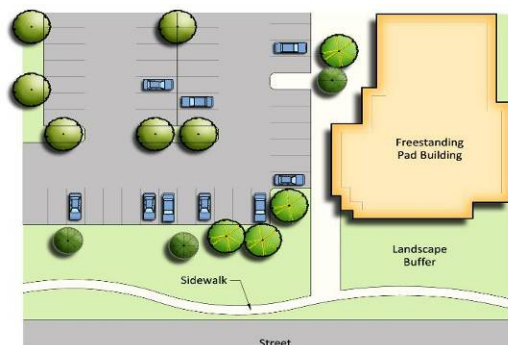


Figure 53. Clearly defined pedestrian walkways.

- Raised walkways, decorative paving, landscaping and/or bollards shall be used to separate pedestrian paths from vehicular circulation areas. **See Figure 54.**
- Parking areas should be designed so that pedestrians walk parallel to moving cars. **See Figure 55.**

### Loading and Delivery

- Loading and delivery service areas shall be located and designed to minimize their visibility, circulation conflicts, and adverse noise impacts to the maximum extent feasible.
- Loading and delivery service areas shall be screened with portions of the building, architectural wing walls, freestanding walls or landscape planting.
- When commercial buildings abut a residential zone, loading areas shall not be visible from adjacent residentially-zoned properties.
- Loading areas shall be designed to not interfere with circulation or parking, and to permit trucks to fully maneuver on the property without backing from or onto a public street. **See Figure 56.**
- Service, loading and delivery areas should take access from planned shared access points to reduce curb cuts along project frontages.

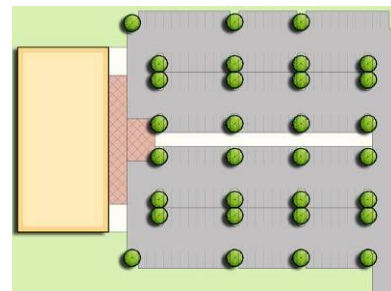
## 5. Architecture

### Mass and Scale

- The mass and scale of new infill developments shall be compatible with the existing, adjacent structures. This can be accomplished by transitioning from the height of adjacent buildings to the tallest elements of the new development by stepping back the upper portions of taller buildings.



Figure 54. Raised walkway and landscaping in parking lot.



Appropriate



Inappropriate

Figure 55. Pedestrian circulation



Figure 56. Loading area placed behind building outside of circulation lanes.

- Human-scale elements, such as pedestrian-scaled doors, windows and building modules shall be used to emphasize pedestrian orientation.
- The size and location of various building elements (e.g., roofs, parapet walls, wing walls, etc.) shall be in scale to the building as a whole and provide visual interest. **See Figure 57.**

### Building Facades

- Buildings shall include enhanced and articulated facades along public streets.
- Design details shall be continued or repeated upon all building elevations.
- Building entrances should be readily identifiable. The use of recesses, projections, columns, and other design elements to articulate entrances are encouraged. **See Figure 58.**
- Facades shall provide visual interest with vertical and horizontal variations in wall and roof planes, building projections, door and window bays, arcades, and similar elements/techniques. **See Figure 59.**
- Buildings shall undergo a break in façade approximately every 40 feet, to create a varied wall surface along public areas. Higher facades and rooftops should be incorporated at corners and intersections, and appropriate massing and scale should be considered for the remainder of the building spanning public right-of-way frontage.
- Buildings should include vertical elements (e.g., clock tower, building articulation) that create points of visual interest when viewed from the public right-of-way.



Figure 57. Building elements add visual interest.



Figure 58. Building Entry.



Figure 59. Horizontal and vertical articulation.



- Roof designs that are visually interesting and designed to completely screen all rooftop equipment from public streets are required. **See Figure 60.**
- The location of windows in commercial buildings adjacent to residential zones shall preclude a direct line of sight into residential properties.
- Buildings should use large windows along walls and skylights in rooftop designs to capture natural light during operating hours.
- The interior areas of commercial development should have shaded or covered walkways.



Figure 60. Full roof screens all equipment and provides visual interest.

### Storefronts

- Storefronts shall be comprised predominantly of transparent surfaces (windows). **See Figure 61.**
- The use of clear glass (on the first floor) is strongly encouraged.
- Storefront windows shall be large and a minimum of 24 inches off the ground. The maximum bulkhead (wall plane between the ground and the bottom of the windows) height should be approximately 36 inches.
- Storefront entries should promote a sense of entry into the structure as well as provide a sense of shelter by incorporating elements such as overhangs, canopies, awnings, and recesses. **See Figure 62.**
- If security grilles are necessary, they shall be placed inside the building behind the window display area at a minimum distance of two feet behind the window.
- Product storage racks shall not block views through storefront windows.



Figure 61. Storefront windows.



Figure 62. Storefront overhangs provide a sense of shelter and entry.

## Colors and Materials

- The use of a coordinated three-color palette for the base color and major and minor trim accents is encouraged.
- Colors for all structures on-site should be varied and should consist of neutral, earth tones. **See Figure 63.**
- Exterior finish materials shall be appropriate for the architectural style and/or theme of the entire development and should contribute towards a high quality image. **See Figure 64.**
- Changes in materials shall occur at inside corners to make building volumes appear substantial. **See Figure 65.**
- Materials shall be varied to provide architectural interest, however, the number of materials shall be limited and not exceed what is required for contrast and accent of architectural features.
- Exterior materials and architectural details shall relate to each other in ways that are traditional and logical. For example, heavy materials should appear to support lighter ones. See Figure 65.

## 6. Landscaping

### Plants and Irrigation

- Landscaping should help complete the design of the site and enhance the quality of commercial developments by framing and softening the appearance of buildings, screening undesirable views, and buffering incompatible uses.



Figure 63. Use of neutral, earth tones.



Figure 64. Exterior finish materials.



Figure 65. Heavy materials at base of building with lighter materials above.

- Landscaped areas should generally incorporate planting utilizing a three tiered system:
  - 1) ground covers (including flowering plants—annuals and perennials),
  - 2) shrubs and vines, and
  - 3) trees.

**See Figure 66.**



Figure 66. Example of three tier landscape system.

- Entry and exit points shall be highlighted through a combination of distinctive landscape and hardscape features. **See Figure 67.**
- Planting materials shall be used in plazas or gathering areas to provide shade and soften the appearance of hard surfaces. Water features and public art are also encouraged in these places. **See Figure 68.**
- Trees located along street frontages shall be selected to match or complement existing or proposed street trees in the public right-of-way.
- A minimum five-foot landscape strip shall be used along circulation aisles in parking lots, and along building side/rear elevations if a walkway is not used. A landscape strip is also encouraged in nonpublic areas and service areas between pavement and buildings.
- On-site water filtration features and bio-swales are strongly encouraged, and can also be used as buffering methods for adjacent businesses.
- Drought tolerant and low-water trees, vines, and groundcovers shall be used on-site. When feasible, drip irrigation systems shall be installed to provide on-site vegetation with appropriate irrigation and ensure the highest possible volume of water conservation.



Figure 67. Highlighting entry points.



Figure 68. Public plaza area within commercial development incorporates water feature.

- Planting materials shall be used to provide a buffer against noise, and may be integrated with walls or fences to achieve desired sound reduction and appearance.
- Tree and shrub planting shall be in large masses.
- Plant material selected shall be suited to the specific soil and micro climatic conditions.
- Trees shall be healthy and have a uniform branching pattern.
- All ground cover shall be healthy and densely foliated and comprised of well rooted cuttings or container plants.
- Availability and specific site conditions should be considered in final selection. Ground cover shall achieve 100% coverage in one year.
- Informal tree masses should be planted in a mix of sizes.

#### Site Furniture

- Outdoor furniture and fixtures (e.g., lighting, directional signs, trellises, raised planters, works of art, benches, trash receptacles, fencing, etc.) shall be integral elements of the building and landscape design. **See Figure 69.**
- Outdoor furniture shall be of a sturdy construction to withstand daily use. Wood should be avoided.
- Outdoor furniture shall be located so it will not conflict with the pedestrian and motor vehicle circulation patterns. **See Figure 70.**
- Outdoor seating should be shaded.



Figure 69. Trellis.



Figure 70. Outdoor furniture outside of pedestrian walkway.



## Paving

- Decorative paving shall be incorporated into courtyards, plazas, pedestrian walkways, and crosswalks. **See Figure 71.**
- Paving materials shall complement the architectural design of the building and landscape design of the project. The use of stamped concrete, stone, brick, permeable pavers, exposed aggregate, or colored concrete is encouraged. The use of slippery materials (e.g., polished marble or granite) is prohibited.



Figure 71. Enhanced paving in pedestrian areas.

## E. Special Commercial Uses

### 1. Drive-Through Uses

#### Site Design

- The predominant feature along the street frontage shall be the building, not parking lots or the drive-through aisle.
- The building shall be located to maximize the distance for vehicle queuing while screening the drive-through operations. **See Figure 72.**
- When adjacent to residential zones, outdoor order kiosks, loading/unloading areas, and storage areas shall be located as far as possible from residential properties.
- Drive-through aisles shall be located in the rear of the building away from the street frontage whenever possible. If the drive-through aisle is located between the building and the street, dense landscaping and landscaped berms or a screen wall (42 inches high or less) shall be provided to screen the drive-through aisle from street view. **See Figure 73.**

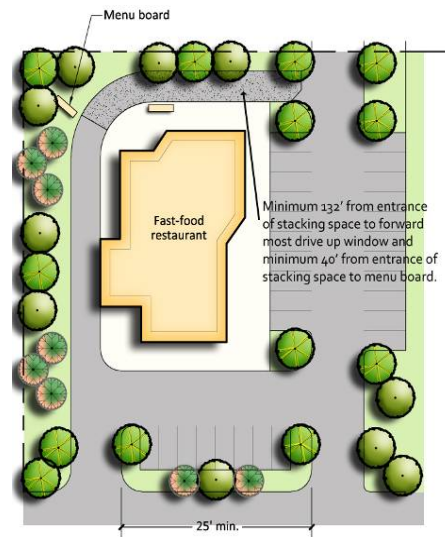


Figure 72. Vehicle queuing.



Figure 73. Example of appropriately landscaped and screened drive-through aisle.

## Building Design

- All building elevations shall receive the same level of architectural detailing.
- Buildings shall incorporate roof designs with built-in equipment wells or other built-in screening methods, so that screening devices do not appear added-on.
- If the drive-through facility is a pad building within a shopping center, the architecture shall relate to and be compatible with the design of the center. The only feature that identifies the franchise shall be the company's logo and signs.

## 2. Mini-Storage Facilities

### Site Design

- Offices and customer service areas shall be located adjacent to the street frontage to provide convenient access and help visually break up the front façade.

### Building Design

- Long, flat, unarticulated walls shall be avoided along street frontages. **See Figure 74.**
- Building walls and screen walls shall incorporate substantial articulation, and changes in plane and height to add visual interest.
- A minimum of two different building materials shall be used on building walls and screen walls adjacent to street frontages (e.g., stucco, brick, stone).
- Building materials, textures and landscaping shall be chosen to deter graffiti.

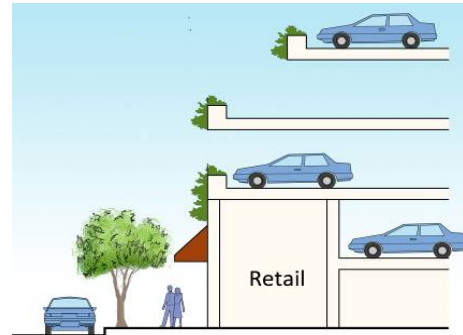


Figure 74. Articulated wall of mini-storage facility.

### 3. Parking Garages

#### Site Design

- Where appropriate, parking garages should incorporate ground floor retail adjacent to the public sidewalk. **See Figure 75.**
- A minimum 5-foot wide landscaped strip shall be provided on all sides of the parking structure except where ground floor retail space is provided.



Incorporate retail or other compatible uses on ground floor whenever possible.

Figure 75. Liner shops.

#### Building Design

- Parking garages shall be designed to help reduce the mass and scale of the garage and to ensure their compatibility with surrounding uses.
- Conceal view of vehicles in the garage through a combination of screen walls and plantings. **See Figure 76.**
- Avoid a monolithic appearance. This can be accomplished as follows:
  - Minimize horizontal and vertical banding by balancing both horizontal and vertical elements.
  - Use simple, clean geometric forms, and coordinated massing.
  - Step back upper levels of the garage 5 to 10 feet above the first floor. **See Figure 77.**
- Coordinate openings in the parking garage with the size and modulation of adjacent windows, structural bays, and storefronts if the parking garage contains other uses.
- Size openings in the parking garage to resemble large windows as in an office building.



Figure 76. Parking structure with landscaping.



Figure 77. Horizontal and vertical articulation breaks up parking structure elevation.



- Use masonry materials that are predominantly light in color, but avoid unpainted concrete.
- Avoid a sloping ramp appearance by providing level and uniform wall planes between floors.
- Visually define and differentiate between pedestrian and vehicular entrances through appropriate architectural detailing. **See Figure 78.**

### Access and Circulation

- Vehicle stacking areas for entering and exiting traffic shall be sufficient in length to minimize traffic backup into surrounding streets or within the garage. A minimum of two vehicle lengths of stacking distance shall be provided between the back of the sidewalk and the control gate.
- One inbound lane shall be provided for a garage with a capacity of up to 500 vehicles. At least two inbound lanes shall be provided for garages with a capacity of more than 500 vehicles.
- The maximum aisle length shall not exceed 400 feet without providing a cross aisle.
- Ramp grades shall not exceed 10 percent and parking areas should not exceed a slope of four to five percent.

### Security and Lighting

- The design of the garage shall eliminate possible hiding places and openings that could allow random pedestrian access.
- During periods when parking activity is substantially less than the garage capacity (i.e., during night operations), there shall be a means of securing unused parking levels from use, including stairwells and elevators. If the garage is not operated on



Figure 78. Paving differentiates between pedestrian and vehicular entries.

a 24-hour basis the entire facility shall be secured from access during hours when the facility is closed.

- For security reasons, at least one or two sides of the stair tower shall include glass running vertically the height of the tower. Elevators shall be provided with glass-back cabs and shafts. **See Figure 79.**
- Stairs and elevators shall be located adjacent to a street on the exterior of the structure where lobbies can be exposed to outside view.
- The use of security cameras is required.
- A minimum of five foot-candles shall be provided inside the structure and a minimum of three foot-candles for exterior parking areas. Higher levels are recommended for remote areas subject to security problems such as stairways, elevators, and other pedestrian access points.
- Lighting levels shall be equally distributed to provide uniform illumination over all parking areas.
- Light sources shall be shielded so that the source of the illumination is not seen from outside the structure.

#### 4. Service Stations

##### Site Design

- The site shall be designed to accommodate anticipated circulation patterns and those patterns should be defined by paving and by well-placed landscaped areas.
- In areas developed with buildings adjacent to the sidewalk, service stations shall also be oriented to the sidewalk, placing any service bay door and car wash openings on the rear of the structure.

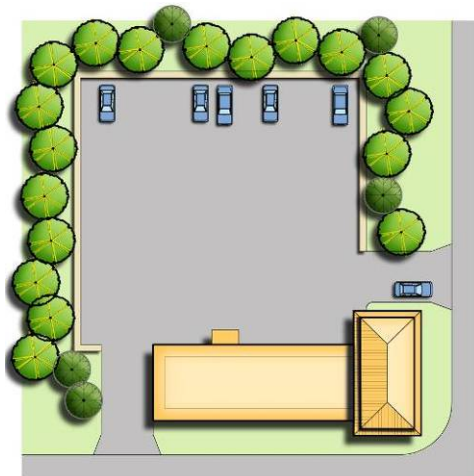


Figure 79. Glass-back elevator cab and shaft.

- Where commercial development abuts the service station, two-way vehicular access integrated with the adjacent commercial development shall be provided where feasible.
- The site design for projects located at street corners shall provide a strong design element at the corner to help frame the public right-of-way and anchor the corner. **See Figure 80.**
- Parking spaces for vehicles left for repair shall be located in the least visible areas of the site and screened from public view.
- Service or car wash bays shall not face toward a public street nor toward a residential zone if the building is within 200 feet of a residential zone.
- Work bays shall be oriented so that the interior of the bays are not visible or audible from a public street, adjacent residential zones, or designated open space. **See Figure 81.**
- Each pump island shall include a vehicle stacking area for at least two vehicles (38-feet), on at least one end of the pump island and shall not restrict vehicle circulation and parking areas.
- A gasoline tanker truck unloading zone shall be provided and shall not obstruct vehicle circulation and parking areas.



Figure 80. Corner landscaping element.



Work Bays.

Figure 81. Work bays face interior

## Building Design

- Service station buildings shall be designed to complement and be compatible with the predominant architectural theme and scale of the area. If located within a multi-use center, the architectural design shall be compatible with the design of the center.
- The design of the building should be clean and simple, and shall relate to surrounding buildings through use of similar scale, materials, colors, and/or detailing.

- Building elevations facing public streets and residential zones shall be architecturally detailed to provide interest and the appearance of quality development.
- The roof design of service stations, including pump island canopies, shall incorporate full, pitched roof treatments with a low to moderate slope. **See Figure 82.**
- Building materials shall have the appearance of substance and permanency (e.g., masonry).



Figure 82. Sloped roof on pump island canopies.

### Landscaping and Walls

- A three-foot high, landscaped berm, a dense hedge, or a low wall shall be provided along all street frontages where parking is provided. **See Figure 83.**
- A minimum six-foot high decorative masonry wall shall be provided along side and rear property lines not abutting public streets. A minimum five-foot wide landscaped planter shall be provided adjacent to the wall in areas accessible to the public.



Figure 83. Landscaped berm.

### Site Elements

- Gates, fencing, and walls shall remain free of signs or other advertisements.
- The use of chain-link fencing is prohibited if visible from a public street.
- Where security is an issue, fencing shall consist of open grille work, and the use of surveillance cameras is encouraged.
- Electric fences, barbed wire, concertina wire, or other security wire is prohibited.



## 5. Shopping Centers

### Site Design

- Commercial sites shall be separated from residentially-zoned properties by streets, landscaped buffers and/or decorative masonry walls.
- Portions of primary buildings and/or freestanding satellite buildings shall be located at the street setback lines to enclose the site and help frame the street. **See Figure 84.**
- Buildings within the center shall have a logical spatial and functional relationship to each other and shall provide for convenient pedestrian circulation throughout the center.
- Parking shall be provided within convenient walking distances of all tenants. Walking paths to buildings from the public street shall be provided. **See Figure 85.**
- To reduce the visual impact of large paved areas, parking lots shall be broken up into smaller areas separated by landscaping, pedestrian circulation areas and drive aisles.
- Storage areas and loading facilities shall be limited in number and shall be designed, located, and screened to minimize their visibility from outside public areas and surrounding streets.



Figure 84. Buildings placed at street setback lines.



Figure 85. Walking paths.

### Building Design

- Buildings, hardscape, landscape, site furnishings and signage should reflect a unified theme. **See Figure 86.**



Figure 86. Unified theme.

- Where a shopping center is adjacent to a residential zone, the scale of the shopping center shall be reduced to be compatible with the adjoining use by:
  - Keeping buildings as small as possible, particularly in height;
  - Reducing scale through building wall articulation, added detailing and avoiding large scale design elements;
  - Developing the center as a complex of smaller buildings connected by pedestrian-oriented open spaces; and/or
  - Setting the buildings further away from the residential zone and providing dense landscape screening.
- Long, linear buildings shall be avoided. Where such buildings are unavoidable, their length shall be mitigated by changes in building height, wall plane, and spatial volumes and by varied use of window areas, arcades, roof elements, and building materials. **See Figure 87.**
- If the shopping center contains a large scale building, integration of smaller-scale shops along the exterior of the building with entrances from the exterior of the building are desirable in order to create a more human scale and pedestrian-oriented character.
- Side and rear elevations of commercial buildings that are visible from residential zones or public rights-of-way shall be architecturally consistent with the front elevations of the building.
- Blank walls adjacent to main pedestrian areas shall be avoided.

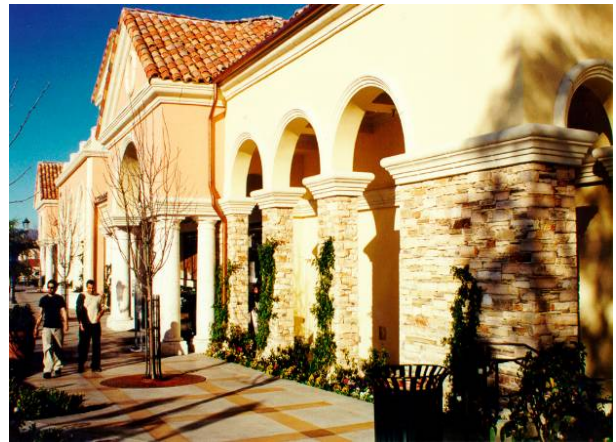


Figure 87. Articulation along wall plane.

- Flat roofs, mansard roofs, and veneer parapets are strongly discouraged in favor of full, pitched roof treatments. In large centers, a combination of flat roofs with decorative cornices and full, pitched roofs may be acceptable if the design presents a balanced appearance. **See Figure 88.**
- All roof-top and ground-mounted equipment shall be screened from view.
- Outdoor sales and storage areas shall be designed to blend with the architecture of the main building. The height of the screening elements shall be tall enough to screen all stored materials. **See Figure 89.**



Figure 88. Appropriate roofing.



Figure 89. Outdoor sales area.



### **11.10 Development Incentives**

This Section offers development incentives to produce greater land use efficiencies and reduce incremental costs for new development.

#### **A. Applicability**

The incentives in this Section shall apply to all new development that meet(s) the applicable eligibility criteria.

#### **B. Definitions**

For the purposes of this Section, lot consolidation shall have the following meaning:

1. Lot consolidation. A legal action in which a lot line is removed or abandoned; a lot line is adjusted; lots are merged; or other equivalent action is taken, for the purpose of allowing a structure or development to be built so that it extends over what were previously two or more separate lots. A lot consolidation cannot create additional lots and cannot make existing lots nonconforming. All lots must be identical in ownership.

#### **C. Lot Consolidation Incentives**

1. Eligibility requirements. In order to be eligible for the by-right development incentives indicated in Subparagraph 2, below, the minimum consolidated lot size for a development shall be 97,500 square feet.
2. By-right incentives. Eligible projects shall receive one or more of the following incentives:
  - a. Expedited application processing. Applications for eligible projects shall receive expedited project processing (i.e., projects will move to front of line for assignment to a planner for review), irrespective of the number of lots involved.
  - b. Parking Reduction. Required parking standards may be reduced up to a maximum of 20 percent, provided that the adequacy of proposed parking can be demonstrated in a parking study prepared in compliance with Section 11.6 Parking and Loading Standards, as approved by the Director of Community Development.
  - c. Allowable Bonuses. Allowable increases in intensity (i.e., floor area ratio (FAR) and in maximum height shall be in the amounts listed in Table 11-10 Allowable Bonuses for Lot Consolidation. The intensity and height bonus incentives shall apply to the total gross square footage of the consolidated lots.

| Table 11-10<br>Allowable Bonuses for Lot Consolidation |                                  |                    |                               |
|--------------------------------------------------------|----------------------------------|--------------------|-------------------------------|
| <i>Base Intensity (FAR)</i>                            | <i>Allowable Intensity Bonus</i> | <i>Base Height</i> | <i>Allowable Height Bonus</i> |
| 0.5                                                    | 10%                              | 60 ft              | 15 ft                         |

**D. Green Building Incentives**

1. Eligibility requirements. Projects that are seeking green building certification by a third-party entity (e.g., LEED, etc.) shall be eligible for the by-right development incentives indicated in Subparagraph 2.
2. By-right incentives.
  - a. Expedited application processing. Applications for eligible projects shall receive expedited project processing (i.e., projects will move to front of line for assignment to a planner for review).
  - b. Parking Reduction. Required parking standards may be reduced up to a maximum of 20 percent, provided that the adequacy of proposed parking can be demonstrated in a parking study prepared in compliance with Section 11.6 Parking and Loading Standards, as approved by the Director of Community Development.
  - c. Allowable Bonuses. Allowable increases in intensity (i.e., floor area ratio [FAR]) and in maximum height shall be in the amounts listed in Table 11-11 Allowable Bonuses for Green Building. The intensity and height bonus incentives shall apply to the total gross square footage of the project site.

| Table 11-11<br>Allowable Bonuses for Green Building |                                  |                    |                               |
|-----------------------------------------------------|----------------------------------|--------------------|-------------------------------|
| <i>Base Intensity (FAR)</i>                         | <i>Allowable Intensity Bonus</i> | <i>Base Height</i> | <i>Allowable Height Bonus</i> |
| 0.5                                                 | 10%                              | 60 ft              | 15 ft                         |

**E. Application and Review Process for Incentives**

1. Written submittal. Interested parties shall submit a written request for approval of incentives to the Director of Community Development on forms provided by the Community Development Department.
2. Determination. The Director of Community Development shall determine whether the proposed new development meets the eligibility criteria in Paragraphs C.1. or D.1.

Additional factors to be considered when reviewing applications for incentives shall include the following:

- a. Detriment. The proposal will not detrimentally affect access, design, or other public safety and welfare concerns.
  - b. Covenants or conditions. The proposal will not violate restrictive covenants contained on the face of the final plat or conditions of plat approval.
  - c. Right-of-way easements. The proposal will not invalidate any easement(s) unless the adjustment establishes replacement easement(s) that is properly filed with the city.
4. Conditions. Conditions may be imposed in connection with the granting of any incentive where the Director of Community Development deems that conditions are necessary to protect the public health, safety, and welfare.

### **11.11 Entitlement Procedures**

#### **A. Purpose**

These administrative procedures have two major purposes:

1. Ensure that development conforms to the SWIP Specific Plan ("Plan").
2. Ensure that the City's review is as expedited as possible while remaining legal and proper.

#### **B. Summary of Processing Procedures**

1. Conformity with the Plan. The Director of Community Development shall review each application for conformity with the development regulations in this Chapter. Conformity has two components:
  - a. Standards. Compliance with the Standards is mandatory and the City may not approve a project that fails to comply with the Standards.
  - b. Guidelines. The City may exercise discretion in evaluating the project's compliance with the Guidelines.
2. Project Review. Applications for development approvals shall be filed with the Department will be returned for revision. Applications must strive to meet the "Guidelines," but applicants may propose alternate ways to achieve the goals of the Guidelines.
3. Timing of Permits and Approvals. Required planning approvals shall be obtained before the issuance of any grading, building, or other construction permit, and before the proposed use is constructed, otherwise established, or put into operation.
4. Processing Requirements. Applications for planning permits shall be processed in compliance with Table 11-12Hearing Bodies.
5. Timing of Project Review. Project review shall be required before the issuance of a Building or Grading Permit, Business License, or Certificate of Occupancy for any new structure (not including fences or walls) and/or existing structures to be reconstructed or remodeled (including facade improvements).

## Southwest Industrial Park Specific Plan

Slover West Industrial District

**Table 11-12 – Hearing Bodies**

| Reviewing Bodies                       |        |      |    |    |     | Appeal Body |    |
|----------------------------------------|--------|------|----|----|-----|-------------|----|
|                                        | D.A.B. | CD   | PC | CC | PR  | PC          | CC |
| Administrative site plan               | X*     | X    |    |    |     | X           |    |
| Administrative site plan, amendment    | X*     | X    |    |    |     | X           |    |
| Building relocation                    |        | X    |    |    |     |             | X  |
| Certificate of appropriateness         |        |      |    |    |     |             | X  |
| Code of the City of Fontana, Amendment | X      |      | Xf | X  |     |             |    |
| Conditional Use Permit                 | X      |      | X  |    |     |             | X  |
| Density bonus                          | X      | X    | Xf | X  |     |             |    |
| Design review                          | X      |      | X  |    |     |             | X  |
| Design review, amendment               | X      | X    | X  |    |     |             | X  |
| Design review, signs                   |        | X    |    |    |     | X           |    |
| Development agreements                 | X      | X    | Xf | X  |     |             |    |
| Development agreements, amendment      | X      | X    | Xf | X  |     |             |    |
| General plan amendments                | X      | X    | Xf | X  |     |             |    |
| Home occupation                        |        | X    |    |    |     | X           |    |
| Interpretation                         | X*     |      | X  |    |     |             | X  |
| Lot line adjustment                    |        | X*** |    |    |     |             |    |
| Parcel maps, tentative                 | X      | X    | X  |    |     |             | X  |
| Parcel maps, final                     |        | X*** |    |    |     |             |    |
| Pre-Annexation Agreement               |        |      | Xf | X  |     |             |    |
| Specific Plan                          |        |      | Xf | X  | X** |             |    |
| Specific plan, amendment               |        |      | Xf | X  | X** |             |    |
| Tract maps, tentative                  | X      |      | X  |    |     |             | X  |
| Tract maps, final                      |        |      |    | X  |     |             |    |
| Variances                              | X      |      | X  |    |     |             | X  |
| Zone changes                           | X      |      | Xf | X  |     |             |    |
| Administrative Variance                | X      | X    |    |    |     | X           |    |
| Minor Use Permit                       | X      | X    |    |    |     | X           |    |

**Notes:**

Decisions of any "Reviewing Body" may be appealed to the City Council, except where State law limits such appeal to the City Engineer. If the Planning Commission is listed above as the "Appeal Body", the Commission must first review an Appeal before it may be forwarded to the City Council for consideration.

DAB—Development Advisory Board

CD—Community Development Director

PC—Planning Commission

CC—City Council

PR—Parks and Recreation Commission

X\*—At the discretion of the Director of Community Development or his/her designee

X\*\*—If Public Park(s) are considered

X\*\*\*—City Engineer has final approval

f—Recommending body to the City Council

**C. Similar Use Determination**

1. **Applicability and Authority.** Unlisted uses in Table 11-2 are prohibited uses, unless the Director of Community Development finds a proposed use to be similar to an expressly allowed use. A Similar Use Determination is a process for determining when an unlisted use is similar in nature to a permitted or conditionally permitted use and may be permitted. As specified by Municipal Code Section 30-4 Other Uses to be Determined by the Director of Community Development, the Director of Community Development shall have the responsibility and authority to make Similar Use Determinations.
2. **Ministerial Action.** A Similar Use Determination shall constitute a ministerial action.
3. **Application Contents and Filing.** An application for similar use shall be in writing on forms provided by the Director of Community Development.
4. **Determination Findings.** In determining "similarity," the Director of Community Development shall make all of the following findings:
  - a. The characteristics of and activities associated with the proposed use are equivalent to one or more of the listed uses and will not involve a higher level of activity or environmental impacts than the uses listed in the land use district;
  - b. The proposed use will be consistent with the purposes of the applicable land use district; and
  - c. The proposed use will be consistent with the General Plan and this SWIP Specific Plan.
5. **Notice.** A Similar Use Determination shall be made in writing and shall contain the facts that support the determination. The Community Development Department shall maintain all determinations on record for review by the general public upon request. The notice shall include:
  - a. A brief statement explaining the criteria and standards considered relevant to the decision;
  - b. A statement of the standards and facts relied upon in rendering the decision; and
  - c. An explanation of appeal rights and appeal deadlines. The determination of similar use by the Director of Community Development shall be subject to appeal to the Planning Commission.

***D. Dedication and Maintenance of Gateway Intersection Enhancements***

1. When dedication and maintenance is required.
  - a. Whenever a development project is proposed on land that is designated as a location for gateway intersection enhancements in Section 11.8 Public Right-of-Way, the developer shall:
    - i. Dedicate any necessary right-of-way area to the City or provide an easement in favor of the City for the installation of gateway intersection enhancements;
    - ii. Construct the gateway intersection enhancements to the standards indicated in Section 11.8 Public Right-of-Way; and
    - iii. Enter into an agreement with the City that specifies perpetual maintenance.
  - b. The applicable review authority shall impose the dedication (or easement) requirement as a condition of project approval.
  - c. The City Attorney and the Director of Community Development shall approve the form and content of any dedication or easement instrument used to ensure the installation and perpetual maintenance of the gateway intersection enhancements.

***E. Nonconforming Lots, Structures, and Uses***

1. Nonconformance provisions are established to:
  - a. Bring all uses, structures, sites and signs into conformance with the developmental requirements and design guidelines in the Code;
  - b. Limit the occurrences and extent of nonconformance by prohibiting expansion, intensification, reinstatement, alteration, restoration after destruction, and reestablishment after abandonment; and
  - c. Gradually phase out nonconforming uses, structures, lots, and signs.
2. Applicability
  - a. Nonconforming uses, structures, signs and lots may be maintained, expanded, altered and/or abated only in accordance with the provisions of this Specific Plan.
  - b. Any Designated Historic Landmark, or any property listed on the California Register of Historical Resources or National Register of Historic Places, shall be exempt from the provisions of this Section with respect to the restoration and maintenance of structures, provided that any construction plans are approved through a Certificate of Appropriateness by the Historic Preservation Commission/Planning Commission.



3. Nonconforming Uses. A use that lawfully occupied a building or land at the time this Specific Plan became effective, and that does not conform to the use regulations of the land use district in which it is located, is deemed a "legal nonconforming use." A legal nonconforming use may continue, subject to the following:
  - a. Discontinuation of Use
    - i. Loss of legal nonconforming status. If a legal nonconforming use is discontinued for a period of 90 or more days, regardless of the owner's intent, it shall lose its legal nonconforming status and the continued use of the property shall be required to conform to all provisions of this Specific Plan.
    - ii. Extension of legal nonconforming status. Wherein special circumstances exist, the Director of Community Development may extend the legal nonconforming status of a use, for up to an additional 90-day period. Furthermore, an additional extension may be granted by the Planning Commission, for up to an additional 90-day period. The total time period of all time extensions shall not exceed 180 days.
    - iii. Extension of legal nonconforming use.
      - (1) An application for a Minor Use Permit shall be filed with the Community Development Department on a City application form, together with all required fees, plans, maps, reports, special studies, exhibits, and any other information deemed necessary by the Director of Community Development to process the application. The application shall be filed prior to the expiration of the 90-day period.
      - (2) The application shall be reviewed by the Director of Community Development within 30 days following application filing. The Director of Community Development shall notify the applicant, in writing, as to whether the application is complete. If the application is not complete, the Director of Community Development shall specify those parts of the application that are not complete and shall identify the manner by which it can be made complete. If written notification is not provided to the applicant within 30 days following application filing, the application shall be deemed complete.
      - (3) The Director of Community Development shall investigate the facts bearing on the application and provide the information necessary for action on the application, consistent with this Specific Plan and the General Plan. The applicant shall have made a good faith effort through the submittal of documentation and has diligently pursued compliance with this Specific Plan.
      - (4) The application shall be reviewed by the Director of Community Development at a duly noticed public hearing, whom shall then approve, modify or deny such application. The decision of the Director of Community Development shall be final and conclusive in the absence of a timely filed appeal to the Planning Commission. An appeal of the Director of Community Development's decision

shall be filed within 10 days from the date of the decision of the Director of Community Development. An appeal of the Director of Community Development's decision shall be reviewed by the Planning Commission. The decision of the Planning Commission shall be final and conclusive in the absence of a timely filed appeal to the City Council.

- (5) The applicant may appeal the decision of the Planning Commission to the final deciding body, the City Council. The City Council decision shall be final and conclusive. If the application to extend the legal nonconforming use is approved by the City Council, the extension shall be granted for 90 days from the date of approval.
- (6) If the Director of Community Development or appointed designee has determined that the applicant has failed to show a good faith effort towards continually processing the extension of legal nonconforming use application (i.e., revising plans, withdrawing the application, placing the project on hold, etc.), the legal nonconforming use shall cease within 60 days from the application submittal date.
- (7) In granting an extension of the legal nonconforming status, the Director of Community Development may attach reasonable conditions and restrictions to the request, in addition to those required by this Specific Plan, which will ensure that the use:
  - Will not endanger the public health, safety or general welfare;
  - Will not injure the value of adjoining or abutting property;
  - Will not result in any significant environmental impacts; and
  - Will be in harmony with the area in which it is located.
- (8) In approving an extension of the legal nonconforming status, the Director of Community Development or Planning Commission shall consider and clearly establish the following findings of fact:
  - The non-conforming use has been discontinued within the 90-day period.
  - A physical and/or economic hardship has prevented the nonconforming use from being in compliance prior to the expiration of the 90 day period;
  - Approving the extension will not adversely affect the health, safety or general welfare.
- b. Change in Ownership, Tenancy or Management. A change in ownership, tenancy or management of a nonconforming use shall not affect its legal nonconforming status, provided that the use did not discontinue pursuant to the section entitled "1) Loss of legal nonconforming status" or the type of use and/or intensity of use do not change.

- c. New Development. New development on any lot or parcel upon which a legal non conforming use exists shall require that all uses on the property conform to the provisions of this Specific Plan.
        - d. Alteration and Expansion of Use
          - i. A nonconforming use shall not be enlarged or extended in such a way as to occupy any part of any structure or property that it did not occupy prior to the creation of the nonconformity.
          - ii. A structure fully or partially occupied by any nonconforming use shall not be moved, altered or enlarged, unless required by law, or unless the moving, alteration or enlargement will result in the elimination of the nonconforming use.
        - e. Intensification of Use. A nonconforming use shall not be intensified in such a way as to increase the discrepancy between existing conditions and the standards set forth in this Specific Plan.
4. Nonconforming Structures. A structure lawfully existing at the time this Specific Plan became effective, any portion of which does not comply with the requirements of the land use district in which it is located, including setbacks, separations, height and design, is deemed a "legal nonconforming structure." A legal nonconforming structure may continue to exist, subject to the following:
  - a. Damage or Destruction
    - i. A legal nonconforming structure that is damaged or partially destroyed by fire, flood, wind, earthquake or other calamity, or the public enemy, or other cause which is beyond the control of the property owner, and which could not otherwise have been prevented by reasonable care and maintenance of the structure, may be reconstructed up to the original size, placement and density, provided that total cost of such reconstruction does not exceed more than 50 percent of the structure's current fair market value. The structure may be restored and the nonconforming use may be resumed, provided that restoration is started within six months, unless extended by the Director of Community Development, and diligently pursued.
    - ii. In the event that the cost of repairing such damage exceeds 50 percent of the current fair market value of the structure prior to such damage occurring, the structure may be reconstructed up to the original size, placement and density, subject to all of the following:
      - The Planning Commission, at a duly noticed public hearing, must find that continuing the nonconforming structure will not result in an annoyance to and/or reduction of any surrounding property; and

- The extent of damage or partial destruction shall be based upon a comparison of the estimated cost of restoring the structure to its condition prior to such damage or partial destruction with its value at the time the structure was damaged or partially destroyed. Estimates for such purpose shall be made by or reviewed by the Building Official; and
  - The restoration is commenced within six months and diligently pursued to completion.
  - An application for a Nonconforming Structure shall be filed with the Community Development Department on a City application form, together with all required fees, plans, maps, reports, special studies, exhibits, and any other information deemed necessary by the Director of Community Development to process the application. The application shall be filed prior to the expiration of the go-day period.
  - A structure or development that has been damaged or destroyed by fire, flood, wind, earthquake, or other calamity, or by public enemy, or other cause which is beyond the control of the property owner, and which could not otherwise have been prevented may be reconstructed up to the original size, placement and density, except a multiple family dwelling or development which has been abandoned for a period of 90 or more days prior to being involuntarily damaged or destroyed, or a multiple family dwelling or development constituting a public nuisance prior to being involuntarily damaged or destroyed may not be reconstructed unless the structure is made to comply to all provisions of this Specific Plan.
- b. Alterations and Expansion
- i. A nonconforming structure shall not be moved, altered or enlarged so as to increase the discrepancy between existing conditions and the most current standard as prescribed by the land use district in which the structure is located, except alteration and/or enlargement to a single family dwelling conducted pursuant to section "e) Nonconforming Single-Family Residential Structures".
  - ii. Within land use districts, reasonable repairs and alterations may be made to legal nonconforming structures, provided that no structural alterations shall be made which would prolong the life of supporting members of a structure, such as bearing walls, columns, beams or girders. Structural elements may be modified only if such modification or repair is immediately necessary to protect the public health and safety, occupants of the legal nonconforming structure, or adjacent property, as determined by the Building Official. The total cost of such repairs or alterations may not exceed 50 percent of the replacement cost of the nonconforming structure.
- c. New Structures. Any new structure constructed on a lot or parcel with an existing legal nonconforming structure shall be constructed in conformance with all applicable provisions of this Specific Plan. However, in no case may a new nonresidential structure be constructed on the same lot as an existing legal nonconforming residential structure.

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6. Nonconforming to Development Standards. The development that is not in compliance with the site development standards prescribed by the regulations of the land use district in which the lot or parcel is located, including area, coverage, configuration, dimensions, parking, landscaping, screen walls, fences and enclosure trash receptacles, is deemed "legal nonconforming," provided such development was lawfully created and existing at the time this Specific Plan, which created the nonconformity, became effective.
  - a. A development that is nonconforming as to landscaping, screen walls, fences and enclosure of trash receptacles, shall be altered to comply with the district regulations covering the following standards, or as a condition of any subsequent Development Plan or Conditional Use Permit approval.
7. Nonconforming Lots. A lot or parcel that is not in compliance with the site development standards prescribed by the regulations of the land use district in which the lot or parcel is located, including area and configuration is deemed a "legal nonconforming lot," provided such lot or parcel was lawfully created and existing at the time this Specific Plan, which created the nonconformity, became effective.
  - a. A lot or parcel that is nonconforming as to minimum area or dimension shall be granted all development rights and uses of the land use district within which it is located.
    - i. The landscaping of setback areas insofar as a setback exists;
    - ii. The landscaping of parking areas, provided fulfilling the requirement does not reduce off-street parking or loading spaces to fewer than prescribed in this Specific Plan;
    - iii. The screening of storage areas; and
    - iv. The enclosure of trash receptacles.
8. Elimination of Nonconforming Adult Business Uses. Nonconforming adult business uses shall be eliminated in compliance with Municipal Code Chapter 30 Zoning and Development Code.
9. Abatement of Nonconforming Uses, Structures, Lots and Signs. Whenever a use, structure, site or sign becomes nonconforming because of a change of land use district boundaries or a change of the regulations prescribed for the district in which the site is located, the period of time prescribed in Municipal Code Chapter 30 Zoning and Development Code for the abatement period for the elimination of the use, the removal of the structure or sign, or the improvement of the lot or parcel shall begin on the effective date of the change of district boundaries or regulations.

***F. Administration and Enforcement***

The Director of Community Development shall enforce the provisions in this Specific Plan. All officers, employees, and officials of the City of Fontana, who are vested with the duty or authority to issue permits or licenses shall conform with this Specific Plan and shall not issue any permit or license, or approve any use or building, which would be in conflict with this Specific Plan. Any permit, license or approval issued that is in conflict with the requirements of this Specific Plan shall be considered null and void.

***G. Amendments to the Specific Plan***

The SWIP Specific Plan may be amended utilizing the same procedures by which it was originally adopted. In addition, subsequent amendments to this Specific Plan shall demonstrate the amendment meets the intent of the Specific Plan's existing policy framework, or specific findings to demonstrate the amendment enhances the Plan or is necessary to more effectively implement the Specific Plan. All sections or portions of the Specific Plan proposed to be amended or that may be affected by the amendment must be identified during the amendment process. A concurrent amendment to the General Plan would not be required provided that the Director of Community Development determines that substantive changes would not influence the goals, objectives, policies, or programs of the General Plan.

Allowing flexibility in the administration of the Specific Plan enhances the effectiveness of the Specific Plan as a comprehensive, "living" planning document. The following minor modifications to the Specific Plan qualify for processing as an administrative amendment to the Specific Plan subject to the review and approval of the Director of Community Development:

- Changes in the location of infrastructure and public facilities (e.g., internal roads, drainage facilities, etc.).
- Minor change in roadway alignment.



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## Chapter 12.0 – Speedway Industrial District



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### **12.1 Purpose**

The Speedway Industrial District (SID) is intended to encourage uses that complement and support the Auto Club Speedway of Southern California. This district will provide opportunities for a mixture of uses, including service commercial, entertainment, small businesses, research and development, restaurants, and hospitality uses. Light manufacturing will be allowed in the district. General features of this District include:

- Auto-related uses
- Entertainment-oriented uses
- Speedway theming
- Landscape/Streetscape Enhancement
- Edge conditions that are compatible with surrounding uses
- Establishment of uses that capitalize on regional market potential
- Facade Improvements that enhance the I-10 Corridor
- Promotion of lot consolidation

## **12.2 Applicability**

### **A. Projects Subject to Development Regulations**

This Chapter contains the development regulations that govern all future private development actions in the SID, including new construction, additions or renovations to existing structures and/or new land uses proposed for existing facilities.

### **B. Right of Continued Use**

This Chapter shall not require any change in any existing building or structure for which a building permit has been previously issued or for approved plans on file in the Community Development Department before the effective date of this Specific Plan. Changes in the property's ownership or tenants of legal existing uses shall likewise require no change in any existing building or structure. Nonconforming standards and provisions shall be governed by Section 12.11 Entitlement Procedures.

### **C. Other Requirements**

This Chapter does not eliminate the need for obtaining any other permits required by the City, or any permit, approval or entitlement required by any other applicable special district or agency, and/or the regulations of any State or Federal agency.

### **D. Types of Development Regulations**

The development regulations are of two types – Standards and Guidelines – as follows:

1. Standards address those aspects of development that are essential to achieve the goals of the Specific Plan. They include specifications for allowable land uses and site development (e.g., building height, setbacks, etc.). Conformance with Standards is mandatory. Standards are indicated by use of the words "shall," "must," or "is / is not permitted."
2. Guidelines provide guidance for new development in terms of aesthetics and design details. They are intended to direct building and site design in a way that results in the desired character for the SID. Whereas conformance with the Standards is mandatory, conformance with the Guidelines is preferred and/or recommended. Provisions that fall into this category are indicated by the use of the words "should," "may" or "are encouraged to." In various cases, the Guidelines provide a choice of treatments that will achieve the desired effect. Developers are permitted to propose alternative design details if they are able to show that the details implement the Specific Plan objectives with respect to the desired character of the SID.

### **E. Minimum Requirements**

The provisions in this Chapter shall be minimum requirements. When this Chapter provides for discretionary authority on the part of the Director of Community Development, Planning Commission, or City Council, that discretion may be exercised to impose more stringent requirements if deemed necessary to accomplish the objectives of the SID.



**F Overview of Development Regulations**

1. Relationship of Land Use Districts. The development regulations in this Chapter apply to those properties that are within the SID. Exhibit 12.1 Land Use Plan indicates the location of the SID and its relationship to the other land use districts in the Specific Plan area.
2. Standards, Guidelines, and Procedures. The development regulations are divided into the following sections: 12.3 Allowable Land Uses and Permit Requirements; 12.4 Development Standards; 12.5 Landscape Standards; 12.6 Parking and Loading Standards; 12.7 Sign Standards; 12.8 Public Right-of-Way Streetscape; 12.9 Design Guidelines, 12.10 Development Incentives, and 12.11 Entitlement Procedures. Projects must meet all development standards in order to achieve approval in the development review process. Projects are encouraged to adhere to the guidelines contained in 12.9 Design Guidelines.
3. Steps for Using Chapter. Table 12-1 Process Procedures illustrates the steps for using this Chapter.

**Table 12-1 Process Procedures-**

| <i>Instructions</i>                                                                                                         | <i>Information Source</i>                              | <i>Where to Find in this Chapter</i> |
|-----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|--------------------------------------|
| Locate property and its street frontage                                                                                     | Land Use Plan                                          | Figure 12-1                          |
| Identify the allowable uses and refer to the definitions of the uses                                                        | Allowable Land Uses & Permit Requirements Definitions  | Table 12-2<br>Appendix A             |
| Comply with the requirements for intensity, lot dimensions, height limits, and setbacks                                     | Intensity and Dimensional Standards                    | Table 12-3                           |
| Comply with fence, wall, and screening standards                                                                            | Fence, Wall, and Screening Standards                   | Table 12.4                           |
| Comply with landscaping requirements                                                                                        | Landscape Standards<br>Public Right-of-Way Streetscape | Section 12.5<br>Section 12.8         |
| Comply with parking requirements                                                                                            | Parking and Loading Standards                          | Section 12.6                         |
| Comply with sign requirements                                                                                               | Sign Standards                                         | Section 12.7                         |
| Review the design guidelines for preferred site layout, building orientation and architectural detail, fencing, and parking | Design Guidelines                                      | Section 12.9                         |
| Determine if development is eligible for incentives                                                                         | Development Incentives                                 | Section 12.10                        |
| Submit project application and proceed through project approval process                                                     | Entitlement Procedures                                 | Section 12.11                        |

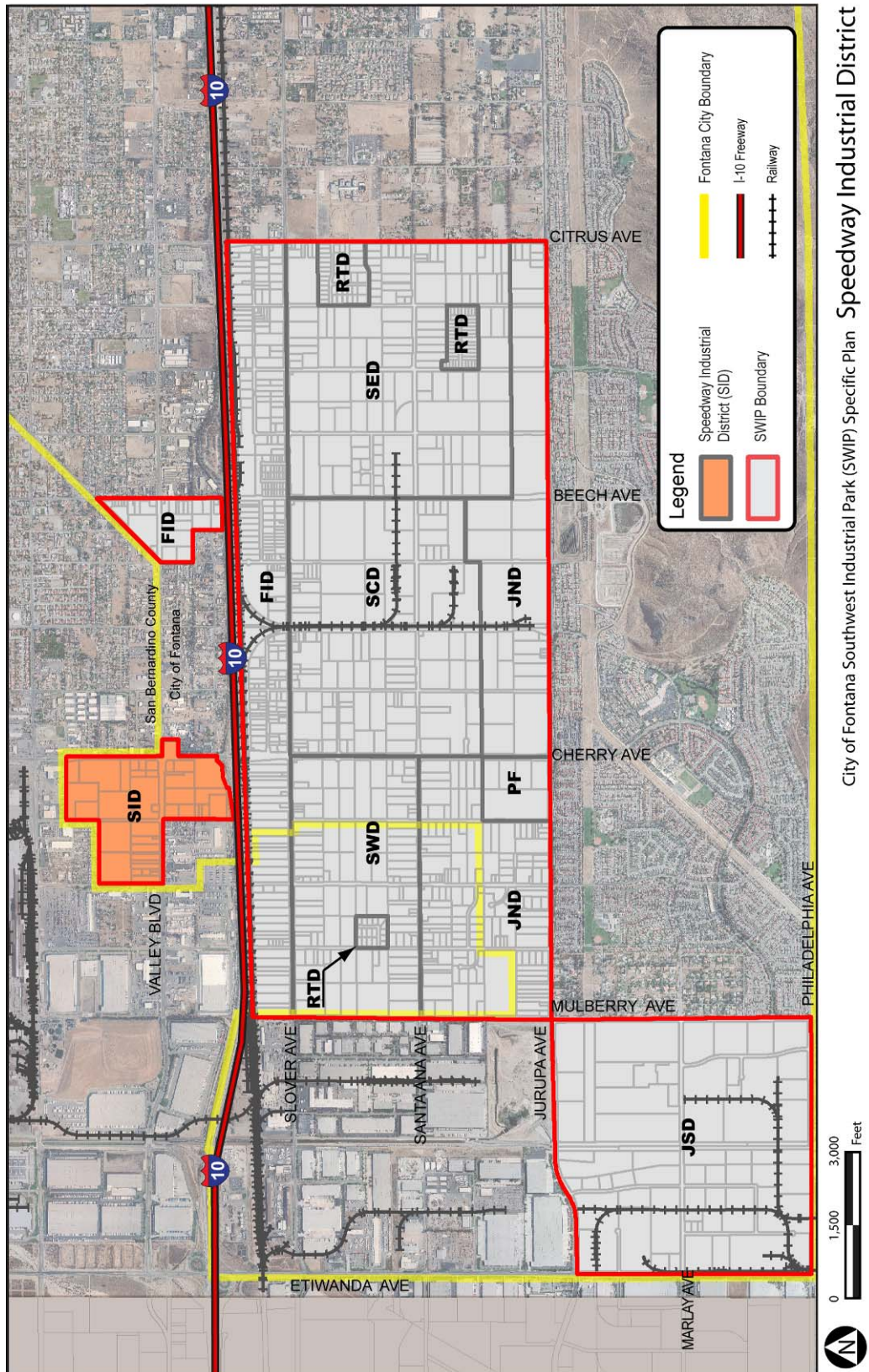


Exhibit 12.1 – Land Use Plan

### **12.3 Allowable Land Uses and Permit Requirements**

This Section identifies allowable land uses and their permit requirements.

#### **A. Allowed Uses**

Table 12-2 Allowable Land Uses and Permit Requirements identifies the types of land uses allowed in the SID and the permit required to establish each use.

#### **B. Uses Not Listed**

Uses not listed in Table 12-2 are prohibited land uses, until and unless the Director of Community Development makes a similar use determination in compliance with Subsection 12.11.D Entitlement Procedures – Similar Use Determination.

#### **C. Other Applicable Regulations**

The provisions contained in this SWIP Specific Plan constitute the primary land use and development standards for the Specific Plan area. These regulations are in addition to the provisions in the City of Fontana Municipal Code.

This Specific Plan provides all development standards and guidelines necessary to approve subsequent project applications, unless otherwise noted. Permit processing procedures (e.g., noticing, hearing, appeals, and expiration procedures) and enforcement procedures are provided in Municipal Code Chapter 30 (Zoning and Development Code) shall apply, unless otherwise noted. Where there is a conflict between the provisions in this Specific Plan and those in the Zoning and Development Code, the Specific Plan provisions shall prevail to the extent allowable under Federal or State law. Where there is no conflict, both shall be applied concurrently.

#### **D. Definitions**

Definitions for land uses are provided in Appendix A Definitions. If a definition is not provided, the definitions in the Municipal Code shall apply. The Director of Community Development shall interpret the definitions; make a similar use determination in compliance with Subsection 12.11.C Entitlement Procedures – Similar Use Determination; and/or refer any questions to the Planning Commission for its determination. For the purposes of this Specific Plan, the following definitions shall apply:

1. Commercial Use: Activity involving the sale of goods or services carried out for profit.
2. Industrial Use: Those fields of economic activity including construction; manufacturing; transportation, communication, electric, gas, and sanitary services; and wholesale trade.

**Table 12-2 Allowable Land Uses and Permit Requirements**

| <b>Land Use</b>                                           | <b>Permit Requirement</b>                                                                              |
|-----------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
|                                                           | "P"= Use Permitted by Right<br>"C"= Conditional Use Permit Required<br>"M" = Minor Use Permit Required |
| <b>Entertainment, Recreation and Public Assembly Uses</b> |                                                                                                        |
| Adult Businesses                                          | Municipal Code §30-11 & FMCCChapter 15, Article XVIII                                                  |
| Open Space / Park                                         | P                                                                                                      |
| Public Assembly Facilities                                | C                                                                                                      |
| Recreational Facilities                                   | M                                                                                                      |
| <b>Industry, Manufacturing, and Processing Uses</b>       |                                                                                                        |
| Flex-Tech Multi-Use Facilities (2)                        | P                                                                                                      |
| Manufacturing, Light                                      |                                                                                                        |
| • Electronics & Equipment                                 | P                                                                                                      |
| • Glass Product Fabrication                               | P                                                                                                      |
| • Product Assembly and Distribution                       | P                                                                                                      |
| General Manufacturing                                     |                                                                                                        |
| • Transportation Product Assembly                         | P                                                                                                      |
| Research and Development                                  | P                                                                                                      |
| <b>Residential Uses</b>                                   |                                                                                                        |
| Caretaker Housing (1)                                     | C                                                                                                      |
| <b>Retail Uses</b>                                        |                                                                                                        |
| Alcohol Sales, Off-Site/On-Site                           | C                                                                                                      |
| Factory/Warehouse Outlet Store                            | P                                                                                                      |
| Retail Sales, General (3)                                 | P                                                                                                      |
|                                                           |                                                                                                        |
| <b>Service Uses</b>                                       |                                                                                                        |
| Business Support Services                                 | P                                                                                                      |
| Financial Facilities                                      | P                                                                                                      |
| Catering Services                                         | P                                                                                                      |
| Food Service                                              |                                                                                                        |
| • Outdoor Dining                                          | P                                                                                                      |
| • Restaurants                                             | P                                                                                                      |
| Hotel                                                     | P                                                                                                      |
| Industrial Repair                                         | C                                                                                                      |
| Offices                                                   | P                                                                                                      |
| Personal Services                                         | P                                                                                                      |
| School, Commercial                                        | M                                                                                                      |
| School, Trucking                                          | C                                                                                                      |

Table 12-2 Allowable Land Uses and Permit Requirements (continued)

| <b>Land Use</b>                                                | <b>Permit Requirement</b>                                                                                                   |
|----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
|                                                                | <i>"P"= Use Permitted by Right</i><br><i>"C"= Conditional Use Permit Required</i><br><i>"M" = Minor Use Permit Required</i> |
| <b>Motor Vehicle</b>                                           |                                                                                                                             |
| • Car Wash/ Detailing                                          | <b>M</b>                                                                                                                    |
| • Motor Vehicle Rental, Sales, and Leases                      | <b>C</b>                                                                                                                    |
| • Service Stations (3)                                         | <b>C</b>                                                                                                                    |
| • Specialty or Antique Automotive Sales                        | <b>C</b>                                                                                                                    |
| • Truck Sales                                                  | <b>C</b>                                                                                                                    |
| • Truck Stops (3)                                              | <b>C</b>                                                                                                                    |
| • Vehicle Auctions                                             | <b>P</b>                                                                                                                    |
| <b>Distribution, Wholesaling, and Warehousing Uses</b>         |                                                                                                                             |
| Warehousing Facilities                                         | <b>P</b>                                                                                                                    |
| <b>Transportation, Communications, and Infrastructure Uses</b> |                                                                                                                             |
| Antennas                                                       | <b>M</b>                                                                                                                    |
| Broadcasting Offices or Studios                                | <b>P</b>                                                                                                                    |
| Parking Facilities (3)                                         | <b>P</b>                                                                                                                    |
| <b>Other Uses</b>                                              |                                                                                                                             |
| Drive-Through Uses (3)                                         | <b>M</b>                                                                                                                    |
| Outdoor Display & Sales                                        | <b>M</b>                                                                                                                    |
| Public Facilities                                              | <b>P</b>                                                                                                                    |
| Temporary Uses                                                 | Municipal Code Chapter 30, Division 14 (Temporary Use).                                                                     |

(1) See Section 12.4D

(2) See Section 12.9E

(3) See Section 12.9F

## 12.4 Development Standards

New land uses and structures and alterations to existing land uses and structures in the SID shall be designed, constructed, and established in compliance with the requirements in this Section.

### A. Intensity and Dimensional Standards

Table 12-3 Intensity and Dimensional Standards provides the required intensity and dimensional standards for proposed development. The Director of Community Development is authorized to approve modifications of 10 percent or less of any land use district setback, lot width, lot depth, building coverage, building height, or wall height standard in compliance with the administrative variance procedures in Municipal Code Section 30-51.6 (Findings necessary for granting a variance). See Exhibit 6-3 Dimensional Standards.

The Director of Community Development may grant an administrative variance from the requirements of this chapter where practical difficulties, unnecessary hardships, or results contrary to the intent of this chapter would occur from the strict and literal interpretation and enforcement of the Code. An administrative variance may be granted upon conditions which will ensure the protection of the public safety, health and welfare. To grant an administrative variance, the Director of Community Development must find from the facts presented that the following conditions exist.

- (1) That because of circumstances applicable to the property including size, shape, topography, location or surroundings, the strict application of this chapter will deprive the property of privileges enjoyed by other property in the vicinity and under identical zoning classification;
- (2) That the granting of such an administrative variance will be subject to conditions assuring that the variance shall not constitute a grant of special privileges inconsistent with the limitations upon other properties in the vicinity and zoning district in which the property is located;
- (3) That the administrative variance does not authorize a use or activity which is not a specifically allowed use in the zoning district in which the property is located; and
- (4) That the granting of one administrative variance will not be contrary to the general plan.

**Table 12-3: Intensity and Dimensional Standards**

| Lot Size and Building Placement                            |                                                       |                                                       |
|------------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------|
|                                                            | Industrial                                            | Commercial                                            |
| <b>INTENSITY</b>                                           |                                                       |                                                       |
| Floor Area Ratio (3)                                       | 1.0 max. FAR                                          | 1.0 max. FAR                                          |
| <b>LOT DIMENSIONS</b>                                      |                                                       |                                                       |
| Lot Size                                                   | 35,000 sq ft min.                                     | 20,000 sq ft min.                                     |
| Lot Width (C)                                              |                                                       |                                                       |
| Lots abutting railroad/freeway                             | 200 ft min.                                           | 150 ft min.                                           |
| Lots not abutting railroad/freeway                         | 150 ft min.                                           | 100 ft min.                                           |
| Lot Depth (D)                                              | 150 ft min.                                           | 150 ft min.                                           |
| <b>BUILDING SETBACKS</b>                                   |                                                       |                                                       |
| Front Setback (1)                                          |                                                       |                                                       |
| Major Highway (Cherry and Valley) (G)                      |                                                       |                                                       |
| without building setback                                   | 30 ft min.                                            | 20 ft min. (4)                                        |
| with 15 ft min. building setback                           | 30 ft min.                                            | 15 ft min. (4)                                        |
| Primary Highway (Not applicable) (F)                       | (Not applicable)                                      | (Not applicable)                                      |
| Secondary Highway/Collector Street (Almond and Banana) (E) |                                                       |                                                       |
| without building setback                                   | 20 ft min                                             | 15 ft min. (4)                                        |
| with 15 ft min building setback                            | 20 ft min                                             | 20 ft min. (4)                                        |
| Side (Street) Setback (1)                                  |                                                       |                                                       |
| Major Highway (Cherry and Valley) (G)                      | 20 ft min.                                            | 20 ft min. (4)                                        |
| Primary Highway (Not applicable) (F)                       | (Not applicable)                                      | (Not applicable)                                      |
| Secondary Highway/Collector Street (Almond and Banana) (E) | 20 ft min.                                            | 15 ft min. (4)                                        |
| Side (Interior) Setback (2)                                | None                                                  | None                                                  |
| Rear Setback (2)                                           | None                                                  | None                                                  |
| I-10 Freeway Setback (1)                                   | 20 ft min.                                            | 10 ft min.                                            |
| Accessory Building Setback                                 | Comply with setbacks applicable to primary structures | Comply with setbacks applicable to primary structures |

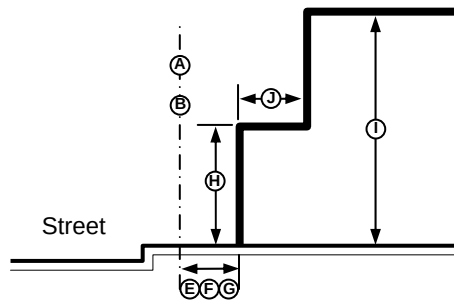
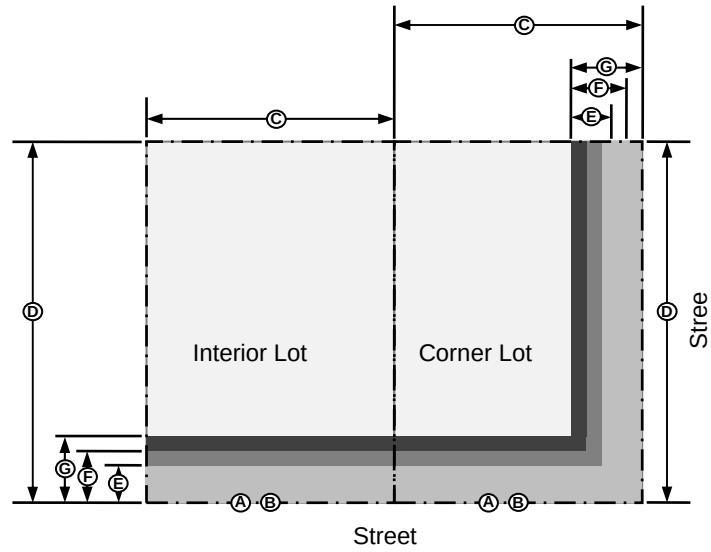
**Table 12-3: Intensity and Dimensional Standards**

| Building Height and Mass                                                                                                                                                  |                                            |                                                                                               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|-----------------------------------------------------------------------------------------------|
|                                                                                                                                                                           | Industrial                                 | Commercial                                                                                    |
| <b>HEIGHT</b>                                                                                                                                                             |                                            |                                                                                               |
| Primary Building                                                                                                                                                          | 60 ft max                                  | 60 ft max                                                                                     |
| Accessory Building                                                                                                                                                        | 1-story or 14 ft max. to eave/parapet line | 1-story or 14 ft max. to eave/parapet line                                                    |
| Interior (Floor-to-Floor, excluding parking levels)                                                                                                                       | Ground floor – 12 ft min                   | Ground floor – 12 ft min                                                                      |
| <b>UPPER STORY SETBACKS</b>                                                                                                                                               |                                            |                                                                                               |
| All buildings regardless of street frontage                                                                                                                               | Allowed.                                   | Allowed.                                                                                      |
| Adjacent to Major Highways (Cherry and Valley) and residential zones for buildings that have a front setback of between 15 and 30 feet from the public right-of-way line. | Allowed.                                   | Required: 15-foot upper story setback for part of buildings above 30 feet from finished grade |

**Notes:**

- (1) Setback is measured from public right-of-way line.
- (2) Setback is measured from property line.
- (3) See Section 12.10 Development Incentives.
- (4) Corner cut-off setbacks per Specific Plan.





- Ⓐ = Public Right-of-Way Line
- Ⓑ = Property Line
- Ⓒ = Lot Width
- Ⓓ = Lot Depth
- Ⓔ = Front/Side Setback – Secondary Highway/Collector Street
- Ⓕ = Front/Side Setback – Primary Highway
- Ⓖ = Front/Side Setback – Major Highway
- Ⓗ = 30 foot Height
- Ⓘ = 60 foot Height
- Ⓣ = 15 foot Stepback above 30 foot Building Height

Exhibit 12-2 – Dimensional Standards.

**B. Fences, Walls, and Screening**

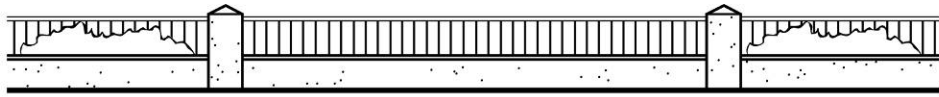
1. Standards and Guidelines. Table 12-4 contains standards for fences, walls, and screening. Refer to Section 12.9 Design Guidelines for guidelines about the design, materials, and construction of fences, walls, and screening.

**Table 12-4 Standards for Fences, Walls, and Screening**

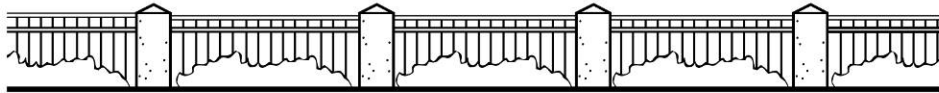
| <i>Location</i>                                    | <i>Materials<br/>See Section 12.9 Design Guidelines</i>                                                                                                        | <i>Maximum Height (1)</i>                                                                                 |
|----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| Within front setback area                          | Solid fencing/wall                                                                                                                                             | 36 inches; or<br>42 inches if abutting residential front yard                                             |
|                                                    | Open fencing/wall                                                                                                                                              | 6 ft                                                                                                      |
| Within street side setback area                    | Tubular steel construction allowed in required setback area if set back at least 15 ft from lot line. Solid masonry wall not allowed in required setback area. | 8 ft if necessary for security purposes, with 18-inch maximum width pilasters a minimum of 8 ft on center |
| Within interior side setback area                  | Any type of fence, hedge, or wall allowed, except that if abutting residential zone, solid masonry wall only                                                   | 8 ft                                                                                                      |
| Within rear setback area                           | Any type of fence, hedge, or wall allowed, except that if abutting residential zone, solid masonry wall only                                                   | 8 ft                                                                                                      |
| Within freeway setback area                        | Tubular or wrought iron fencing with pilasters                                                                                                                 | 8 ft tall pilasters at 30 ft on center with 8 ft tall tubular or wrought iron fencing between pilasters   |
| Outside of a required setback area                 | Solid or open fencing/wall                                                                                                                                     | No height limit                                                                                           |
| At intersections of alleys, streets, and driveways | Solid or open fencing/walls                                                                                                                                    | 30 inches                                                                                                 |
| Within I-10 Freeway setback area                   | See Section 12.8.C Public Right-of-Way Streetscape- Freeway Edges Design Criteria                                                                              |                                                                                                           |

Note: (1) All fences and walls shall meet the City's line of sight regulations, as determined by the City Engineer.

2. Materials.
  - a. Open fencing shall mean fencing with over 50 percent of the surface area open for free passage of light and air and through which the area behind the fence is visible to public view. See Exhibit 12.3 Open and Solid Fencing.
  - b. Solid fencing shall mean fencing with 50 percent or less of the surface area open for free passage of light and air and designed to conceal the area behind the fence from public view. See Exhibit 12.3 Open and Solid Fencing.
  - c. Barbed wire fence, electric fences, or similar fencing material is prohibited.
  - d. Chain link fencing is allowed on interior property lines that are not visible from public rights-of-way.

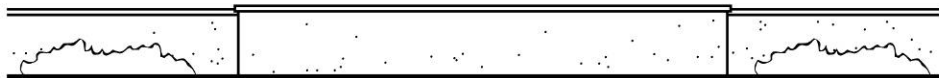


Elevation of Wall / Wrought Iron Combination

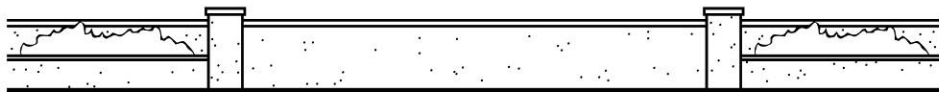


Elevation of Wrought Iron with Pilasters

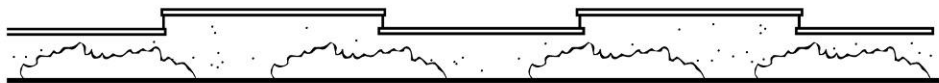
*Examples of Open Fencing*



Elevation of Staggered Wall



Elevation of Planters / Wall



Elevation of Wall with Breaks

*Examples of Solid Fencing*

Exhibit 12-3 – Open and Solid Fencing.

3. Screening and buffering.

- a. Roof-mounted and ground-mounted mechanical equipment, utilities, storage, and solid waste storage areas shall be screened from adjoining properties and public right-of-ways by a visual barrier (e.g., wall, fence, landscape material, etc.) to the satisfaction of the Director of Community Development. Where only landscaping is used for screening, it shall be planted with five-gallon (minimum size) shrubs spaced to provide a continuous dense screen.
- b. Parking lot perimeters shall be screened and planted in compliance with Section 12.6 Parking and Loading Standards.

**C. Outdoor Activities and Storage**

- 1. Storage in Setback Areas. Material or equipment shall not be stored anywhere in the front yard. Temporary storage of construction materials during construction on the same site is permitted. Boats, campers, motor vehicles, trailers, equipment, materials, or antenna that may be stored in side and rear yards, provided that they are outside the required side and rear setback areas identified in Table 12-3 Intensity and Dimensional Standards.
- 2. Limitations on Outdoor Uses.
  - a. All uses shall be conducted entirely within a completely enclosed building that is attached to a permanent foundation, except approved outdoor dining areas, vehicle sales and rental businesses, parking areas, nursery growing areas, industrial activities, and other approved uses that require outdoor activities.
  - b. Areas used for the approved outdoor storage of vehicles, equipment and/or building materials (raw or finished) may use compacted slag, gravel, or other similar material deemed suitable by the Director of Community Development.
- 3. Outdoor Wholesaling. Outdoor wholesaling of goods and materials shall comply with the following:
  - a. A building shall be provided on the same parcel or on an adjacent parcel associated with the same business.
  - b. All display materials, including vehicles, shall be set back five feet from any landscaped area and shall not be located on required parking areas.
  - c. The entire area used for display purposes shall be surfaced with asphalt or an equally serviceable hard pavement surface. The surface shall be maintained in good condition.

- d. Storage of equipment or materials, with the exception of the display of vehicles for sale or rent, shall be screened by a visually solid masonry wall of minimum height six feet. The approving authority may determine through the design review process that the subject use requires a solid masonry wall higher than six feet.
- e. Outdoor display areas shall be maintained in a neat and orderly condition.

***D. Caretaker Housing***

Caretaker housing shall be:

- 1. Accessory to a principal use;
- 2. A maximum of 1,500 square feet total floor area unless otherwise approved by the Planning Commission;
- 3. Limited to one unit per lot; and
- 4. Subject to the setback requirements applicable to the principal structure with which it is associated.

***E. Solar Access***

A structure, fence, or wall shall not be constructed or modified, and vegetation shall not be placed or allowed to grow so as to obstruct more than 10 percent of the absorption area of a solar energy system on an abutting or adjacent lot at any time.

***F. Undergrounding of Utilities***

- 1. Utility service laterals to new development shall be installed underground.
- 2. Temporary overhead power and telephone facilities are permitted only during construction.
- 3. Placement, location and screening of utilities of any kind, which cannot be installed underground and must be placed above ground for function and safety reasons, require written approval by the Director of Community Development or the Planning Commission prior to any administrative or discretionary approval.
- 4. Transformer enclosures shall be designed of durable materials with finishes and colors used that are compatible and harmonious with the overall architectural theme.
- 5. All utilities including, but not limited to drainage systems, sewers, gas lines, water lines, and electrical, telephone, and communications wires and equipment shall be installed and maintained underground. Placement, location, and screening of utilities of any kind, which cannot be installed underground and must be placed above ground for function and safety reasons, require written approval by the Director of Community Development or the Planning Commission before any administrative or discretionary approval.

## 12.5 Landscape Standards

### A. Required landscaping

This section provides the required minimum standards for all landscaped areas within any new and rehabilitated development.

1. Landscaped area means the entire parcel less the building footprint, driveways, nonirrigated portions of parking lots, and hardscapes (driveways, approaches, sidewalks, etc.). Decorative hardscapes used to enhance the landscape will be considered as part of the landscape area; this would include such things as cobble rock, decomposed granite, brickwork, stamped concrete, gravel, pavers, and water features.
2. Landscape setbacks along public right-of-ways shall incorporate landscape buffers with undulating and variable height earth-mounding (berms), and/or low walls, and required plant materials as shown in Table 12-5 Landscape Standards.
3. Block wall and wrought iron fencing shall be located behind landscape setback area(s).
4. The developer shall submit to the City's Department of Engineering, a Landscape Documentation Package that conforms to the Water Efficient Landscape Ordinance in Municipal Code, Chapter 28Vegetation.
5. All new development landscaping shall comply with the standards shown in Table 12-5 Landscape Standards. Additional guidelines that should be considered are provided in Section 12.9 Design Guidelines.
6. The Recommended Plant Materials Palette, Table 12-6 can be found immediately after this section. The plant materials palette is provided to ensure the installation of drought-tolerant, water efficient landscaping that will provide wind breaks and thrive in the local climate conditions. In an effort to provide visual elements that distinguish this district from others, please note that turf (grass) does not appear in the Plant Materials Palette, and shall be prohibited, in lieu of drought-tolerant ground covers.
7. Public right-of-way improvements, including street improvements, streetscape/landscape (parkway) improvements, and street tree requirements, are in Section 12.8 Public Right-of-Way Streetscape.

**Table 12-5 Landscape Standards**

Notes: The Director of Community Development may require additional setbacks.

|                                                                                                      |                                                                                                                                                                                                                                                                                                                        |
|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Minimum Landscaped Area<br>Mixture of ground cover, shrubs, trees, and decorative hardscape features | 15% of total site area, not including areas covered by buildings, structures, or areas used for approved outside storage, loading, or other activities.<br><br>25% of total site area, for hotels, not including areas covered by buildings, or areas used for approved outside storage, loading, or other activities. |
| Decorative hardscape features<br>Brick, stone, art, fountains, ponds, etc.                           | Maximum 15 % of the total required landscaping of site area                                                                                                                                                                                                                                                            |
| Minimum plant sizes in landscaped areas                                                              | Minimum Ratio 1 tree/500 SF of landscape area                                                                                                                                                                                                                                                                          |
| Trees                                                                                                | 50% - 15-gallon<br>40% - 24-inch box<br>10% - 30-inch box or greater                                                                                                                                                                                                                                                   |
| Shrubs                                                                                               | 50% - 5-gallon<br>50% - 1-gallon                                                                                                                                                                                                                                                                                       |
| Groundcover                                                                                          | 12-inch maximum on center spacing that will cover area within one year of initial planting                                                                                                                                                                                                                             |
| Street trees in parkways per Master Plan of Parkway Trees                                            | 1 tree of not less than 24-inch box size for each 30 linear feet of street frontage<br><br>In parkways of inadequate width, street trees shall be planted in abutting setback/yard, in addition to the required buffer landscaping in setback area                                                                     |
| Landscape buffer in front setback area                                                               | 1 tree for each 20 linear feet minimum of street frontage and three 5-gallon shrubs for each tree<br><br>Undulating earth berms with informal tree and shrub massing and/or low decorative walls may be utilized.<br><br>Maximum slope: 3:1 for berms                                                                  |
| Additional landscape requirements                                                                    | 1 tree for each 800 square feet minimum of other required landscaped area and 8 shrubs for each tree.                                                                                                                                                                                                                  |
| Landscape Buffer<br>Front setback area and street-side setback area                                  | Major Highway: 30 ft minimum width<br>Primary Highway: 25 ft minimum width<br>Collector/Local Streets: 20 ft minimum width                                                                                                                                                                                             |
| Landscape buffer in any side or rear yard abutting a residential zone                                | 20 ft minimum width with 1 tree for each 20 linear feet of lot line, and 3 shrubs per tree                                                                                                                                                                                                                             |



**B. Recommended Plant Materials Palette**

Table 12-6 Recommended Plant Materials Palette provides a listing of primarily drought-tolerant trees, shrubs, and ground covers to provide water-efficient landscaping in new projects. The limited selection of landscape material in the palette is envisioned to assist the user in incorporating sustainable landscaping into the project, while including enough variety of size, form, and density, to meet the requirements within buffer setbacks and screening techniques. Final selection shall be approved the City. The Director of Community Development shall approve artificial turf.

**Table 12-6 (a) – Recommended Plant Materials Palette  
Recommended Trees**



**Bottle Tree**  
*Brachychiton populneus*



**Honey Locust**  
*Gleditsia triacanthos*



**Canyon Live Oak**  
*Quercus chrysolepis*



**Mexican Fan Palm**  
*Washingtonia robusta*



**Date Palm**  
*Phoenix dactylifera*



**Stone Pine**  
*Pinus pinea*

Table 12-6 (a) – Recommended Plant Materials Palette  
Recommended Trees (continued)



**Desert Willow**  
*Chilopsis linearis*

Table 12-6 (b) – Recommended Plant Materials Palette  
Recommended Shrubs



**Agave**  
*Agave species*



**Kangaroo Paw**  
*Anigozanthus hybrids*



**Aloe**  
*Aloe species*



**Natal Plum**  
*Garissa grandiflora*



**Bougainvillea**  
*Bougainvillea species*



**Purple Fountain Grass**  
*Pennisetum setaceum*  
'Cupreum'

**Table 12-6 (b) – Recommended Plant Materials Palette**  
**Recommended Shrubs (continued)**



**Bush Morning Glory**  
*Convolvulus cneorum*



**Red Hot Poker**  
*Kniphofia uvaria*



**Coyote Brush**  
*Baccharis pilularis*



**Red Yucca**  
*Hesperaloe parviflora*

**Table 12-6 (c) – Recommended Plant Materials Palette**  
**Recommended Groundcover**



**Dymondia**  
*Dymondia margaretae*



**Rosea Ice Plant**  
*Drosanthemum floribundum*



**Moss Verbena**  
*Verbena tenuisecta*



**Stone Crop**  
*Sedum species*



Table 12-6 (c) – Recommended Plant Materials Palette  
Recommended Groundcover (continued)



**Peruvian Verbena**  
*Verbena peruviana*



**Trailing Lantana**  
*Lantana montevidensis*



**Prostrate Myoporum**  
*Myoporum parvifolium*

## 12.6 Parking and Loading Standards

### A. Applicability

This section contains regulations for off-street parking and loading. Regulations identify required number of parking and loading spaces for all new development projects and those proposing substantial modification to existing buildings. Please refer to Municipal Code Chapter 30 Zoning and Development Code for all parking and loading-related information or regulations not specifically addressed in this section.

### B. General Parking and Loading Regulations

1. Methods of Calculation.
  - a. Multiple Uses. If more than one use is located on a site, the total number of required off-street parking and loading spaces shall be the sum of the requirements for the various uses computed separately. If individual uses on the same site have a floor area less than that for which loading spaces would be required, then the total gross floor area of all uses on the site or lot shall be used in determining the required number of loading spaces.
  - b. Fractional Number. Whenever the computation of the required number of off-street parking or loading spaces results in a fractional number, one additional space shall be required for a fraction of more than one-half, but shall not be required for a fraction of one-half or less.
2. Off-Site Location. Required off-street parking spaces shall be located on the same property as the use that they are intended to serve. Where the required parking spaces cannot be accommodated on the same property, they may be located in a separate off-site parking facility that is not more than 300 feet from the use(s) they serve.
3. Shared Use. Required off-street parking and loading spaces shall not be considered as providing parking or loading spaces for any other use, except where shared use facilities are approved in compliance with Subparagraph 5 Adjustments to Parking Requirements, below.
4. Uses Not Specified. For uses not specified, the Director of Community Development shall determine parking requirements based upon the requirements of the most similar use. See Subsection 12.11.C Entitlement Procedures – Similar Use Determination.
5. Adjustments to Parking Requirements.
  - a. Administrative Variance. The Director of Community Development is authorized to approve alternate parking plans involving a modification of 10 percent or less of any of the off-street parking and loading standards in compliance with Section 30-51.5 of Municipal Code Chapter 30.

- b. **Parking Study Option.** An applicant may submit a separate parking and loading study for new development to the Director of Community Development for review and approval. A parking and loading study shall provide sufficient data and information to justify the need for adjustments to the parking and loading requirements and shall analyze whether:
  - i. Adequate off-street parking will be provided for the project;
  - ii. The project demonstrates the use of creative design concepts, including but not limited to shared parking facilities, transit accessibility, pedestrian amenities, and bicycle amenities;
  - iii. Environmental impacts associated with the project will not be increased by the modification of standards; and
  - iv. Traffic safety and pedestrian safety will be enhanced by the modifications.
- c. **Shared Use Facility.** Required off-street parking and loading spaces may be considered as providing parking or loading spaces for another use where joint facilities serving more than one use contain no less than the total number of spaces deemed necessary for each individual use added together with other uses. Where adjoining uses on the same site have different hours of operation with minimal conflict, the Director of Community Development may determine that some or all of the same spaces may be counted as satisfying the requirements for both uses, provided that the number of spaces shall not be less than the prescribed for the use requiring the greater number.

***C. Required Number of Parking Spaces***

Each land use shall provide the number of off-street parking spaces indicated in Table 12-7 Parking Requirements by Land Use, except where adjustment has been granted in compliance with Subparagraph b.5 Adjustments to Parking Requirements, above. For the purposes of this Section, the following definitions shall apply:

- 1. **Commercial Use:** Activity involving the sale of goods or services carried out for profit.
- 2. **Industrial Use:** Those fields of economic activity including construction; manufacturing; transportation, communication, electric, gas, and sanitary services; and wholesale trade.

**Table 12-7 Parking Requirements by Land Use**

| <b>Land Use</b>                                                                   | <b>Vehicle Spaces (Minimum #)<br/>GFA – Gross Floor Area</b>                                                                                                                                         | <b>Bicycle Spaces<br/>(Minimum #)</b>                                  |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|
| <b>Entertainment, Recreation and Public Assembly Uses</b>                         |                                                                                                                                                                                                      |                                                                        |
| Adult Businesses                                                                  | Subject to Parking Plan required by Municipal Code §15-918                                                                                                                                           |                                                                        |
| Open Space / Park                                                                 | Public - Determined by Parks and Recreation Department<br>Private - .25 spaces/1,000 sq ft of total park area                                                                                        | 1 space/ 33 vehicle parking spaces                                     |
| Public Assembly Facilities                                                        | With fixed seats – 1 space/3 fixed seats;<br>Without fixed seats – 25 spaces/1,000 sq ft of seating area;<br>and<br>4 spaces/1,000 sq ft GFA outside assembly area                                   | 1 space/33 vehicle parking spaces                                      |
| Recreational Facilities – Indoor, except for the following:                       | 1 space/each 4 persons of the facility's allowed maximum capacity, unless otherwise modified in compliance with Section 12.6.B.5 Adjustments to Parking Requirements                                 |                                                                        |
| Amusement Arcade                                                                  | 1 space/each 4 persons of the facility's allowed maximum capacity                                                                                                                                    | 1 space/ 3 games up to 20 games; and 1 space/5 games for over 20 games |
| Athletic Club/Gym                                                                 | 4 spaces/1,000 sq ft GFA;<br>20 spaces/1,000 sq ft of exercise floor area;<br>3 spaces/outdoor ball court                                                                                            | .4 spaces/1,000 sq ft GFA                                              |
| Bowling Alley                                                                     | 4 spaces/lane, and<br>additional spaces required for restaurant and other accessory uses                                                                                                             | 1 space/33 vehicle parking spaces                                      |
| Dancing                                                                           | 14 spaces/1,000 sq ft GFA                                                                                                                                                                            |                                                                        |
| Pool/Billiard Hall                                                                | 2 spaces/table                                                                                                                                                                                       | 1 space/5 tables                                                       |
| Skating Rink                                                                      | 14 spaces/1,000 sq ft GFA                                                                                                                                                                            | 1 space/33 vehicle parking spaces                                      |
| Recreational Facilities – Outdoor, except for the following:                      | 1 space/each 4 persons of the facility's allowed maximum capacity, unless otherwise modified in compliance with Section 3.2.7.b.5 –Adjustments to Parking Requirements                               |                                                                        |
| • Golf driving range, batting cage                                                | 1 space/tee, cage, or similar; and<br>1 space/employee at maximum shift                                                                                                                              | 1 space/33 vehicle parking spaces                                      |
| • Swimming pools                                                                  | 14 spaces/1,000 sq ft of water surface area                                                                                                                                                          | 1 space/33 vehicle parking spaces                                      |
| <b>Industry, Manufacturing, and Processing Uses</b>                               |                                                                                                                                                                                                      |                                                                        |
| Flex-Tech Multi-Use Facilities                                                    | 3.5 spaces per 1,000 sq ft GFA                                                                                                                                                                       | 1 space/33 vehicle parking spaces                                      |
| Light Manufacturing<br>All uses listed under "Manufacturing, Light" in Table 12-2 | 2 spaces/1,000 sq ft GFA for first 40,000 sq ft;<br>.75 spaces/1,000 sq ft GFA of additional area above 40,000 sq ft;<br>4 spaces/1,000 sq ft GFA of office space; and<br>1 space/1 facility vehicle | 1 space/33 vehicle parking spaces                                      |
| Transportation Product Assembly                                                   | 2 spaces/1,000 sq ft GFA for first 40,000 sq ft;<br>.75 spaces/1,000 sq ft GFA of additional area above 40,000 sq ft;<br>4 spaces/1,000 sq ft GFA of office space; and<br>1 space/1 facility vehicle | 1 space/33 vehicle parking spaces                                      |
| Research and Development                                                          | 2 spaces/1,000 sq ft GFA                                                                                                                                                                             | 1 space/33 vehicle parking spaces                                      |
| <b>Residential Uses</b>                                                           |                                                                                                                                                                                                      |                                                                        |
| Caretaker Housing                                                                 | 2 spaces in an enclosed garage                                                                                                                                                                       | None                                                                   |



**Table 12-7 Parking Requirements by Land Use (continued)**

| <b>Land Use</b>                                                                                         | <b>Vehicle Spaces (Minimum #)<br/>GFA – Gross Floor Area</b>                                                                                                                                                                                                                                                        | <b>Bicycle Spaces<br/>(Minimum #)</b>                                                               |
|---------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| <b>Retail Uses</b>                                                                                      |                                                                                                                                                                                                                                                                                                                     |                                                                                                     |
| Alcohol Sales,<br>Off-Site/On-Site                                                                      | Same as required spaces for the underlying use (e.g., restaurant, public assembly facility, retail store, etc.), unless otherwise modified in compliance with Section 3.2.7.b.5 –Adjustments to Parking Requirements                                                                                                |                                                                                                     |
| Factory/Warehouse<br>Outlet Store                                                                       | 5 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                            | None                                                                                                |
| Retail Sales, General                                                                                   | 4 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                            | 1 space/33 vehicle                                                                                  |
| Not in shopping<br>center or<br>factory/warehouse<br>outlet mall)                                       |                                                                                                                                                                                                                                                                                                                     | parking spaces                                                                                      |
| Shopping Center                                                                                         | 5 spaces/1,000 sq ft GFA for the initial 10,000 sq ft; and<br>4 spaces/1,000 sq ft GFA for over 10,000 sq ft                                                                                                                                                                                                        | 1 space/33 vehicle<br>parking spaces                                                                |
|                                                                                                         |                                                                                                                                                                                                                                                                                                                     |                                                                                                     |
|                                                                                                         |                                                                                                                                                                                                                                                                                                                     |                                                                                                     |
| <b>Service Uses</b>                                                                                     |                                                                                                                                                                                                                                                                                                                     |                                                                                                     |
| Business Support<br>Services                                                                            | 4 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                            | None                                                                                                |
| Catering Services                                                                                       | 2.5 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                          | None                                                                                                |
| Financial Facilities                                                                                    | 4 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                            | 2 spaces                                                                                            |
| Food Service:                                                                                           |                                                                                                                                                                                                                                                                                                                     |                                                                                                     |
| <ul style="list-style-type: none"> <li>Fast food restaurant with drive through, walk-in area</li> </ul> | Indoor Seating: 13 spaces/1,000 sq ft GFA*<br><i>*GFA shall not include play areas without seating.</i><br>Outdoor Seating (patio area):<br>Less than 50% of indoor area: 6.5 spaces/1,000 sq ft<br>50% or more of indoor area: 13 spaces/1,000 sq ft                                                               | 4 spaces                                                                                            |
| <ul style="list-style-type: none"> <li>Other restaurant</li> </ul>                                      | Indoor Seating: 10 spaces per 1,000 sq ft GFA<br>Outdoor Seating (patio area):<br>Less than 50% of indoor area: 5 spaces/1,000 sq ft<br>50% or more of indoor area: 10 spaces/1,000 sq ft                                                                                                                           | 2 spaces                                                                                            |
| Hotel                                                                                                   | 1.25 spaces per guest room;<br>10 spaces/1,000 sq ft GFA for lounge/restaurant;<br>Spaces at following rates for conference/banquet facilities:<br>Less than 20 sq ft per room – 0 spaces<br>20 sq ft per room – 30 spaces/1,000 sq ft GFA<br>1 space per employee on maximum shift                                 | 1 space/33 vehicle<br>parking spaces                                                                |
| Industrial Repair                                                                                       | 2 spaces/1,000 sq ft GFA for the initial 40,000 sq ft<br>1.3 spaces/1,000 sq ft additional GFA greater than 40,000 sq ft<br>4 spaces/1,000 sq ft GFA of office space, where those uses exceed 10% of GFA<br>OR<br>1 space for each employee on the maximum shift as determined by Director of Community Development | None                                                                                                |
| Offices                                                                                                 | 4 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                            | Under 50,000 sq ft – 2 spaces<br>50,001 – 100,000 sq ft – 3 spaces<br>Over 100,000 sq ft – 5 spaces |

**Table 12-7 Parking Requirements by Land Use (continued)**

| <b>Land Use</b>                                       | <b>Vehicle Spaces (Minimum #)<br/>GFA – Gross Floor Area</b>                                                                                                                                                                                                                                                                                                               | <b>Bicycle Spaces<br/>(Minimum #)</b> |
|-------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| Personal Services                                     | 4.4 spaces/1,000 sq ft GFA                                                                                                                                                                                                                                                                                                                                                 | None                                  |
| School, Commercial                                    | 1 space/teaching and non-teaching position on maximum shift; and<br>1 space/2 students on maximum enrollment                                                                                                                                                                                                                                                               | 1 space/33 vehicle parking spaces     |
| School, Truck Driving                                 | 1 truck parking space/truck operated by or for school;<br>1 space/teaching and nonteaching staff member on maximum shift;<br>1 space/2 students on maximum enrollment<br>additional spaces required for accessory lodging                                                                                                                                                  | .25 spaces/<br>classroom              |
| <b>Motor Vehicle</b>                                  |                                                                                                                                                                                                                                                                                                                                                                            |                                       |
| • Car Wash Full-Service                               | 1 space/employee;<br>Stacking for 5 vehicles for car wash lane<br>Reserve spaces equal to 3 times the wash lane capacity                                                                                                                                                                                                                                                   | None                                  |
| • Car Wash Self-Service                               | 2 spaces/bay                                                                                                                                                                                                                                                                                                                                                               | None                                  |
| • Motor Vehicle Rental, Sales, and Leases             | Indoor display/sale/service = 3.3 spaces/1,000 sq ft GFA;<br>Outdoor display/sale = .40 spaces/1,000 sq ft GFA; and<br>1 space/employee                                                                                                                                                                                                                                    | None                                  |
| • Service Stations                                    |                                                                                                                                                                                                                                                                                                                                                                            |                                       |
| With convenience market                               | 5 spaces/1,000 sq Ft GFA; and 5 spaces/service bay                                                                                                                                                                                                                                                                                                                         | 1 space/10 vehicle parking spaces     |
| Without convenience market                            | 3.3 spaces/1,000 sq ft or 5 spaces/service bay, whichever is more; minimum of 4 spaces                                                                                                                                                                                                                                                                                     |                                       |
| • Specialty/Antique Automotive Sales                  | Indoor display/sale/service = 3.3 spaces/1,000 sq ft GFA;<br>Outdoor display/sale = .40 spaces/1,000 sq ft GFA; and<br>1 space/employee                                                                                                                                                                                                                                    | None                                  |
| • Truck Sales                                         | Indoor display/sale/service = .20 spaces/1,000 sq ft GFA;<br>Outdoor display/sale/service = .33 spaces/ 1,000 sq ft GFA;<br>and<br>1 space/employee                                                                                                                                                                                                                        | None                                  |
| • Truck Stops                                         | 1 truck parking space/10,000 sq ft of site area;<br>5 vehicle parking spaces/1,000 sq ft of building area; and<br>additional spaces required for restaurant, lodging, and other accessory uses                                                                                                                                                                             | None                                  |
| • Vehicle Auctions                                    | <b>Automobile or boat sales (new/used/auction)</b><br>1 space/300 sq ft of indoor display, sales, or service area;<br>1 space/2,500 sq ft of outdoor sales or display area; and<br>1 space/employee<br><b>Truck sales/services (new/used/auction)</b><br>1 space/250 sq ft of sales area;<br>1 space/3,000 sq ft of outdoor sales or display area; and<br>1 space/employee | None                                  |
| <b>Distribution, Wholesaling and Warehousing Uses</b> |                                                                                                                                                                                                                                                                                                                                                                            |                                       |
| Warehousing Facilities                                | 2 spaces/3 employees on maximum working shift;<br>No additional spaces if office area is less than 10% GFA.<br>Office space rate if office area over 10% GFA.<br>Space to accommodate all trucks and other vehicles used in connection with use                                                                                                                            | None                                  |

| Table 12-7 Parking Requirements by Land Use (continued)                                                                                                                                                                                                                                                                                                           |                                                                                    |                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|---------------------------------------|
| <b>Land Use</b>                                                                                                                                                                                                                                                                                                                                                   | <b>Vehicle Spaces (Minimum #)<br/>GFA – Gross Floor Area</b>                       | <b>Bicycle Spaces<br/>(Minimum #)</b> |
| <b>Transportation, Communications and Infrastructure Uses</b>                                                                                                                                                                                                                                                                                                     |                                                                                    |                                       |
| Antennas                                                                                                                                                                                                                                                                                                                                                          | 1 space                                                                            | None                                  |
| Broadcasting Offices<br>or Studios                                                                                                                                                                                                                                                                                                                                | 5 spaces/1,000 sq ft GFA                                                           | None                                  |
| Parking Facilities                                                                                                                                                                                                                                                                                                                                                | Per approved plan                                                                  | None                                  |
| <b>Other Uses</b>                                                                                                                                                                                                                                                                                                                                                 |                                                                                    |                                       |
| Drive-Through                                                                                                                                                                                                                                                                                                                                                     | Stacking for 7 vehicles at each bay, window, lane, ordering<br>station, or machine | None                                  |
| Outdoor Display &<br>Sales                                                                                                                                                                                                                                                                                                                                        | 1 space/1,000 sq ft of outdoor merchandise areas                                   | None                                  |
| Public Facilities                                                                                                                                                                                                                                                                                                                                                 | Per public agency                                                                  |                                       |
| Temporary Uses                                                                                                                                                                                                                                                                                                                                                    | Per Temporary Use Permit                                                           |                                       |
| <i>Note: Sources consulted to compile the table entries include the Municipal Code; The Dimensions of Parking, ULI<br/>and National Parking Association, 5th Edition, 2010; Recommended Zoning Ordinance Provisions, National<br/>Parking Association, December 2006; and Parking Standards, APA Planning Advisory Service Report 510/511;<br/>November 2002.</i> |                                                                                    |                                       |

**D. Required Number of Loading Spaces**

Each land use shall provide the number of off-street loading spaces indicated in Table 12-8 Loading Space Requirements by Land Use. Requirements for uses not specifically listed shall be determined by the Director of Community Development based upon the requirements for comparable uses and upon the particular characteristics of the proposed use. For other standards (e.g., size of loading spaces, location, turning radius, etc.), refer to Article XI Off-Street Parking and Loading Standards, Division 4 Loading Area Regulations, in Municipal Code Chapter 30 Zoning and Development Code.

| Table 12-8 Loading Space Requirements by Land Use           |                                                                                                                                                                                         |                 |
|-------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| Land Use                                                    | Number of Spaces Required                                                                                                                                                               |                 |
|                                                             | Speedway Industrial District                                                                                                                                                            |                 |
|                                                             | Loading Spaces (Minimum #)                                                                                                                                                              | Type (1)        |
| Entertainment, Recreation and Public Assembly Uses          |                                                                                                                                                                                         |                 |
| Public Assembly Facilities                                  | 1 space; and<br>Additional spaces as required by design review                                                                                                                          | Van             |
| Recreational Facilities                                     | 0 - 29,999 sq ft: 1 space<br>30,000 - 99,999 sq ft: 2 spaces<br>Over 100,000 sq ft: 3 spaces                                                                                            | Truck           |
| Industry, Manufacturing, and Processing Uses                |                                                                                                                                                                                         |                 |
| Flex-Tech Multi-Use Facilities                              | 5,000 - 30,000 sq ft: 1 space; and<br>1 additional space for each additional 30,000 sq ft                                                                                               | Truck           |
| All uses listed under "Manufacturing, Light" in Table 12-2  |                                                                                                                                                                                         |                 |
| All uses listed under "General Manufacturing" in Table 12-2 |                                                                                                                                                                                         |                 |
| Research and Development                                    |                                                                                                                                                                                         |                 |
| Retail Uses                                                 |                                                                                                                                                                                         |                 |
| Retail Sales, General and Factory/Warehouse Outlet          | Up to 10,000 sq ft: 1 space                                                                                                                                                             | Truck           |
|                                                             | 10,001 - 30,000 sq ft: 1 space<br>30,001 - 90,000 sq ft: 2 spaces<br>Over 90,000 sq ft: 2 spaces; and 1 additional space for each additional 50,000 sq ft over the initial 90,000 sq ft | Tractor Trailer |
| Specialty/Antique Automotive Sales                          | 1 space                                                                                                                                                                                 | Tractor Trailer |
| Truck Sales                                                 | 1 space                                                                                                                                                                                 | Tractor Trailer |

| Table 12-8 Loading Space Requirements by Land Use (continued)                 |                                                                                                                                                                                         |                 |
|-------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| Land Use                                                                      | Number of Spaces Required                                                                                                                                                               |                 |
|                                                                               | Speedway Industrial District                                                                                                                                                            |                 |
|                                                                               | Loading Spaces (Minimum #)                                                                                                                                                              | Type (1)        |
| <b>Service Uses</b>                                                           |                                                                                                                                                                                         |                 |
| All uses listed under "Service Uses" in Table 12-2; except for the following: | Up to 10,000 sq ft: 1 space                                                                                                                                                             | Truck           |
|                                                                               | 10,001 - 30,000 sq ft: 1 space<br>30,001 - 90,000 sq ft: 2 spaces<br>Over 90,000 sq ft: 2 spaces; and 1 additional space for each additional 50,000 sq ft over the initial 90,000 sq ft | Tractor Trailer |
| Hotel                                                                         | 10,000 - 50,000 sq ft: 1 space                                                                                                                                                          | Van             |
|                                                                               | Over 50,000 sq ft: 1 space                                                                                                                                                              | Truck           |
| Industrial Repair                                                             | 5,000 - 30,000 sq ft: 1 space; and<br>1 additional space for each additional 30,000 sq ft                                                                                               | Truck           |
| <b>Motor Vehicle</b>                                                          |                                                                                                                                                                                         |                 |
| • Motor Vehicle Rental, Sales, and Leases                                     | 1 space                                                                                                                                                                                 | Tractor Trailer |
| • Service Stations                                                            | 1 space                                                                                                                                                                                 | Tractor Trailer |
| • Specialty or Antique Automotive Sales                                       | 1 space                                                                                                                                                                                 | Tractor Trailer |
| • Truck Sales                                                                 | 1 space                                                                                                                                                                                 | Tractor Trailer |
| • Truck Stops                                                                 | 1 space                                                                                                                                                                                 | Tractor Trailer |
| Offices                                                                       | 5,000 – 50,000 sq ft: 1 space                                                                                                                                                           | Van             |
|                                                                               | Over 50,000 sq ft: 1 space                                                                                                                                                              | Truck           |
| School, Commercial                                                            | 1 space; and additional spaces required by design review                                                                                                                                | Van             |
| School, Truck Driving                                                         | 1 space; and additional spaces required by design review                                                                                                                                | Van             |
| <b>Distribution, Wholesaling and Warehousing Uses</b>                         |                                                                                                                                                                                         |                 |
| Warehousing Facilities                                                        | 5,000 - 30,000 sq ft: 1 space; and<br>1 additional space for each additional 30,000 sq ft                                                                                               | Tractor Trailer |

**Notes:**

(1) A van loading space shall be a minimum of 12 ft wide by 19 ft long with a minimum 10 ft overhead clearance.

A truck loading space shall be a minimum of 12 ft wide by 45 ft long with a minimum 14 ft overhead clearance.

A tractor trailer loading space shall be a minimum of 12 ft wide by 70 ft long with a minimum 14 ft overhead clearance.

**E. Landscaping Standards for Parking Areas**

Within any parking area, one tree shall be planted for every five single-row parking stalls or 10 double-row parking stalls. Eighty percent of these shall be 15 gallons in size and the remaining 20 percent shall be 24-inch box or larger in size. If for some reason the contractor is unable to distribute trees in the interior of the parking area in compliance with these standards, the Director of Community Development may approve the placement of no more than 40 percent of the trees within the perimeter of the parking area. Planters shall not have a dimension less than four feet, excluding the thickness of the curbing. These requirements may be reduced for industrial parking areas that are screened from public view.

1. Parking areas shall contain a minimum landscape area equivalent to 30 percent of the total required 15 percent landscaping for the total site area.
2. Parking area perimeter landscaping.
  - a. Parking areas for nonresidential uses abutting or adjacent to residentially zoned property shall provide a landscape strip that is a minimum of 10 feet in width, excluding overhang, curb, and walkways, between the parking area and the common property line bordering the residentially zoned property. Parking areas shall be screened from the residentially zoned property by a solid decorative masonry wall that is a minimum of six feet in height.
  - b. Parking areas for nonresidential uses abutting or adjacent to non-residentially zoned property or a street shall install a landscape strip that is a minimum of five feet in width, excluding overhang, curb, and walkways, between the parking area and the common property line or the parking area and the street right-of-way. This requirement may be reduced or modified if a joint access agreement exists that is satisfactory to the Director of Community Development. Parking areas shall be screened from streets through combinations of plant materials, earth berms, raised planters, grade separations, or low walls. Slopes shall not exceed three to one or exceed 36 inches in height measured from the parking lot surface.
  - c. Plant materials, walls, or structures within a traffic sight area shall not block sight lines from driveways to streets and shall not exceed 36 inches in height.
  - d. End of aisle spaces adjacent to landscape finger shall be two feet wider for step out area.
3. Parking area interior landscaping.
  - a. Tree number and location. One tree shall be provided for each four parking spaces and shall be evenly spaced throughout the interior parking area at a rate of one tree for every eight parking spaces. See Exhibit 12-4 Parking Lot Landscaping. The required number of trees in the interior area shall not include trees required around the parking area perimeter. Trees are not required for tractor-trailer parking. A minimum of one cluster of trees shall be provided for each 100 feet of a row or double row of parking space. Trees shall be located in planters that are bounded on

at least two sides by parking area paving. Planters shall have a minimum exterior dimension of five feet.

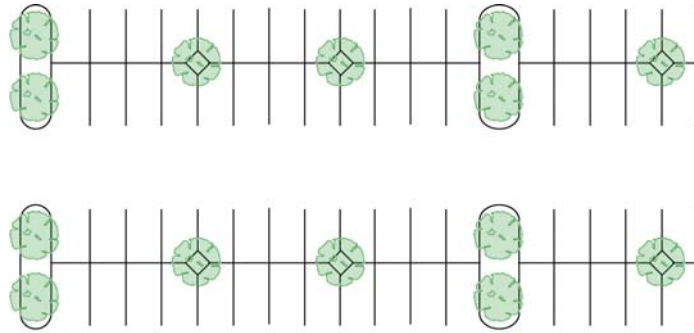


Exhibit 12-4 – Parking Lot Landscaping.

- b. Tree size. All trees within the parking area shall be a minimum 24-inch box container at time of planting.
  - c. Landscape protection. Landscaping shall be protected by concrete curbs of at least six inches in height. An end-of-aisle planter shall be provided at the ends of all parking aisles. Finger aisle planters shall be a minimum of nine feet wide and end-of-aisle planters shall be a minimum of seven feet wide, as measured from the inside of the curb. The parking space side of finger and end-of-aisle planters shall have a 24-inch wide concrete surface measured from the face of the curb. Planters shall be landscaped with a mixture of trees, shrubs, and ground cover. Planting areas shall have round corners instead of 90 degree corners and shall be shaped to allow vehicle movements. The Director of Community Development may approve alternative barriers designed to protect landscaped areas from vehicle damage. Wheel stops may be placed to allow for two feet of vehicle overhang area within the dimension of the parking space. To increase the parking lot landscaped area, a maximum of two feet of the parking stall depth may be landscaped with low-growth, hardy materials in-lieu of paving, allowing a bumper overhang while maintaining the required parking dimensions. However, the overhang area shall not be counted as part of the minimum landscape area required by paragraph (1) above, and when adjacent to a required landscaping strip shall be in addition to the minimum required width. Fixtures (e.g., lights, sprinklers) that are higher than the curb are prohibited within a bumper overhang area. Curbing that creates a bumper overhang barrier shall not exceed a height of five inches.
  - d. Parking areas with more than 100 spaces shall provide an appropriate entry feature consisting of a concentration of landscape elements, including trees, flowering plants, enhanced paving, and project identification.
4. Parking structures. A landscaping strip 10 feet wide shall be provided on all sides of a parking structure. One tree shall be provided for each 20 to 40 feet of perimeter of the



structure, based on species selected. These trees shall be distributed evenly throughout the subject landscape area.

## 12.7 Sign Standards

### A. Applicability

This section contains standards and guidelines for signage to ensure that signs are consistent with the overall quality and character of anticipated new development. Regulations identify permitted sign types; provide standards for number of signs, size, and location; and provide design guidelines for color, materials, and illumination. Refer to the Fontana Municipal Code for all sign-related information or regulations not specifically addressed in this section.

### B. Standards and Guidelines

1. Standards. The following standards shall apply to all signs, regardless of type:
  - a) Sign types not listed in this Section are not permitted.
  - b) Linear Frontage Ratio. For each establishment, one and one-half (1 ½) square feet of total sign area shall be allowed for each linear foot of building frontage. Unless otherwise noted, all signs (including temporary signs) shall count toward the total sign area permitted based on the Linear Frontage Ratio. For multi-tenant buildings, each establishment shall be calculated individually. For corner establishments, each facade shall be calculated individually. Permitted sign area based on the linear frontage of one establishment or facade shall not be placed on another establishment or facade.
  - c) Signs shall not be animated.
  - d) Commercial messages that identify, advertise, or attract attention to a business, product, service, or event or activity sold, existing, or offered elsewhere than upon the same property where the sign is displayed are expressly prohibited.
  - e) In the event of a conflict between this Section and any other City regulation, the provisions of this Section shall apply.
  - f) All issues not specifically addressed herein (e.g., signage in the public right-of-way, exempt signs, permit processing, etc.) shall be addressed pursuant to the Fontana Municipal Code.
2. Guidelines. The following guidelines shall apply to all signs, regardless of type.
  - a. Design Compatibility
    - Provide signage that is compatible with the building architecture and coordinate sign materials and colors with the building facade/storefront design.
    - Place signs in accordance with facade rhythm, scale, and proportion.

- Ensure that signs associated with multi-tenant buildings are complementary to one another. A consistent location for tenant identification signs is recommended.

b. Location

- Signs shall be placed at or near the public entrance to a building or main parking area to indicate the most direct access to the business.
- Signs shall not be located so that they cover or interrupt the architectural details or ornamentation of a building's facade.
- Signs shall not project above the edge of the rooflines and shall not obstruct windows and/or doorways.

c. Sign Legibility

- Avoid hard-to-read, intricate typefaces. Typefaces that are difficult to read reduce the sign's ability to communicate.
- Avoid spacing letters and words too close together. Lettering shall not occupy more than 75 percent of the sign face.
- Limit the number of lettering styles in order to increase legibility. Signs shall be limited to no more than two styles for small signs (generally up to 10 square feet) and three styles for larger signs.
- Use significant contrast through incorporating light colored letters and a darker, contrasting background to provide the most visible and best-looking image.
- Incorporate business identity symbols and logos.
- Logo means any symbol or any combination thereof adopted and used by an individual or corporation to identify goods made or sold or services rendered by an individual or corporation and to distinguish them from goods made or sold or services rendered by others and that is nationally or State of California registered.

d. Color and Materials

- Bright day-glo (fluorescent) colors shall be avoided as they are distracting and do not blend well with other background colors.
- Sign colors shall relate to and complement the materials or color scheme of the buildings, including accent and trim colors.
- Sign materials shall be selected with consideration for the architectural design of the building's façade and also contribute to the legibility of the sign.
- Construct signs of durable, high-quality materials.
- Wood, paper, and cloth signs, and painted wall signs are prohibited.

e. Illumination

- Individually illuminated letters, either internally illuminated or back-lighted solid letters (reverse channel), are a preferred alternative to internally illuminated plastic-faced cabinet signs.

- Signs shall be comprised of individual letters.
  - The use of backlit, individually cut letter signs is strongly encouraged for all types of business and signs, including monument-type signs.
  - Whenever indirect lighting fixtures are used, care shall be taken to properly shield the light source.
- f. Electrical Raceways and Conduits
- Electrical transformer boxes and raceways shall be concealed from public view.
  - All exposed conduit and junction boxes shall be appropriately concealed from public view.

### C. Sign Types

For the purposes of this plan, Table 12-9 Sign Types indicates the signs that are allowed in the Speedway Industrial District.

| Table 12-9 Sign Types |                                                                                                               |
|-----------------------|---------------------------------------------------------------------------------------------------------------|
| 1                     | <b>Grand Projecting Sign</b><br>Hotels, movie theaters, live performance theaters                             |
| 2                     | <b>Marquee Sign</b><br>Movie theaters and live performance theaters with a capacity of 500 persons or greater |
| 3                     | <b>Grand Wall Sign</b><br>Non-residential uses with unfenestrated wall areas of 2,000 square feet or greater  |
| 4                     | <b>Wall Sign</b><br>Non-residential uses with a dedicated ground floor entrance                               |
| 5                     | <b>Projecting Sign</b><br>Non-residential uses with a dedicated ground floor entrance                         |
| 6                     | <b>Awning Valance Sign</b><br>Non-residential uses with a dedicated ground floor entrance                     |
| 7                     | <b>Awning Side Sign</b><br>Non-residential uses with a dedicated ground floor entrance                        |
| 8                     | <b>Canopy Fascia Sign</b><br>Non-residential uses with a dedicated ground floor entrance                      |
| 9                     | <b>Under-Awning or Under-Canopy Sign</b><br>Non-residential uses with a dedicated ground floor entrance       |
| 10                    | <b>Recessed Entry Sign</b><br>Non-residential uses with a dedicated ground floor entrance                     |
| 11                    | <b>Window Sign</b><br>Non-residential uses with a dedicated ground floor entrance                             |
| 12                    | <b>Temporary Window Sign</b><br>Non-residential uses with a dedicated ground floor entrance                   |
| 13                    | <b>Temporary Wall Sign</b><br>Non-residential uses with a dedicated ground floor entrance                     |
| 14                    | <b>Monument Sign</b><br>Any building with continuous linear street frontage of 200 feet or greater            |
| 15                    | <b>Freeway Adjacent Sign</b><br>Any parcel with continuous linear freeway frontage of 200 feet or greater     |
| 16                    | <b>Directional Sign</b><br>Each vehicle entrance                                                              |
| 17                    | <b>Accessory Sign</b><br>Identified specific uses                                                             |

## D. Sign Type Standards and Guidelines

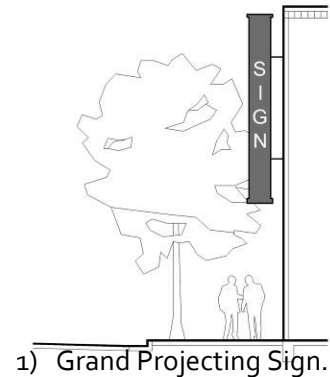
This section provides Standards and Guidelines for each Sign Type.

### 1. Grand Projecting Sign

Grand Projecting Signs are tall, large, vertically-oriented signs that project from the building perpendicular to the façade and that are structurally integrated into the building.

#### a. Standards

- i. Only one (1) Grand Projecting Sign shall be permitted per establishment.
- ii. The Grand Projecting Sign area shall not count towards the total sign area permitted based on the Linear Frontage Ratio.
- iii. Grand Projecting Signs shall be no taller than 30 feet from the bottom-most part of the sign to the tallest part of the sign.
- iv. Grand Projecting Signs may use animation provided such animation consists of flashing lights or chase lights only.
- v. Grand Projecting Signs shall project no more than six feet from the façade of the building.
- vi. No portion of a Grand Projecting Sign shall be lower than 12 feet above the level of the walkway over which it projects.
- vii. Letter width shall not exceed two-thirds (2/3) of the sign width.
- viii. No portion of a Grand Projecting Sign shall extend more than 10 feet above the roofline.



#### b. Commercial Guidelines

- i. Materials used in Grand Projecting Signs shall be metal and paint only.
- ii. Grand Projecting Signs shall be illuminated by exposed neon tube illumination or exposed incandescent bulb illumination only.
- iii. Letters shall be oriented right-side-up and stacked in a single upright row with the first letter being at the top of the sign and the last letter being at the bottom.

## 2. **Grand Wall Sign**

Grand Wall Signs are large signs located on, and parallel to, large unfenestrated building wall areas.

### a. Standards

- i. A Grand Wall Signs shall only be located on unfenestrated wall areas of 2,000 square feet in size or greater.
- ii. Only one (1) Grand Wall Sign shall be permitted per establishment.
- iii. The Grand Wall Sign area shall not count towards the total sign area permitted based on the Linear Frontage Ratio.
- iv. A Grand Wall Sign shall not exceed 1,000 square feet or 25 percent of the total wall area, whichever is less.
- v. A Grand Wall Sign shall project no more than one (1) foot from the façade of the building.

### b. Commercial Guidelines

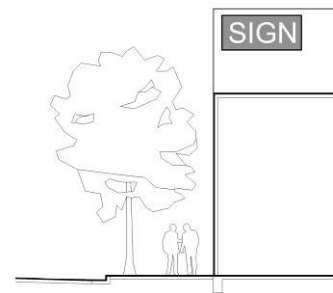
- i. Materials used in Grand Wall Signs shall be wood, ceramic, metal, or paint only.
- ii. Grand Wall Signs shall be illuminated by external illumination only.

### c. Industrial Guidelines

- i. Materials used in Grand Wall Signs shall be ceramic or metal.
- ii. Grand Wall Signs shall be illuminated by external illumination only.

## 3. **Wall Sign**

Wall Signs are signs that are located on, and parallel to, a building wall. Business Identification Wall Signs are signs that announce the name of a business within a building and Building Identification Wall Signs are signs that announce the name of a building. Both are located on, and parallel to, a building wall.



2) Grand Wall Sign.

a. Standards

- i. Wall Signs shall be located below the second floor and within the middle 50 percent of the building or tenant frontage measured from lease line to lease line. Building Identification Wall Signs shall be located only on the frieze or fascia (articulated banding across the top of every building floor) area of storefront level; frieze, fascia, parapet of the uppermost floor; or above the entrance to main building lobby.
- ii. No Wall Sign shall exceed 150 square feet in size. Building Identification Wall Signs shall be no taller than 24 inches in height.
- iii. Wall Signs shall count towards the total sign area permitted based on the Linear Frontage Ratio, except that the area of Building Identification Wall Signs shall not count towards the total sign area permitted based on the Linear Frontage Ratio.
- iv. The following types of establishments may use animated Wall Signs:  
night clubs, movie theaters, and live performance theaters with a capacity of greater than 200 persons. Animation for these establishments shall consist of flashing lights or chase lights only. Building Identification Wall Signs shall not be animated.
- v. Wall Signs shall project no more than one (1) foot from the façade of the building.



3) Building Identification Wall Sign.



3) Business Identification Wall Sign.

b. Commercial Guidelines

- i. Materials used in wall signs shall be wood, ceramic, and/or metal, except that theaters with a capacity of greater than 200 persons may use plastic or acrylic for readerboards. Wall signs may also be inscribed into the façade of the building. Building Identification Wall Signs shall be inscribed into the façade or constructed of individual metal letters.
- ii. Wall signs shall be illuminated by external illumination, exposed neon tube illumination, exposed incandescent bulb illumination, or halo illumination only. Building Identification Wall Signs shall be illuminated by external illumination or halo illumination only.



- iii. Where individual letters are used, letters shall be three-dimensional, created by raised letter forms mounted to the building façade or sign panel, or by incised openings cut out from the sign panel.
- iv. New wall signs for individual businesses in a shopping center shall be placed consistent with the location of signs for other businesses in the center. This will establish visual continuity among storefronts and create a unified appearance for the center.
- v. When signs that are attached to a wall are removed, holes and other disfigurations of the wall's surface shall be patched and painted to match surrounding areas.

c. Industrial Guidelines

- i. Materials used in wall signs shall be ceramic, and/or metal. Wall signs may also be inscribed into the façade of the building. Building Identification Wall Signs shall be inscribed into the façade or constructed of individual metal letters.
- ii. Wall signs shall be illuminated by external illumination, exposed neon tube illumination, exposed incandescent bulb illumination, or halo illumination only. Building Identification Wall Signs shall be illuminated by external illumination or halo illumination only.
- iii. Where individual letters are used, letters shall be three-dimensional, created by raised letter forms mounted to the building façade or sign panel, or by incised openings cut out from the sign panel.
- iv. When signs that are attached to a wall are removed, holes and other disfigurations of the wall's surface shall be patched and painted to match surrounding areas.

**4. Projecting Sign**

Projecting Signs are signs that are oriented perpendicularly to the building façade and are either (1) suspended under a bracket, armature, or other mounting device or (2) are cantilevered (i.e., structurally affixed to the building).

a. Standards

- i. Projecting Signs shall only be mounted on the wall area below the second floor.

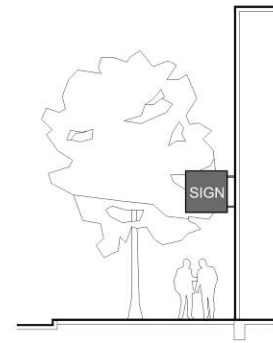


4) Suspended Projecting Sign.

- ii. No Projecting Sign shall exceed 16 square feet in size.
- iii. Projecting Signs shall project no more than four feet from the façade of the building.
- iv. No portion of a Projecting Sign shall be lower than eight feet above the level of the walkway over which it projects.

b. Commercial and Industrial Guidelines

- i. Projecting Signs that are suspended under a bracket, armature, or other mounting device should be wood, or metal and shall be illuminated by external illumination only.
- ii. Projecting Signs that are cantilevered signs shall be wood, ceramic, metal, and paint only and shall be illuminated by external illumination, exposed neon tube illumination, exposed incandescent bulb illumination, or halo illumination only.
- iii. Sign supports and brackets shall be compatible with the design and scale of the sign and the architectural design of the building.



4) Cantilevered Projecting Sign.

**5. Awning Valance Sign**

Awning Valance Signs are signs applied to the awning valance and are contained completely within the valance.

a. Standards

- i. Lettering for Awning Valance Signs shall include one (1) line of lettering not to exceed two-thirds ( $2/3$ ) the height of the valance or 12 inches, whichever is less.
- ii. Awning Valance Signs shall project no farther from the building than its associated awning.
- iii. No portion of an Awning Valance Sign shall be less than eight feet above the level of the walkway over which it projects.



5) Awning Valance Sign.

b. Commercial and Industrial Guidelines

- i. Awning Valance Signs shall consist of metal, or vinyl or paint applied directly to the awning.
- ii. Awning Valance Signs shall be illuminated by external illumination only.
- iii. The shape, design, and color of awnings shall be carefully designed to coordinate with, and not dominate, the architectural style of the building. Where multiple awnings

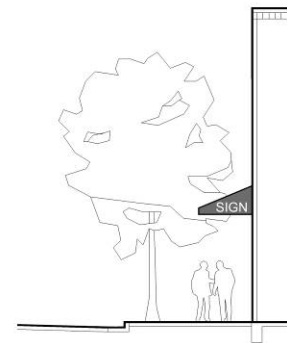
are used on the building, the design and color of the sign awnings shall be consistent with all other awnings.

- iv. The use of temporary signs/letters on awnings is not allowed. Only permanent signs that are an integral part of the awning or canopy shall be used.
- v. The use of adhesive/press on lettering is not allowed. Awning signs shall be painted directly on the canvas awning.
- vi. To avoid having to replace awnings or paint out previous tenant signs when a new tenant moves in to a building, the use of replaceable valances shall be considered.

## **6. Awning Side Sign**

Awning Side Signs are signs applied to the side panel of an awning.

- a. Standards
  - i. The area of Awning Side Signs shall not count towards the total sign area permitted based on the Linear Frontage Ratio.
  - ii. Lettering for Awning Side Signs shall not exceed 12 inches in height with total sign area not to exceed 20 percent of the area of the awning side area.
  - iii. Awning Side Signs shall project no farther from the building than its associated awning.
  - iv. No portion of an Awning Side Sign shall be less than eight feet above the level of the walkway over which it projects.



6) Awning Side Sign.

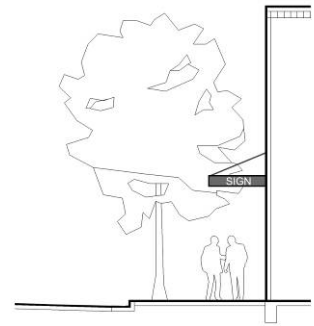
- b. Commercial and Industrial Guidelines
  - i. Awning Side Signs shall consist of vinyl or paint applied directly to the awning.
  - ii. Awning Side Signs shall be illuminated by external illumination only.
  - iii. The shape, design, and color of awnings shall be carefully designed to coordinate with, and not dominate, the architectural style of the building. Where multiple awnings are used on the building, the design and color of the sign awnings shall be consistent with all other awnings.
  - iv. The use of temporary signs/letters on awnings is not allowed. Only permanent signs that are an integral part of the awning or canopy shall be used.

- v. The use of adhesive/press on lettering is not allowed. Awning signs shall be painted directly on the canvas awning.
- vi. To avoid having to replace awnings or paint out previous tenant signs when a new tenant moves in to a building, the use of replaceable valances shall be considered.

## 7. Canopy Fascia Sign

Canopy Fascia Signs are signs that are mounted to the front or side fascia of a canopy and contained completely within that fascia.

- a. Standards
  - i. The height of Canopy Fascia Signs shall not exceed two-thirds ( $2/3$ ) the height of the fascia or 12 inches, whichever is less.
  - ii. The width of Canopy Fascia Signs shall not exceed two-thirds ( $2/3$ ) of the canopy width.
  - iii. Canopy Fascia Signs shall project no farther from the building than its associated canopy.
  - iv. No portion of a Canopy Fascia Sign shall be less than eight feet above the level of the walkway over which it projects.
  - v. Canopy Fascia Signs shall consist of only one (1) line of lettering articulated as individual letters mounted directly to the canopy.
- b. Commercial and Industrial Guidelines
  - i. Materials used in Canopy Fascia Signs shall be metal and paint only.
  - ii. Canopy Fascia Signs shall be illuminated by external illumination only.



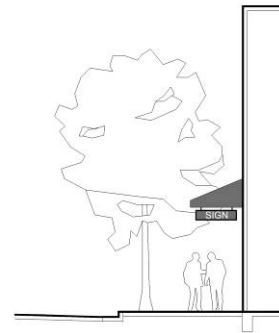
7) Canopy Fascia Sign.

## 8. Under-Awning or Under-Canopy Sign

Under-Awning or Under-Canopy Signs are signs that are suspended under an awning or canopy, perpendicular to the building facade.

### a. Standards

- i. Under-Awning or Under-Canopy Signs shall be located adjacent to a public entrance.
- ii. No more than one (1) Under-Awning or Under-Canopy Sign shall be permitted per establishment per façade.
- iii. The area of Under-Awning or Under-Canopy Signs shall not count towards the total sign area permitted based on the Linear Frontage Ratio.
- iv. Under-Awning or Under-Canopy Signs shall not exceed three (3) square feet in area.
- v. Under-Awning or Under-Canopy Signs shall project no farther from the building than its associated awning or canopy.
- vi. No portion of an Under-Awning or Under-Canopy Sign shall be less than eight feet above the level of the walkway over which it projects.



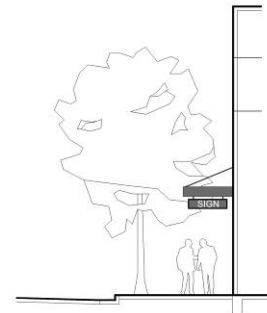
8) Under-Awning Sign.

### b. Commercial Guidelines

- i. Materials used in Under-Awning or Under-Canopy Signs shall be wood, metal, and paint only.
- ii. Under-Awning or Under-Canopy Signs shall be illuminated by external illumination only.

### c. Industrial Guidelines

- i. Materials used in Under-Awning or Under-Canopy Signs shall be metal and paint only.
- ii. Under-Awning or Under-Canopy Signs shall be illuminated by external illumination only.

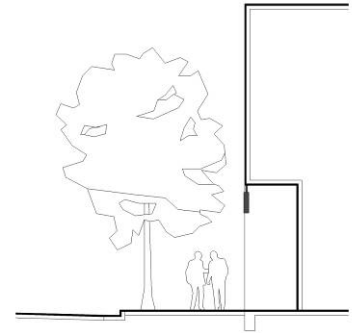


8) Under-Canopy Sign.

## 9. Recessed Entry Sign

Recessed Entry Signs are signs that are oriented parallel to the building façade and that are suspended over a recessed entry.

- a. Standards
  - i. No Recessed Entry Sign shall exceed twenty (20) square feet in size.
  - ii. Recessed Entry Signs shall not project beyond the façade of the building.
  - iii. No portion of a Recessed Entry Sign shall be lower than eight feet above the level of the walkway.
- b. Commercial Guidelines
  - i. Materials used in Recessed Entry Signs shall be wood, metal, and paint only.
  - ii. Recessed Entry Signs shall be illuminated by external illumination only.
- c. Industrial Guidelines
  - i. Materials used in Recessed Entry Signs shall be metal and paint only.
  - ii. Recessed Entry Signs shall be illuminated by external illumination only.



9) Recessed Entry Sign- Section View.



9) Recessed Entry Sign- Elevation View.

## 10. Window Sign

Window Signs are signs that are applied directly to a window or mounted or suspended directly behind a window.

- a. Standards
  - i. Window Signs shall be permitted on windows below the second floor level only. A Window Sign that only identifies a building shall be located on a transom window above a primary entrance, or the glazed area of primary door.
  - ii. Window signs shall count towards total sign area permitted based on the Linear Frontage Ratio, except that the area of a Window Sign that only identifies a building shall not count towards the total sign area permitted based on the Linear Frontage Ratio. One (1) Window Sign that only identifies a building shall be permitted per building per street-facing façade.



10) Window Sign.

- iii. No more than 25 percent of any individual window area shall be covered or otherwise occupied by signage.
- iv. The letter height of each Window Sign shall not exceed 12 inches and shall be taller than four inches.

**b. Commercial and Industrial Guidelines**

- i. Ground-floor Window Signs shall consist of vinyl or paint applied to the glass, neon mounted or suspended behind the glass, or framed and mounted paper signs. Window Signs that only identify a building shall consist of vinyl or paint applied to the glass only.
- ii. Ground floor Window Signs shall be illuminated by exposed neon tube illumination only. A Window Sign that only identifies a Building Identification shall not be illuminated.



10) Building Identification Window Sign.

**11. Temporary Window Sign**

Temporary Window Signs are signs that are applied directly to a window or mounted or suspended directly behind a window and are designed, constructed, and intended for display on private property for a period of not more than 90 consecutive days per year. Examples include “grand opening”, “special sale,” and seasonal signage.

**a. Standards**

- i. Temporary Window Signs shall be located only on ground floor windows on building facades that face a public street or a parking lot.
- ii. Temporary Window Signs shall not exceed six square feet in size.
- iii. Temporary Window Signs shall not cause the total amount of the window area covered with signage to exceed 25 percent.
- iv. Temporary Window Signs that satisfy the above standards and General Standards do not require a permit.



11) Temporary Window Sign.



- b. Commercial and Industrial Guidelines
  - i. Temporary Window Signs shall be constructed of paint applied directly to the glass or framed paper signs placed behind the glass.
  - ii. Temporary Window Signs shall not be illuminated.
  - iii. Temporary Window Signs that satisfy the above guidelines and General Guidelines do not require a permit.

## 12. Temporary Wall Sign

Temporary Wall Signs are signs that are located on, and parallel to, a building wall and are designed, constructed, and intended for display on private property for a period of not more than ninety (90) consecutive days per year. Examples include “grand opening”, “special sale,” and seasonal temporary banner signage.



12) Temporary Wall Sign.

- a. Standards
  - i. Temporary Wall Signs shall only be mounted on a wall area below the second floor level that faces a public street or a parking lot.
  - ii. A maximum of one (1) Temporary Wall Sign is allowed per establishment.
  - iii. No Temporary Wall Signs shall exceed 32 square feet in area.
  - iv. Temporary Wall Signs shall project no more than one (1) foot from the façade of the building.
- b. Commercial and Industrial Guidelines
  - i. Materials used in Temporary Wall Signs shall consist of a flexible vinyl material with grommet holes installed around the edges to accommodate attachment to a building.
  - ii. Temporary Wall Signs shall not be illuminated.

### 13. Monument Sign

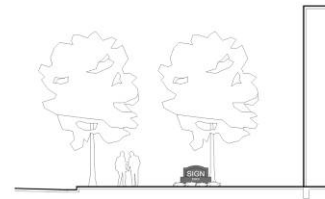
A Monument Sign is a freestanding sign supported by a solid architectural element at its base.

a. Standards

- i. A maximum of one Monument Sign is allowed per street frontage for single-purpose buildings, multi-tenant buildings or complexes and shopping centers on a -parcel with one or more street frontages of at least 100 feet.
- ii. A Monument Sign shall not exceed eight feet in length or six feet in height.
- iii. Monument Signs shall be placed perpendicular or parallel to the street. The base of a Monument Sign shall be set back a minimum of five feet from any public right-of-way or interior property line; a minimum of 10 feet from the edge of a driveway; and a minimum of 50 feet and from any Monument Signs or Pylon Signs on adjoining sites. Monument Signs shall not block sight lines at entry driveways and circulation aisles.
- iv. The sign copy for a Monument Sign shall only identify the name of the center, complex, or building and the address; however, the name of the primary tenant, if any, may be included in the copy. The minimum letter size allowed shall be six inches. Sign copy shall not be located closer than one half-letter height to the sign edge or other line of copy. Between 5 to 10 percent of the sign area should be dedicated to identification of the street address.
- v. The area of Monument Signs shall not count towards the total sign area permitted based upon Linear Frontage.
- vi. Monument Signs shall not project over any on-site driveway or vehicle circulation area.
- vii. Landscaping with automatic irrigation shall be provided at the base of the supporting structure equal to twice the area of one face of the sign or 75 square feet, whichever is greater. For example, 40 sq. ft. of sign area = 80 sq. ft. of landscaped area.

b. Commercial and Industrial Guidelines

- i. Monument Signs may be illuminated; however the sign copy should be the only portion of the sign face that is illuminated. The sign background or field shall be opaque with a nonglossy, nonreflective finish.



13) Monument Sign.

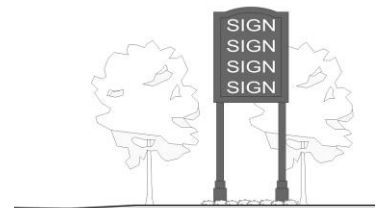
- ii. The sign area and height of the sign shall be in proportion to the site and surrounding buildings. Signs shall not be overly large so as to be a dominant feature of the site.
- iii. Monument Signs shall incorporate architectural elements, details, and articulation as follows:
  - Provide a solid architectural base that supports the sign. The base shall be a minimum of one-foot in height.
  - Provide architectural elements on the sides and top to frame the sign pane(s). Use columns, pilasters, cornices, and similar details to provide design interest.
  - Incorporate materials and colors into the sign support structures to match or be compatible with materials and colors of the development the sign serves so it does not appear out of scale with its adjacent building(s).
  - Keep the overall size of the sign in proportion with the development it serves so it does not appear out of scale with its adjacent building(s).

#### 14. Freeway Adjacent Sign

A Freeway Adjacent Sign is an on-site sign of a pylon-type design that is oriented towards traffic traveling on the I-10 freeway.

##### a. Standards

- i. One Freeway Adjacent Sign is allowed for single-purpose buildings, multi-tenant buildings, or complexes with at least 20,000 square feet of building area on a parcel that has at least 200 linear feet of continuous frontage along the I-10 freeway easement or right-of-way and is at least four net acres in size. A parcel with a Freeway Adjacent Sign shall not be permitted any other freestanding sign of any type.
- ii. Freeway Adjacent Signs shall not exceed 200 square feet in area and a maximum height of 40 feet. If additional sign height and/or area is requested, the Planning Commission, at the Planning Commission's discretion, may approve additional sign height and/or area (up to a maximum height of 50 feet and maximum sign area of 250 square feet) after either or both of the following modeling simulations is conducted by the applicant as a part of the Design Review:



14) Freeway Adjacent Sign.

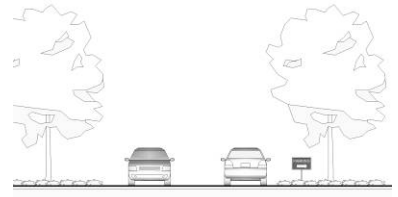
- A “flag test” to simulate the visual impact of the proposed sign structure;
- A line of sight study to determine what size of sign could be seen from any given distance, and whether the additional height and/or area are warranted.

b. Commercial and Industrial Guidelines

- i. Freeway Adjacent Signs may be illuminated; however the sign copy shall be the only portion of the sign face that is illuminated. The sign background or field should be opaque with a nonglossy, nonreflective finish.
- ii. The sign area and height of the sign should be in proportion to the site and surrounding buildings. Signs shall not be overly large so as to be a dominant feature of the site.
- iii. Freeway Adjacent Signs shall incorporate architectural elements, details, and articulation as follows:
  - The supporting structures of Freeway Adjacent Signs shall not include exposed metal pole(s), but shall be surrounded by a decorative cover that is architecturally compatible with the sign cabinet and the architectural character of buildings on the site.
  - Incorporate materials and colors into the sign support structures to match or be compatible with materials and colors of the development the sign serves so it does not appear out of scale with its adjacent building(s).
  - Keep the overall size of the sign in proportion with the development it serves so it does not appear out of scale with adjacent building(s).

### 15. Directional Sign

A Directional Sign is an on-premise sign giving directions, instructions, or facility information of an establishment (e.g., parking signs, exit and entrance signs, etc.).



15) Directional Sign.

- a. Standards
  - i. One (1) directional sign for each vehicle entry to a site with a maximum area of three square feet per sign. Maximum sign height shall be four feet. Additional directional signs may be allowed with approval of a Comprehensive Sign Program.
- b. Commercial and Industrial Guidelines
  - i. Directional signs and their supports shall use the same color palette of the proposed building.
  - ii. Directional signs shall be located to maintain sight lines along major circulation routes and should be illuminated for visual clarity and safety.
  - iii. Directional signs shall be designed with easy-to-read fonts, contrasting colors from the surrounding support panels, and durable materials.
  - iv. Double-sided parking directional signs shall incorporate messaging and direction arrows on both sides of sign.
  - v. Parking directional signage shall be used consistently throughout each individual development.

### 16. Accessory Signs

Accessory Signs are signs that provide incidental information about a project site or a business and its goods or services. For the purposes of this plan, Accessory Signs include:

- Directory Sign. A sign listing the tenants or occupants of a building or building complex.
- Fuel Price Sign. Fuel price signs only advertise the price and grade of fuel for sale at a service station.
- Nameplate Sign. A sign indicating the name and/or address of a building or occupant.
- Restaurant Menu Sign. Menus displayed on the exterior premises of a restaurant.

- a. Standards
  - i. The area of Accessory Signs shall not count towards the total sign area permitted based upon Linear Frontage.
  - ii. Directory Signs: Limited to a total sign area of 10 square feet.
  - iii. Fuel Price Signs: One per street frontage with a maximum sign area of 12 square feet and a maximum height of four feet. Fuel price signs shall only advertise the price and grade of fuel and no other advertising shall be allowed. Located in a landscaped planter with a minimum area equal to the area of the sign.
  - iv. Nameplate Sign: One non-illuminated sign not to exceed one square foot in area.
- b. Commercial and Industrial Guidelines
  - i. Materials used in Exempt Signs shall be wood and metal.
  - ii. Exempt Signs shall be illuminated by internal or external illumination as appropriate.

## ***12.8 Public Right-of-Way Streetscape***

This section establishes standards for streetscape landscaping improvements within the public rights-of-way along the major highways, primary highways, and secondary highways as identified in the General Plan, Circulation Master Plan, as well as district gateway/intersection enhancements. The intent of these streetscape improvement concepts and gateway enhancements is to provide a “sense of place” or identity, while interweaving the standards and tree palettes that may be provided by any overriding City Master Street Tree Plan.

### ***A. Street Classifications***

Streets within the SID are classified as follows:

- 1. Major highways:
  - a. Six-lane major highway – Cherry Avenue (north of Valley Boulevard).
  - b. Modified six-lane residential adjacent major highway – none within SID.
  - c. Modified six-lane no median major highways – Valley Boulevard.
  - d. Eight-lane major highways – Cherry Avenue (south of Valley Boulevard).
- 2. Primary highways – none within the SID.
- 3. Secondary highways – none within the SID.
- 4. Collector streets – Almond Avenue and Banana Avenue.

## **B. General Design Criteria**

The following general design criteria are intended to articulate consistent landscape treatments on similar classifications of corridors and provide a hierarchy of conceptual treatments for district gateway/intersection enhancements.

1. Landscaping should be used to accentuate and frame important view corridors.
2. Landscaping shall employ a common three-tiered approach to design:
  - a. Trees
  - b. Shrubs, vines and tall grass-like materials
  - c. Groundcovers (does not include turf)
3. Landscaping should be consistent and accentuated along arterial corridors and gateway intersections to emphasize district areas.
4. Street trees on major highways shall consist of on-center planting of deciduous trees in medians (whenever medians are required) and evergreen trees in parkways to provide seasonal variations of views during fall and winter months (clearer air and snow-capped peaks).
5. Gateway intersection enhancements should incorporate the adjacent property tree species (used in buffer setback) in order to provide background and screening, and include accent trees selected for their character and shape.
6. Primary and tertiary gateways will include thematic monumentation for district identification and reflect elements of local identity (i.e. river rock, concrete, City logo, etc.).
7. All gateway intersection enhancements shall incorporate decorative paving at corner areas and plant materials that promote the best of water-efficient landscaping.

## **C. Streetscape Concept**

The Streetscape Concept Plan for the entire Specific Plan area is shown on Exhibit 12.5. The plan identifies major, primary, and secondary highways, as well as collector streets and the gateway intersections within the Specific Plan area. Roadway classifications are consistent with the General Plan, Circulation Master Plan.

1. **Major Highway Streetscape.** Major highway streetscapes define the image of the City and its districts, while providing arterial linkages within and beyond the City. There are four streetscape concepts for major highways: Six-Lane Major Highway, Modified Six Lane No Median Major Highway, Modified Six Lane Residential Adjacent Major Highway, and Eight-Lane Major Highway. These major highway streetscapes are designed in response to special design needs, right-of-way, and adjacencies. Major highways within the SID are Cherry Avenue and Valley Boulevard. Streetscape cross-sections for these areas are shown in Exhibits 12-6, 12-7, and 12-8.



**2. Gateways.**

**A. Concept Plan**

The Streetscape Concept Plan Exhibit 12.5 identifies a hierarchy of primary, secondary, and tertiary gateways. The intent of the gateway intersection enhancements is to provide a visual statement that you are within the Specific Plan area.

The gateway intersection enhancements should all incorporate uniform treatments (to varying degrees) within expanded corner setback areas (45 degree diagonal right-of-way). Depending on the hierarchy level, each gateway shall include special corner/sidewalk paving, planting schemes that highlight drought tolerant species, and monumentation signage. Monument signs are optional on tertiary gateway intersections.

Each corner planting scheme shall incorporate the three-tiered planting concept, consisting of accent trees, shrubs, or tall grass-like plant material, and a ground cover. Dense planting of evergreen tree species consistent with adjacent buffer setback plantings shall provide a background/screen for each corner setback area.

Gateway conceptual designs with typical dimensions (plan views) are illustrated in Exhibits 12-9 and 12-10. The monument sign concept as it would appear in front of the planting treatment is illustrated in Exhibit 12-11.

Gateway enhancements and monument sign enhancements shall meet the City's line of sight regulations, as determined by the City Engineer. Dimensions of monument signs shall comply with Section 12.6.D.14.

***B. Dedication and Maintenance of Gateway Intersection Enhancements***

1. When dedication and maintenance is required.
  - a. Whenever a development project is proposed on land that is designated as a location for gateway intersection enhancements in Section 10.8 Public Right-of-Way, the developer shall:
    - i. Dedicate any necessary right-of-way area to the City or provide an easement in favor of the City for the installation of gateway intersection enhancements;
    - ii. Construct the gateway intersection enhancements to the standards indicated in Section 12.8 Public Right-of-Way Streetscape; and
    - iii. Enter into an agreement with the City that specifies perpetual maintenance.
  - b. The applicable review authority shall impose the dedication (or easement) requirement as a condition of project approval.
  - c. The City Attorney and the Director of Community Development shall approve the form and content of any dedication or easement instrument used to ensure the

installation and perpetual maintenance of the gateway intersection enhancements.

C.

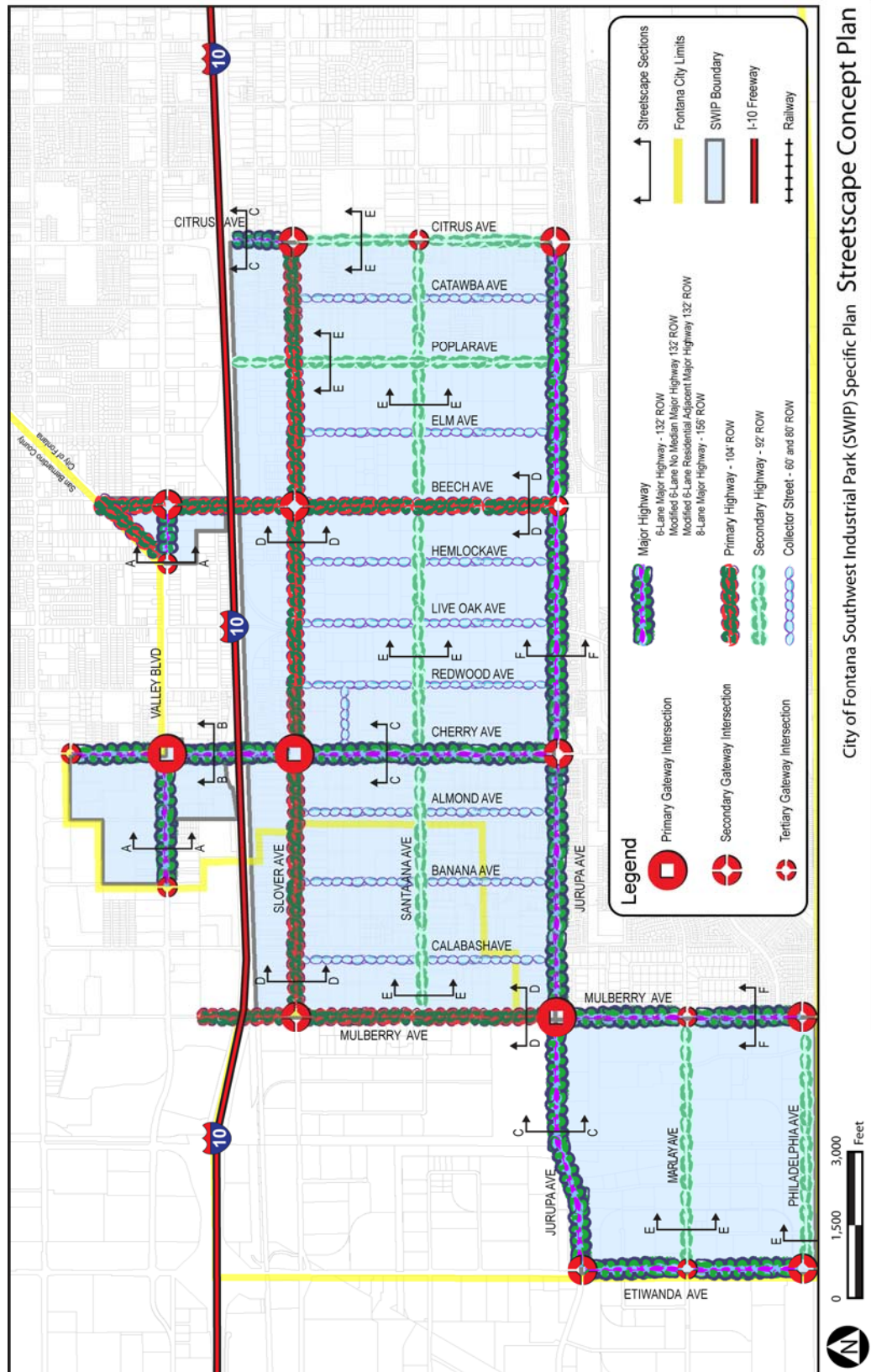


Exhibit 12-5 – Streetscape Concept Plan

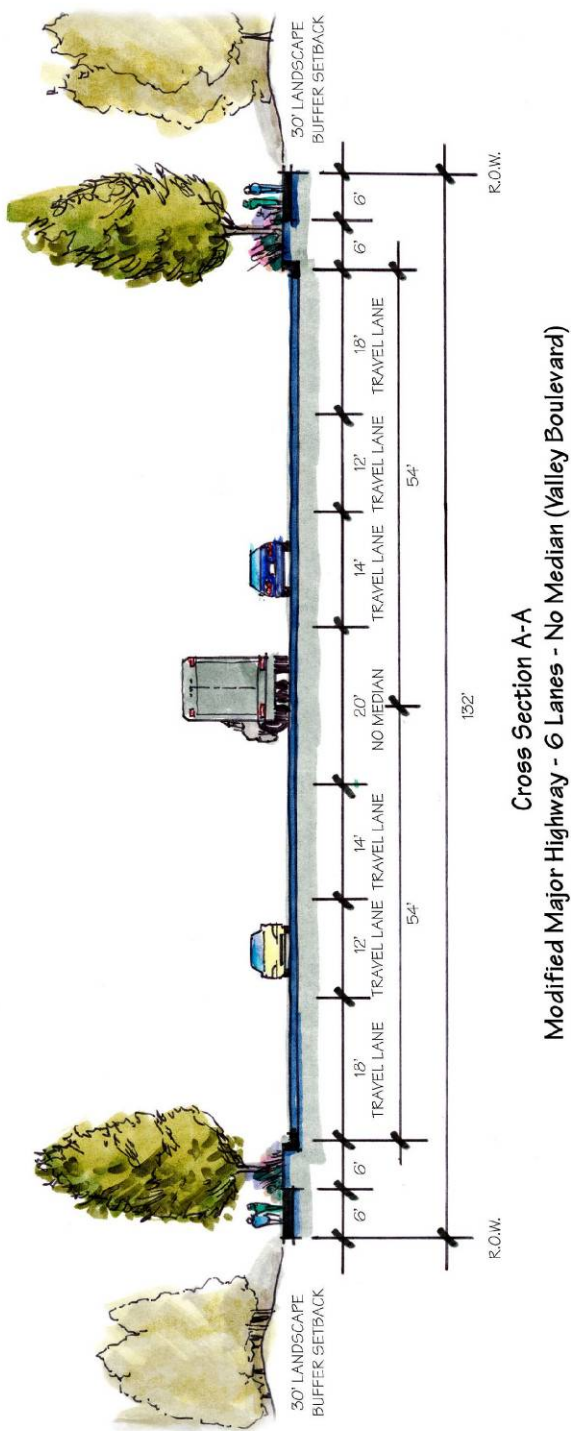


Exhibit 12-6 – Modified Major Highway – 6 Lanes – Cross Section A-A (Valley Boulevard)

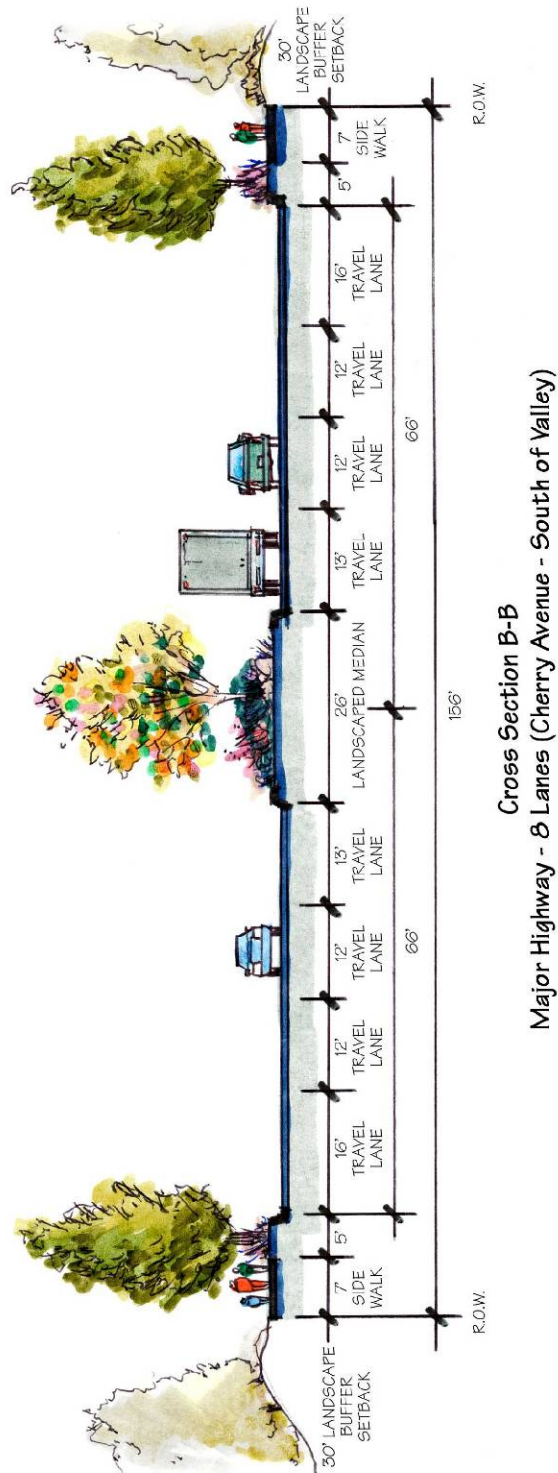


Exhibit 12-7 - Major Highway – 8 Lanes – Cross-Section B-B (Cherry Avenue – South of Valley)

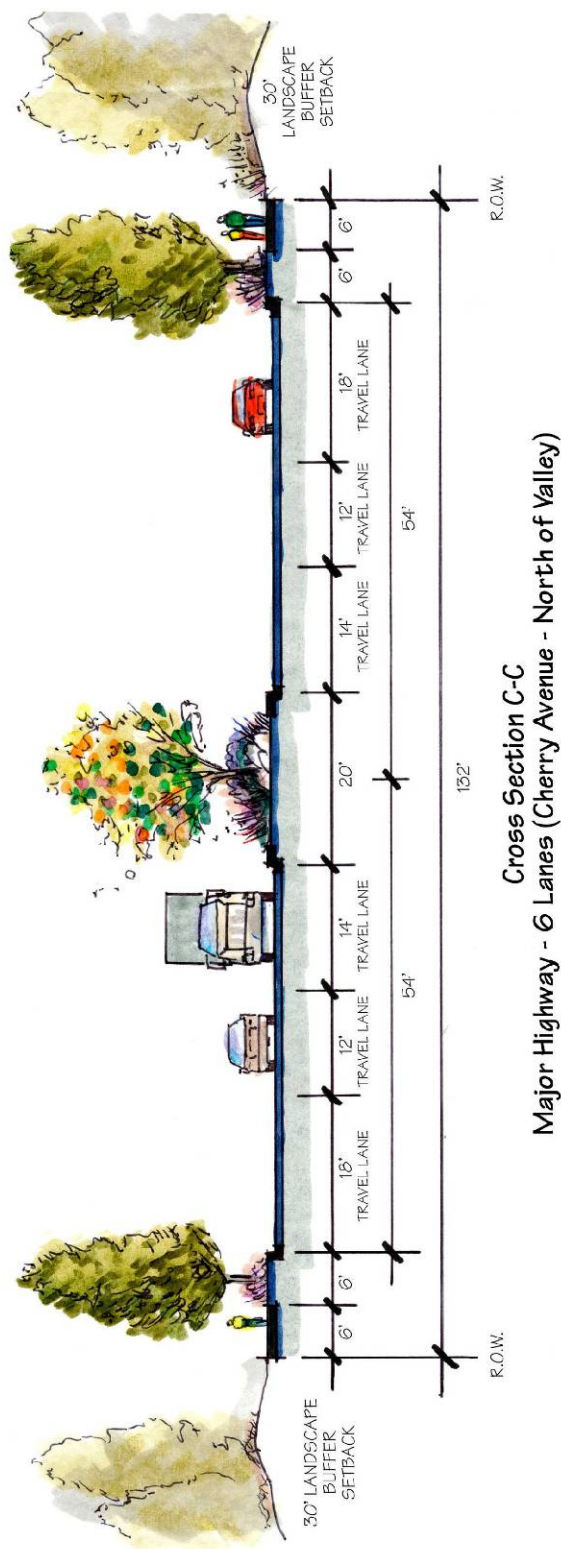


Exhibit 12-8 - Major Highway – 6 Lanes – Cross-Section C-C (Cherry Avenue – North of Valley)



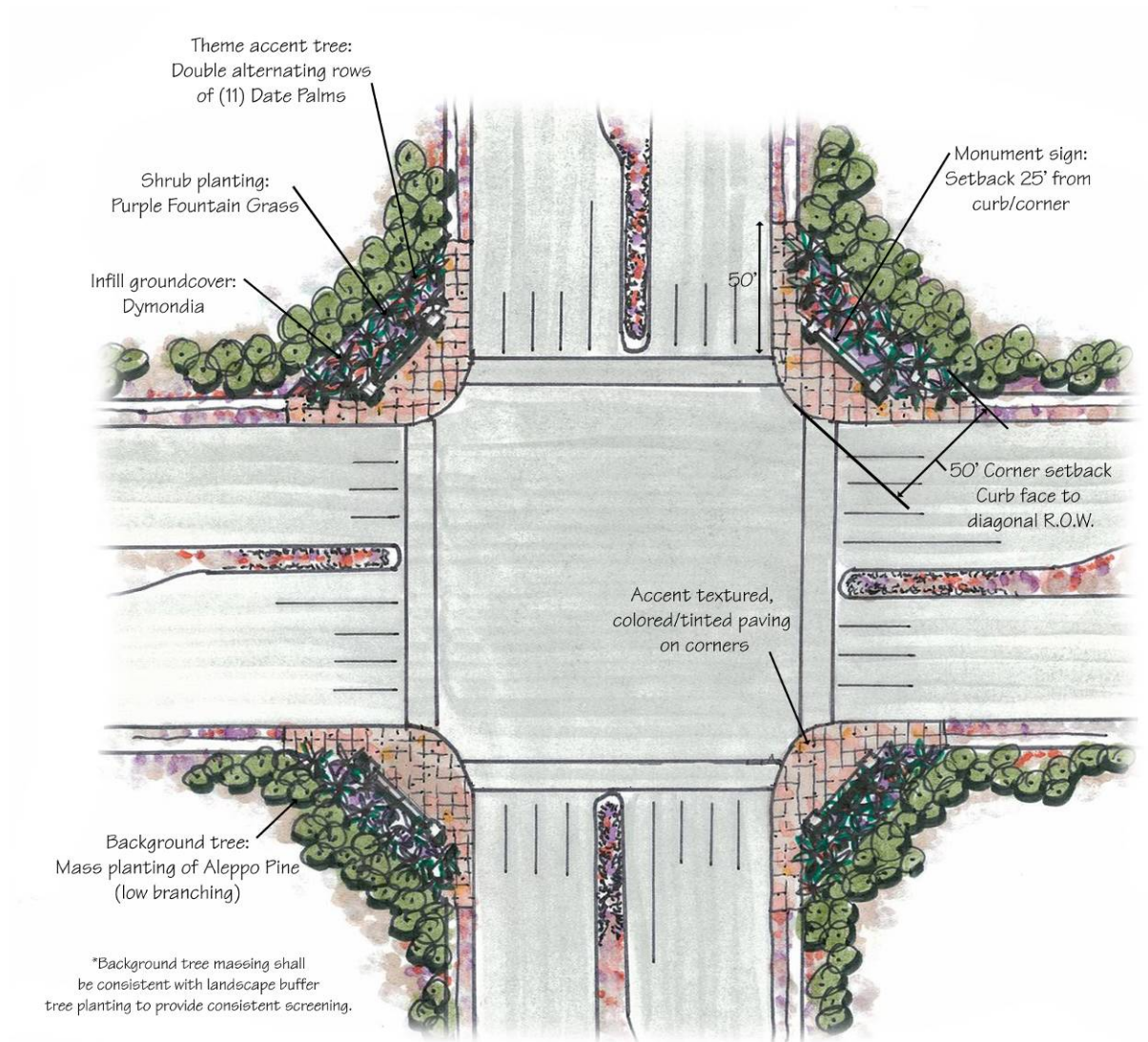


Exhibit 12-9 – Primary Gateway Intersection Enhancement Concept



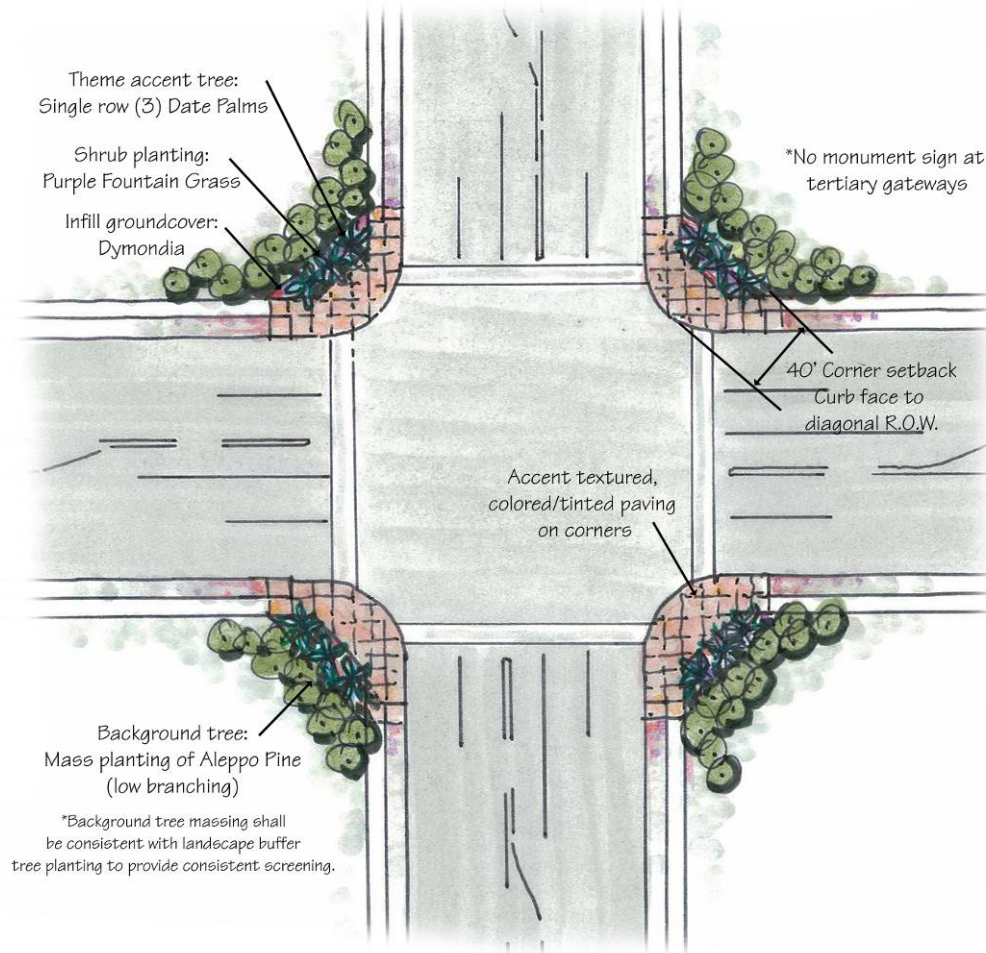
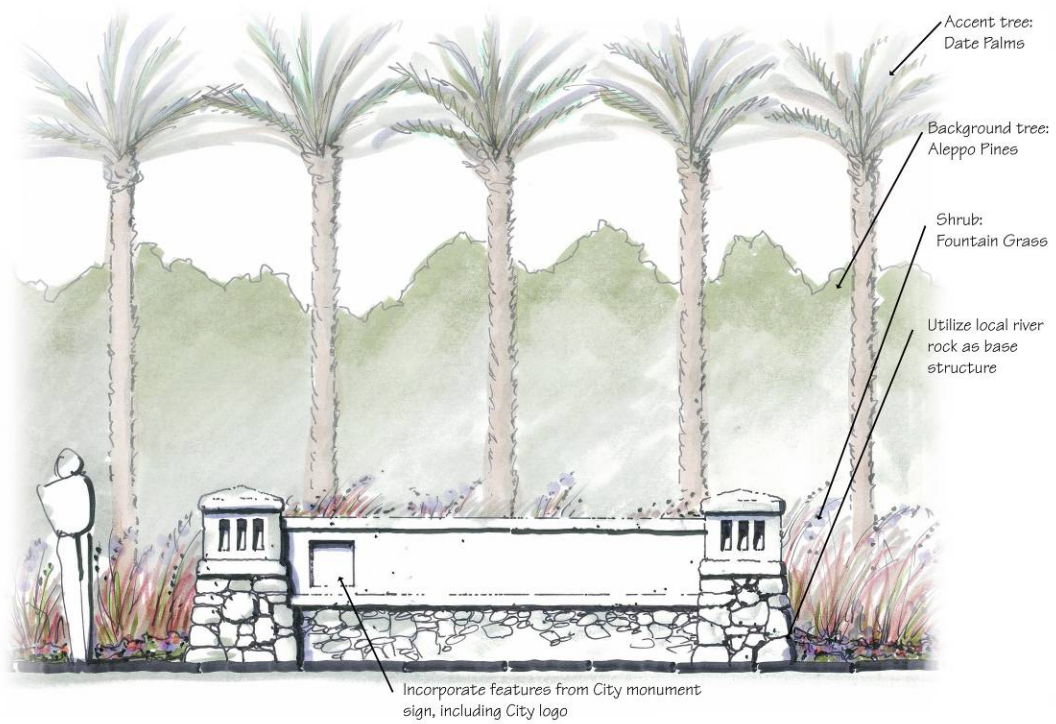


Exhibit 12-10 – Tertiary Gateway Intersection Enhancement Concept



*See Section 12.7.D.14 for dimension standards*

Exhibit 12-11 – Monument Sign Concept

#### 4. **Street Furniture**

Exhibit 12-12 – Street Furniture Palette, identifies recommended street furniture components, including lighting, trash receptacles, and benches, for the district. The palette is intended to ensure a unified visual identity for the district, which is distinct from the other districts within the Specific Plan area.



**Hi-Glo Series Pedestrian Lighting**  
by Landscape Forms



**Chase Park Series trash receptacle and bench**  
by Landscape Forms

Exhibit 12-12 – Street Furniture Palette

**C. Freeway Edges Design Criteria**

Freeway edges are an important part of the overall specific plan area and should be consistent with the overall Specific Plan landscape palette. General guidelines include:

1. A minimum of a 20-foot landscape zone (measured from the private property line to the I-10 freeway). Plantings should reflect the primary highway planting palette to the extent feasible.
2. Landscape treatments along the freeway corridor should serve as a windbreak to protect the sites from seasonal strong winds. Windbreak elements include a row of medium height (20 to 25 feet) dense trees, a row of taller trees (40 to 45 feet) and a row of medium height (8 to 10 feet) dense shrubs.
3. Undesirable views such as parking lots and loading/service areas visible from the I-10 freeway are prohibited.

## **12.9 Design Guidelines**

### **A. Design Objectives**

The Design Guidelines will promote and reinforce the City's commitment to high quality development. In general, the guidelines are intended to ensure that development preserves or improves the positive characteristics of the City's image. The objectives of these guidelines are to:

- Promote orderly development by implementing the SWIP Specific Plan objectives, policies, and principles.
- Protect and enhance property values by ensuring that development fits properly within the context of its surroundings and does not negatively impact adjacent uses.
- Encourage individual creativity and innovative solutions by allowing flexibility in how a particular guideline is met as long as the intent of the guideline is achieved.
- Ensure functional pedestrian and motor vehicle circulation within a project and convenient pedestrian linkages to and from adjacent residential, commercial, industrial, and school areas.

### **B. Design Intent**

The SID encourages the use of auto-themed design elements to compliment the Speedway and create an aesthetically cohesive district. Design interface between varied uses and creating a welcoming, energized environment are important to the SID.

### **C. Industrial, Distribution, and Business Park Uses**

The design guidelines in this Subsection shall apply to industrial, distribution, and business park projects within this land use district.



## 1. Site Design

### Site Layout

- The arrangement of multiple buildings and associated circulation, and parking areas should reflect a well-organized site plan that emphasizes pedestrian connectivity and landscaped areas responsive to the public realm.
- Site development may utilize variations on building placement and landscaping adjacent to the public street. Appropriate configurations may include, but are not limited to the following:
  - Fully landscaped setback between building and street
  - Parking in front of building with a landscape buffer between parking and street. **See Figure 1.**



Figure 1. Appropriate building and landscape placement adjacent to public street.

- Visitor parking may be located at the front of the building adjacent to the main entry while employee parking and service areas are located at the sides and rear of the building. **See Figure 2.**
- Service and loading should not be located on building side(s) adjacent to a public street.

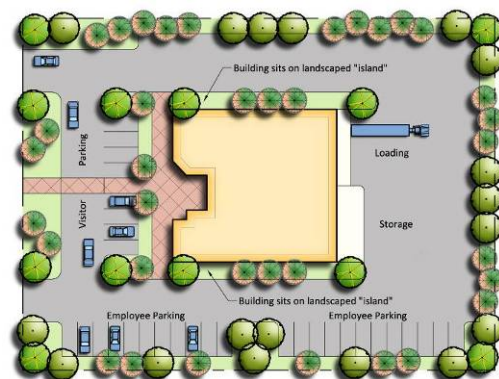


Figure 2. Parking layout.

- When buildings abut residential properties or the I-10 freeway, parking and loading areas should be located at the side of the building instead of the rear. The rear setback area shall be fully landscaped. **See Figure 3.**
- The design and location of accessory buildings (e.g., security kiosks, maintenance buildings, and outdoor equipment enclosures) shall be incorporated into and be compatible with the overall design of the project and the main buildings on the site.
- With the exception of security kiosks, accessory buildings shall be located as far back from the front and street side setback area as possible.
- Sea/train-type metal containers are prohibited.
- Noise-generating activities and storage areas shall be located as far as possible from adjacent properties. Sound attenuation walls shall be used where appropriate to reduce noise.
- Outdoor storage, work, and loading areas shall be incorporated within the building design and located to the rear or side of buildings and screened from view from adjacent public streets. **See Figure 4.**



Figure 3. Fully landscaped setback adjacent to freeway.



Figure 4. Appropriate location of loading areas.



## Courtyards and Plazas

- Buildings should be arranged to create opportunities for open space amenities (e.g., plazas, courtyards, outdoor eating areas, recreation areas, etc.).
- Business park developments should provide recreational facilities (e.g., bicycle paths, tennis courts, volleyball courts, gymnasiums, etc.).

## 2. Building Orientation

- Multiple building developments should be oriented in a manner that will form gateways through facade enhancement, maximize public view, and capture public interest along adjacent major streets. **See Figure 5.**
- The organization of buildings, parking areas, and landscaping shall recognize the existing characteristics of the site and shall relate to the surrounding development in scale and character.
- Buildings should generally be placed at or near setback lines with development oriented in a manner that will provide visual interest, especially for development located along the I-10 Freeway. **See Figure 6.**
- Buildings should be oriented in a manner that takes advantage of passive solar design.
- Buildings orientation shall be oriented to provide a buffer between sensitive uses and outdoor work areas, loading and storage.



Figure 5. Buildings are oriented to create gateway into development.



Figure 6. Buildings are oriented to provide architectural features visible from the freeway.

### 3. Site Elements

#### Fences and Walls

- Walls and fencing materials shall consist of wrought iron, tubular steel, stone, stucco, or brick, and shall be compatible with the overall design character/style of the development. The use of chain-link fence material is not allowed if visible from the public right-of-way. **See Figure 7.**
- Walls and fences shall be integrated with landscaping along the base of the wall or fence.
- Wall heights and surfaces shall be articulated with varying facade depths or pilasters to promote architectural interest, and shall include a cap along the top of the wall.
- Landscaping shall be used in combination with walls and fences to visually soften blank surfaces and to deter graffiti. **See Figure 8.**



Figure 7. Tubular steel and stone pillars are appropriate fencing materials.



Figure 8. Wall is articulated with pillars and incorporates landscaping at the base and vines to deter graffiti.

#### Screening

- Loading bays and service areas shall be screened by building placement, decorative walls or landscaping to the fullest extent feasible so that views of loading areas are minimized from adjacent public streets. **See Figure 9.**
- Trash storage enclosures and outdoor mechanical equipment shall be screened from public view, especially adjacent to the I-10 freeway.

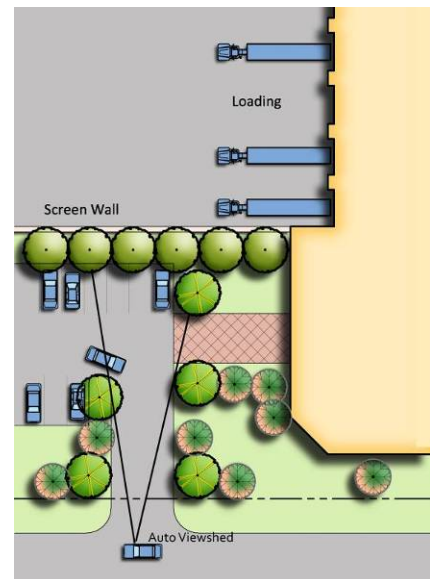


Figure 9. Appropriate placement, orientation and screening of service areas.

- Roof-mounted equipment shall be screened from public view through use of parapet walls or other screening devices. Special consideration shall be given to the screening of roof-mounted equipment on building rooftops that are visible from the I-10 freeway. **See Figure 10.**

### Trash Enclosures

- Trash enclosures shall be incorporated as part of the building design.
- If trash enclosures cannot be located out of public view, the design of trash storage areas shall incorporate architectural screening elements and landscaping compatible with the design of buildings and landscaping on the site. **See Figure 11.**
- Trash enclosures shall integrate horizontal screening such as trellises.

### Lighting

- Outdoor lighting plans shall take into consideration the location and potential growth pattern of nearby trees (existing and planned) so that appropriate lighting levels are maintained over time.
- Energy efficiency shall be considered through use of proper light location and placement, as well as use of energy-efficient bulbs or fixtures.
- Lighting fixtures shall include hoods or other design techniques to reduce glare and light pollution, especially along major streets and adjacent to residential zones, and to prevent light spillover onto adjacent properties. **See Figure 12.**
- Lighting shall be provided in project entryways, walkways, parking lots, and plazas or courtyards to promote safety. **See Figure 13.**

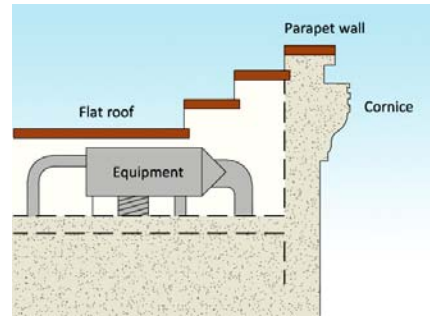


Figure 10. Screening of roof mounted equipment.



Figure 11. Trash enclosure.



Figure 12. Hooded light fixture directs light downward.



Figure 13. Bollard lighting along pedestrian walkway.

- Lighting may be mounted on poles or bollards, affixed to building walls, or placed within paved or landscaped areas. Appropriate materials and construction methods shall be used to ensure proper function of project lighting fixtures.
- Decorative light fixtures shall be consistent with the architectural design of the building. **See Figure 14.**



Figure 14. Decorative light fixtures.

#### 4. Parking and Access

##### Parking

- Parking lots shall not be the dominant visual element on the site.
- Parking lots adjacent to and visible from public streets shall be appropriately screened to minimize undesirable visual impacts.
- Surface parking areas shall integrate trees and landscape improvements to reduce the heat island effect. **See Figure 15.**
- Large parking lots (usually over 100 spaces) shall be divided into multiple, smaller areas and provided with canopy trees located throughout the parking area to reduce the effects of heat and the visual impacts of large parking areas.
- Employee parking areas should be located behind the building or alongside the building so as not to be visible from adjacent streets.
- Internal vehicular and pedestrian circulation within a development involving multiple buildings or lots shall interconnect in an obvious and consistent manner. **See Figure 16.**
- Parking shall be provided within walking distance of all tenants and public sidewalks.

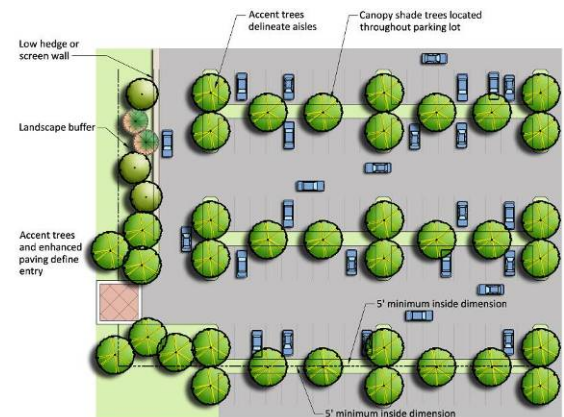


Figure 15. Parking lot landscaping.

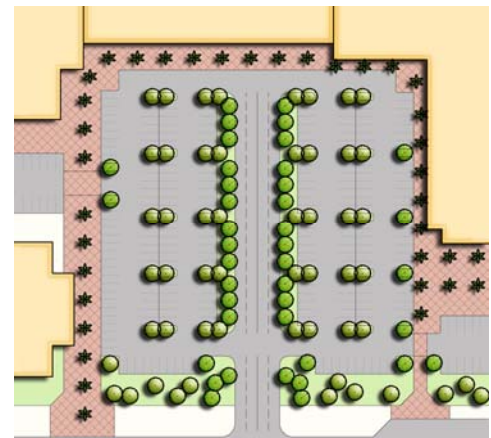


Figure 16. Pedestrian circulation is consistent along perimeter of parking lot.



- Parking lot design shall include water quality storm water facilities consistent with City standards. **See Figure 17.**

### Access

- The use of common (shared) access points and driveways is encouraged; placement of vehicle access points close to building entries shall be avoided to minimize pedestrian and vehicular conflicts. **See Figure 18.**
- Entry drives shall be clearly marked by special features, (e.g., enhanced paving, prominent landscape features, low-level decorative walls, and well-designed monument-type signs). **See Figure 19.**
- Access to each development site shall be clearly visible to pedestrians and motorists.
- Service and loading areas should take access from shared access points to reduce curb cuts along streets.

## 5. Architecture

### Mass and Scale

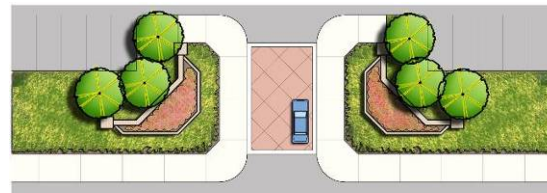
- The mass and scale of the buildings shall respect the visual and physical relationship to the adjacent buildings and surrounding sensitive uses. Taller building elements should be placed towards the center of the site, with lower elements adjacent to surrounding properties.
- Buildings should be stepped back when adjacent to or in close proximity to sensitive uses (e.g. residential, schools, etc.).
- Vertical and horizontal offsets shall be provided to reduce the visual bulk of the building. **See Figure 20.**



Figure 17. On-site stormwater capture system.



Figure 18. Shared parking access.



Enhance project entries with landscaping and special paving for visual impact.

Figure 19. Entry drive.



Figure 20. Incorporation of vertical offsets and material changes.

## Building Facades

- Building facades shall incorporate architectural elements such as windows, pillars, wall plane breaks to minimize blank walls and to create visual interest. **See Figure 21.**
- All building elevations, whether front, side, or rear shall be architecturally detailed.
- Architectural accents (e.g., cornices, tiles, trim around windows, grooves in building faces, accent band details, bulkheads, etc.) shall be used to create variation along building facades. **See Figure 22.**
- Higher facades and rooftops should be incorporated at corners and intersections, and appropriate massing and scale shall be considered for the remainder of the building spanning public street frontage. **See Figure 23.**
- The orientation of windows in buildings adjacent to a residential zone shall preclude a direct line of sight into residential properties.
- Primary building entries shall be easily identified through the use of prominent architectural elements, signage, landscaping, lighting, canopies, roof form, hardscape, architectural projections, columns, vertical elements, or other design features that help emphasize a building's entry. **See Figure 24.**



Figure 21. Façade articulation.



Figure 22. Use of cornices, window trim and grooves.



Figure 23. Enhanced corner elements.



Figure 24. Articulated Entries.

- Roofs shall be designed as an integral component of building form, mass, and facade. Building form should be enhanced by sloped or offset roof planes, eave heights, and rooflines. **See Figure 25.**
- Locate and/or screen rooftop equipment so that it is not visible from the street. Rooftop screening shall be integral to the building's form.



Figure 25. Offset roof planes.

### Color and Materials

- Colors and materials for all structures on-site should consist of earth tones. Use of at least two to three different colors, materials or textures is encouraged..
- Building materials shall be durable and able to withstand long-term exposure to the elements.
- Large expanses of smooth material (e.g., concrete) shall be broken up with expansion joints, reveals, or changes in texture and color. **See Figure 26.**
- To the fullest extent feasible, buildings should use large windows along walls and skylights in rooftop designs to capture natural light during working hours.
- Use of building colors and materials that express an automobile-oriented theme are encouraged. This may include use of decorative elements such as checkered flags, building elements molded in the shape of automobile parts and other graphics.



Figure 26. Use of expansion joints.



## 6. Landscaping

- Landscaping shall be in scale with adjacent structures, streets, and public spaces, and be sized appropriately when it is fully grown.
- Landscaped areas should incorporate a three-tiered planting system:
  - 1) ground covers and flowering plants;
  - 2) shrubs and vines; and
  - 3) trees.

**See Figure 27.**

See recommended Plant Materials Palette in Table 12-6.

- Special landscape features, such as specimen trees, shall be provided at major focal points (e.g., project entries, building entries, and pedestrian gathering areas).
- Entry and exit points shall be highlighted through a combination of distinctive landscape and hardscape features. Incorporation of appropriate public art is highly encouraged. .
- Development on corner lots shall be enhanced with a combination of specimen trees, accent plantings, upgraded perimeter wall surfaces, hardscape treatments and landscape lighting adjacent to the street intersection.
- Drought-tolerant and low-maintenance trees, vines, and groundcovers shall be used on-site. Drip irrigation systems shall be installed where feasible to ensure the highest possible level of water conservation.
- Planting materials shall be used in plaza areas to provide shade and soften the appearance of hard walls. Water features and public art are also encouraged. **See Figure 28.**



Figure 27. Three-tiered planting system: trees, shrubs, and ground covers.



Figure 28. Plaza area.

- The use of vines is encouraged on walls to soften the appearance of buildings and screen walls, and to help deter graffiti. **See Figure 29.**
- Planting materials shall be installed to provide a buffer against noise and should be integrated with walls or fences to achieve desired sound reduction. **See Figure 30.**



Figure 29. Wall incorporates landscaping to soften appearance and deter graffiti.

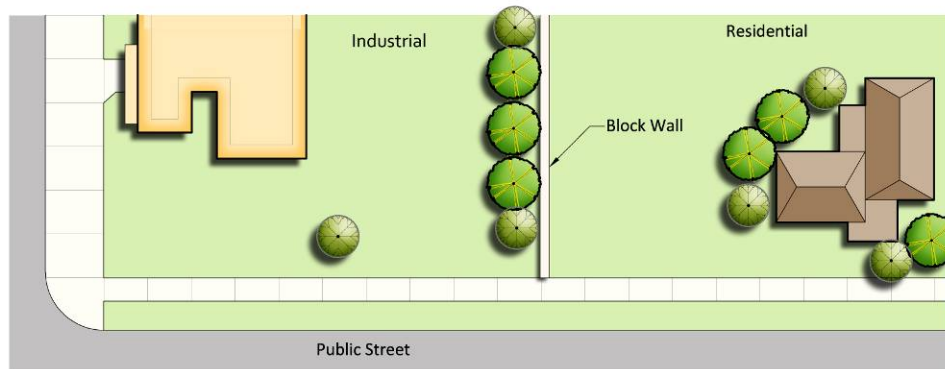
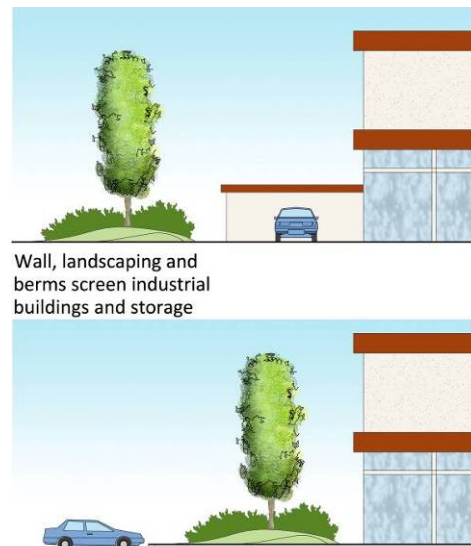


Figure 30. Plant material along buffer wall.

- Landscaping and trellises with vines are encouraged be used for screening trash storage areas, service areas and mechanical equipment.
- Setbacks adjacent to residential zones shall include dense landscaping to provide visual screening and noise abatement.
- Landscaped berms along site edges may be used to screen parking, loading and service areas and to serve as a sound reduction measure. **See Figure 31.**



Wall, landscaping and berms screen industrial buildings and storage

Figure 31. Landscaped berms.

- Surface parking lots shall be well-landscaped to reduce heat island effect and visually reduce the expanse of paved area. **See Figure 32.**
- Pervious paving materials are strongly encouraged for sidewalks, pathways, parking lots, plazas or gathering areas or other paved surfaces on-site.
- An automatic irrigation system using current equipment and technology shall be provided for planted areas.
- Run-off retention and on-site water filtration/storm water treatment features and bio-swales should be a part of the overall landscape design, and can also serve as buffering methods for adjacent businesses. **See Figure 33.**
- Trees shall be selected and placed to create canopy and shade for walkways, pedestrian open spaces, and parking areas.
- Landscape material in the setback and visible from the public right-of-way shall blend with and seem a part of the public right-of-way landscaping.
- Tree and shrub planting shall be in large masses.
- Plant material selected shall be suited to the specific soil and micro climatic conditions.
- Trees shall be healthy and have a uniform branching pattern.
- All ground cover shall be healthy and densely foliated and comprised of well rooted cuttings or container plants.
- Availability and specific site conditions should be considered in final selection. Ground cover shall achieve 100% coverage in one year.
- Informal tree masses should be planted in a mix of sizes.



Figure 32. Landscaped parking lot.



Figure 33. On site water filtration.

## D. Commercial Uses

### 1. Site Design

#### Site Layout

- The arrangement of multiple buildings and associated circulation and parking shall reflect a well-organized site plan that emphasizes pedestrian connectivity and landscaped areas that enhance publicly-accessible spaces. **See Figure 34.**
- Loading areas, access and circulation driveways, trash enclosures, storage areas, and rooftop equipment shall be located as far as possible from adjacent residentially zoned properties.
- Site design shall take into consideration the public street and relationship to freeway access and adjacent uses.
- Buildings may be located adjacent to the street with a fully landscaped setback or buildings may be set back with limited parking in front. **See Figure 35.**

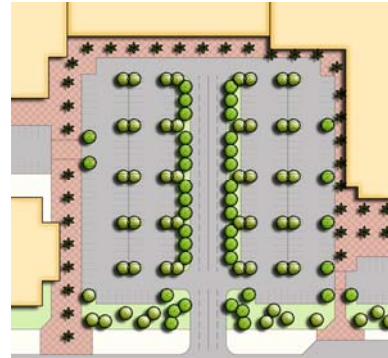


Figure 34. Site plan emphasizes pedestrian connectivity.



Figure 35. Limited parking adjacent to street with landscape setback.

#### Courtyards, and Plazas

- The organization and design of buildings shall encourage and facilitate pedestrian activity.
- Buildings should be organized to create usable open space, courtyards, plazas and dining areas. **See Figure 36.**



Figure 36. Buildings create courtyard.

- Pedestrian-oriented open spaces, courtyards and plazas shall include a focal element such as a sculpture and/or water feature and sitting areas. **See Figure 37.**

## 2. Building Orientation

- The organization of buildings, parking areas, and landscaping shall recognize the existing characteristics of the site and shall relate to the surrounding development in scale and character.
- Commercial buildings on corner parcels shall establish a strong tie to both streets and should encourage pedestrian activity at corner locations. **See Figure 38.**
- Buildings associated with service retail and restaurant uses shall be pedestrian-scaled, with entries fronting onto streets, plazas or courtyards to reinforce pedestrian orientation.
- Commercial development shall be oriented away from residential streets. At corner locations, if the side street primarily serves a residential neighborhood, development and access shall be oriented away from the side street.
- Buildings adjacent to sensitive uses (e.g. schools, residential zones) shall be buffered. This may be accomplished by providing masonry walls, landscaped berms, appropriate building orientation, building height stepbacks and limitations on activities adjacent to sensitive uses. **See Figure 39.**



Figure 37. Open plaza areas with seating.



Figure 38. Commercial/retail buildings on corners should establish strong tie to the street.

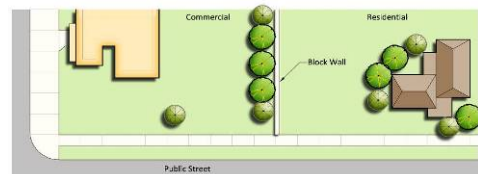


Figure 39. Masonry wall and landscaping separates uses.



- Commercial and retail buildings should generally be placed at or near setback lines with developments oriented in a manner that will provide visual interest, especially for developments located along I-10 Freeway.
- Buildings should be oriented in a manner that takes advantage of passive solar design to the maximum extent feasible.

### 3. Site Elements

#### Fences and Walls

- Wall heights and surfaces shall be articulated with varying façade depths or pilasters to promote architectural interest, and may include a cap along the top of the wall. **See Figure 40.**
- Walls visible from public streets shall be decorative and complement the design of on-site buildings.
- Wall and fencing materials may consist of brick, stone, stucco, wrought iron or tubular steel. Wall and fencing colors should match building colors, with neutral earth tones. **See Figure 41.**
- Walls and fences shall be integrated with landscaping along the base of the wall or fence. **See Figure 41.**



Figure 40. Wall incorporates pilasters and cap.



Figure 41. Stone wall.

## Screening

- Service and delivery areas shall be screened by building placement, decorative walls or landscaping to the fullest extent feasible so that views of loading areas are minimized from adjacent public streets. **See Figure 42.**
- Outdoor mechanical equipment shall be screened from public view, especially adjacent to the I-10 freeway.
- Roof-mounted equipment shall be screened from public view through use of parapet walls or other screening devices. Special consideration shall be given to the screening of roof-mounted equipment on building rooftops that are visible from the I-10 freeway. **See Figure 43.**

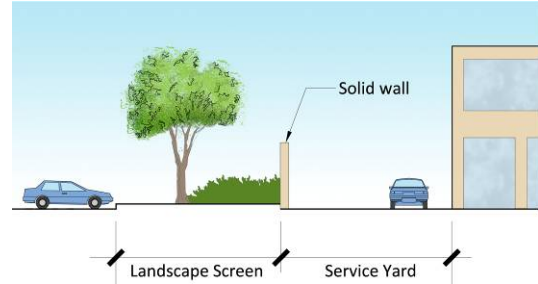


Figure 42. Screened delivery area.

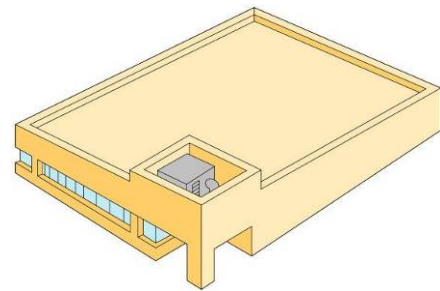


Figure 43. Screening of roof-mounted equipment.

## Trash Enclosures

- Trash enclosures shall be incorporated as part of the building design.
- If trash enclosures cannot be located out of public view, the design of trash storage areas shall incorporate architectural screening elements and landscaping compatible with the design of buildings and landscaping on the site.
- Trash enclosures visible from the public view shall integrate horizontal screening such as trellises.

## Lighting

- Outdoor lighting plans shall take into consideration the location and potential growth pattern of nearby trees (existing and planned) so that appropriate lighting levels are maintained over time.



- Energy efficiency shall be considered through use of proper light location and placement, as well as use of energy-efficient bulbs or fixtures.
- Lighting fixtures shall include hoods or other design techniques to reduce glare and light pollution, especially along major streets and the I-10 freeway and adjacent to residential zones, and to prevent light spillover into adjacent properties. **See Figure 44.**
- Lighting shall be provided in project entryways, walkways, parking lots, and plazas or courtyards to promote safety. **See Figure 45.**
- Lighting may be mounted on poles or bollards, affixed to building walls, or placed within paved or landscaped areas. Appropriate materials and construction methods shall be used to ensure proper function of project lighting fixtures. **See Figure 46.**
- Decorative light fixtures are encouraged, as long as fixtures are consistent with the architectural design of the building. **See Figure 47.**

#### 4. Parking and Access

##### Parking

- Parking lots should be designed with a clear hierarchy of circulation: major access drives with no direct access to parking spaces; major circulation drives with little or no parking; and parking aisles for direct access to parking.
- Large commercial and retail parking areas should be located behind building facades so as not to be visible from major streets.
- Parking lots shall not be the dominant visual element on the site.



Figure 44. Hooded light fixture directs light downward.



Figure 45. Bollard lighting along pedestrian walkway.



Figure 46. Pole mounted light.



Figure 47. Decorative light fixtures.

- Surface parking areas shall integrate trees and landscape improvements to reduce the heat island effect. **See Figure 48.**
- Large parking lots (usually over 100 spaces) shall be divided into multiple, smaller areas and provided with canopy trees located throughout the parking area to reduce the effects of heat gain and the visual impacts of large parking areas.
- Internal vehicular and pedestrian circulation within a development involving multiple buildings or lots shall interconnect in an obvious and consistent manner. **See Figure 49.**
- Parking lot design shall include water quality storm water facilities consistent with City standards. **See Figure 50.**

#### Access - Vehicular

- Access to parking lots shall be from commercially developed streets to discourage cut through traffic from adjacent residential neighborhoods.
- Site access shall promote safety by providing an adequate stacking distance for vehicles between the back of the sidewalk and the first parking stall or circulation aisle.
- Conflict between vehicles and pedestrians shall be avoided at access driveways by providing a walkway on at least one side of the driveway.
- The number of access driveways shall be minimized and located as far as possible from street intersections.
- Site access locations shall be coordinated with existing or planned median openings and driveways on the opposite side of the roadway.



Figure 48. Landscaped parking lot.

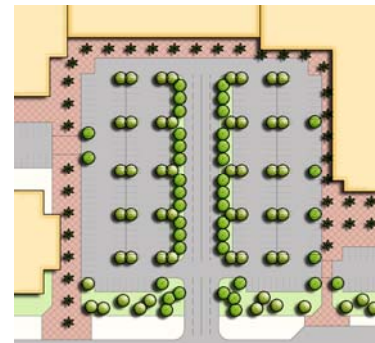


Figure 49. Pedestrian circulation is consistent along perimeter of parking lot.



Figure 50. On-site storm water capture.

- Unobstructed line of sight at corners and driveways shall be provided to reduce vehicular conflicts. **See Figure 51.**
- Avoid placing primary vehicle access in close proximity to major building entrances in order to minimize pedestrian and vehicular conflicts. **See Figure 52.**

### Access - Pedestrian

- Clearly defined pedestrian walkways or paths should be provided from parking areas to primary building entrances. Clear and convenient pedestrian access shall be provided between the public sidewalk and the pedestrian areas of the development. **See Figure 53.**
- Raised walkways, decorative paving, landscaping and/or bollards shall be used to separate pedestrian paths from vehicular circulation areas. **See Figure 54.**

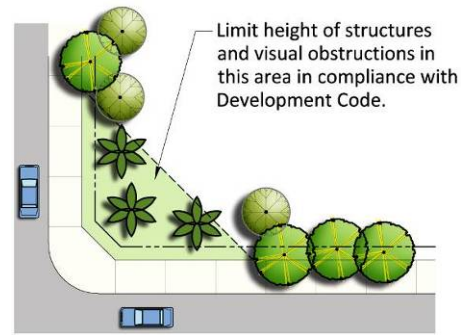


Figure 51. Unobstructed sight lines.



Figure 52. Vehicle access is placed away from building entrances.

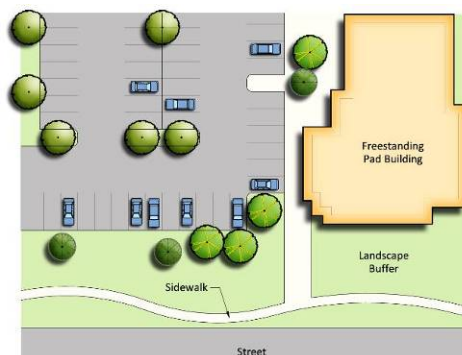


Figure 53. Clearly defined pedestrian walkways.

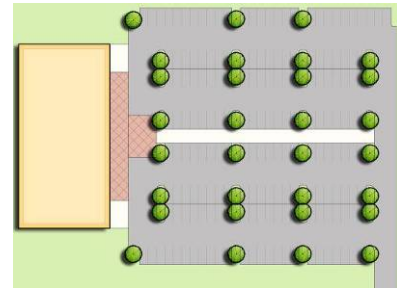


Figure 54. Raised walkway and landscaping in parking lot.

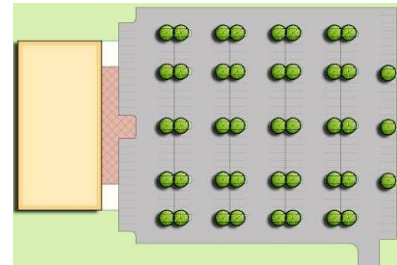
Parking areas should be designed so that pedestrians walk parallel to moving cars. **See Figure 55.**

### Loading and Delivery

- Loading and delivery service areas shall be located and designed to minimize their visibility, circulation conflicts, and adverse noise impacts to the maximum extent feasible.
- Loading and delivery service areas shall be screened with portions of the building, architectural wing walls, freestanding walls or landscape planting.
- When commercial buildings abut a residential zone or the I-10 freeway, loading areas shall not be visible from adjacent residentially-zoned properties or the I-10 freeway.
- Loading areas shall be designed to not interfere with circulation or parking, and to permit trucks to fully maneuver on the property without backing from or onto a public street. **See Figure 56.**
- Service, loading and delivery areas should take access from planned shared access points to reduce curb cuts along project frontages.



Appropriate



Inappropriate

Figure 55. Pedestrian circulation.



Figure 56. Loading area placed behind building outside of circulation lanes.

## 5. Architecture

### Mass and Scale

- The mass and scale of new developments shall be compatible with the existing, adjacent structures. This can be accomplished by transitioning from the height of adjacent buildings to the tallest elements of the new development by stepping back the upper portions of taller buildings.



- Human-scale elements, such as pedestrian-scaled doors, windows and building modules shall be used to emphasize pedestrian orientation.
- The size and location of various building elements (e.g., roofs, parapet walls, wing walls, etc.) shall be in scale to the building as a whole and provide visual interest. **See Figure 57.**

### Building Facades

- Buildings shall include enhanced and articulated facades along public streets.
- Design details shall be continued or repeated upon all building elevations .
- Building entrances should be readily identifiable. The use of recesses, projections, columns, and other design elements to articulate entrances are encouraged. **See Figure 58.**
- Facades shall provide visual interest with vertical and horizontal variations in wall and roof planes, building projections, door and window bays, arcades, and similar elements/techniques. **See Figure 59.**
- Buildings shall undergo a break in façade approximately every 40 feet, to create a varied wall surface along public areas. Higher facades and rooftops should be incorporated at corners and intersections, and appropriate massing and scale shall be considered for the remainder of the building spanning public right-of-way frontage.
- Buildings shall be well-articulated along the freeway frontage with a high degree of architectural detail.



Figure 57. Building elements add visual interest.



Figure 58. Building Entry.



Figure 59. Horizontal and vertical articulation.

- Buildings should include vertical elements (e.g., clock tower, building articulation) that create points of visual interest when viewed from the freeway.
- Roof designs that are visually interesting and designed to completely screen all rooftop equipment from public streets and freeway views are required. **See Figure 60.**
- The location of windows in commercial buildings adjacent to residential zones shall preclude a direct line of sight into residential properties.
- Buildings should use large windows along walls and skylights in rooftop designs to capture natural light during operating hours.
- The interior areas of commercial development should have shaded or covered walkways.



Figure 60. Full roof screens all equipment and provides visual interest.

### Storefronts

- Storefronts shall be comprised predominantly of transparent surfaces (windows). **See Figure 61.**
- The use of clear glass on the first floor is strongly encouraged.
- Storefront windows should be large and a minimum of 24 inches off the ground. The maximum bulkhead (wall plane between the ground and the bottom of the windows) height should be approximately 36 inches.
- Storefront entries should promote a sense of entry into the structure as well as provide a sense of shelter by incorporating elements such as overhangs, canopies, awnings, and recesses. **See Figure 62.**



Figure 61. Storefront windows.



Figure 62. Storefront overhangs provide a sense of shelter and entry.

- If security grilles are necessary, they shall be placed inside the building behind the window display area at a minimum distance of two feet behind the window.
- Product storage racks shall not block views through storefront windows.

### Colors and Materials

- The use of a coordinated three-color palette for the base color and major and minor trim accents is encouraged.
- Colors for all structures on-site should be varied and should consist of neutral, earthy tones. **See Figure 63.**
- Exterior finish materials shall be appropriate for the architectural style and/or theme of the entire development and should contribute towards a high-quality image. **See Figure 64.**
- Changes in materials shall occur at inside corners to make building volumes appear substantial.
- Materials shall be varied to provide architectural interest, however, the number of materials shall be limited and not exceed what is required for contrast and accent of architectural features.
- Exterior materials and architectural details shall relate to each other in ways that are traditional and logical. For example, heavy materials should appear to support lighter ones. **See Figure 65.**
- Use of building colors and materials that express an automobile-oriented theme are encouraged. This may include use of decorative elements such as checkered flags, building elements molded in the shape of automobile parts and other graphics.



Figure 63. Use of neutral, earth tones.



Figure 64. Exterior finish materials.



Figure 65. Heavy materials at base of building with lighter materials above.



## 6. Landscaping

### Plants and Irrigation

- Landscaping should help complete the design of the site and enhance the quality of commercial developments by framing and softening the appearance of buildings, screening undesirable views, and buffering incompatible uses.
- Landscaped areas should generally incorporate planting utilizing a three tiered system:
  - 1) ground covers (including flowering plants—annuals and perennials),
  - 2) shrubs and vines, and
  - 3) trees.

**See Figure 66.**

- Entry and exit points shall be highlighted through a combination of distinctive landscape and hardscape features. **See Figure 67.**
- Planting materials shall be used in plazas or gathering areas to provide shade and soften the appearance of hard surfaces. Water features and public art are also encouraged in these places. **See Figure 68.**
- Trees located along street frontages shall be selected to match or complement existing or proposed street trees in the public right-of-way.
- A minimum five-foot landscape strip shall be used along circulation aisles in parking lots, and along building side/rear elevations if a walkway is not used. A landscape strip is also encouraged in nonpublic areas and service areas between pavement and buildings.



Figure 66. Example of three tier landscape system.



Figure 67. Highlighting entry points.



Figure 68. Public plaza area within commercial development incorporates water feature.

- On-site water filtration features and bio-swales are strongly encouraged, and can also be used as buffering methods for adjacent businesses.
- Drought tolerant and low-water trees, vines, and groundcovers shall be used on-site. When feasible, drip irrigation systems shall be installed to provide on-site vegetation with appropriate irrigation and ensure the highest possible volume of water conservation.
- Planting materials shall be used to provide a buffer against noise, and may be integrated with walls or fences to achieve desired sound reduction and appearance.
- Tree and shrub planting shall be done in large masses.
- Plant material selected shall be suited to the specific soil and micro climatic conditions.
- Trees shall be healthy and have a uniform branching pattern.
- All ground cover shall be healthy and densely foliated and comprised of well rooted cuttings or container plants.
- Availability and specific site conditions should be considered in final selection. Ground cover shall achieve 100% coverage in one year.
- Informal tree masses should be planted in a mix of sizes.

### Site Furniture

- Outdoor furniture and fixtures (e.g., lighting, directional signs, trellises, raised planters, works of art, benches, trash receptacles, fencing, etc.) shall be integral elements of the building and landscape design. **See Figure 69.**



Figure 69. Trellis.

- Outdoor furniture shall be of a sturdy construction to withstand daily use. Wood should be avoided.
- Outdoor furniture shall be located so it will not conflict with the pedestrian and motor vehicle circulation patterns. **See Figure 70.**
- Outdoor seating should be shaded.
- Site furniture that expresses an automobile-oriented theme is encouraged. This may include use of decorative elements such as checkered flags, furniture that repurposes or is molded in the shape of automobile parts, and other speedway-related graphics.

### Paving

- Decorative paving shall be incorporated into courtyards, plazas, pedestrian walkways, and crosswalks. **See Figure 71.**
- Paving materials shall complement the architectural design of the building and landscape design of the project. The use of stamped concrete, stone, brick, permeable pavers, exposed aggregate, or colored concrete is encouraged. The use of slippery materials (e.g., polished marble or granite) is prohibited.



Figure 70. Outdoor furniture outside of pedestrian walkway.



Figure 71. Enhanced paving in pedestrian areas.

### ***E. Flex-Tech Multi-Use Facility***

The design guidelines in this Subsection shall apply to all flex-tech projects within this land use district.

#### **1. Site Design**

##### **Site Layout**

- The arrangement of multiple buildings and associated circulation, and parking areas should reflect a well-organized site plan that emphasizes pedestrian connectivity and landscaped areas responsive to the public realm.
- Site development may utilize variations on building placement and landscaping adjacent to the public street. Appropriate configurations may include, but are not limited to the following:
  - Fully landscaped setback between building and street. **See Figure 72.**
  - Parking in front of building with a landscape buffer between parking and street.
- Visitor parking may be located at located near the front/visitor entries to the businesses, while employee parking and service areas are located at the sides and rear of the building.
- Service and loading area should not be located on building side(s) adjacent to a public street. Service and loading areas should be located to the rear of the buildings or in the interior of a multiple building complex. **See Figure 73.**
- When buildings abut residential properties or the I-10 freeway, parking and loading areas should be located at the side of the building instead of the rear. The rear setback area shall be fully landscaped.



Figure 72. Fully landscaped setback.



Figure 73. Loading and service areas accessed between buildings in a multiple building complex.



- Outdoor storage, work, and loading areas shall be incorporated within the building design and located to the rear or side of buildings and screened from view from adjacent public streets. Accessory buildings such as equipment enclosures or storage buildings should be minimized. These service areas should be incorporated into the building design to the greatest extent feasible. **See Figure 74.**
- The design and location of accessory buildings (e.g., security kiosks, maintenance buildings, and outdoor equipment enclosures) shall be incorporated into and be compatible with the overall design of the project and the main buildings on the site.
- With the exception of security kiosks, accessory buildings shall be located as far back from the front and street side setback area as possible.
- Sea/train-type metal containers are prohibited.
- Noise-generating activities and storage areas shall be located as far as possible from adjacent properties. Sound attenuation walls shall be used where appropriate to reduce noise.

### Courtyards and Plazas

- Buildings should be arranged to create opportunities for open space amenities (e.g., plazas, courtyards, outdoor eating areas, recreation areas, etc.). **See Figure 75.**
- Larger developments should provide recreational facilities (e.g., bicycle paths, tennis courts, volleyball courts, gymnasiums, etc.).

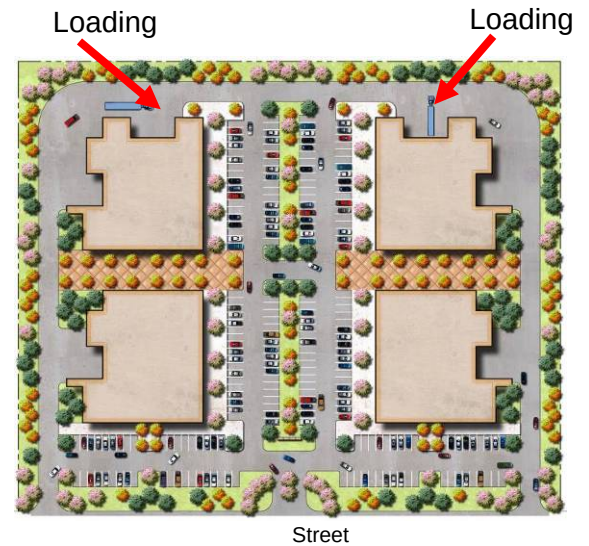


Figure 74. Appropriate location of loading areas.

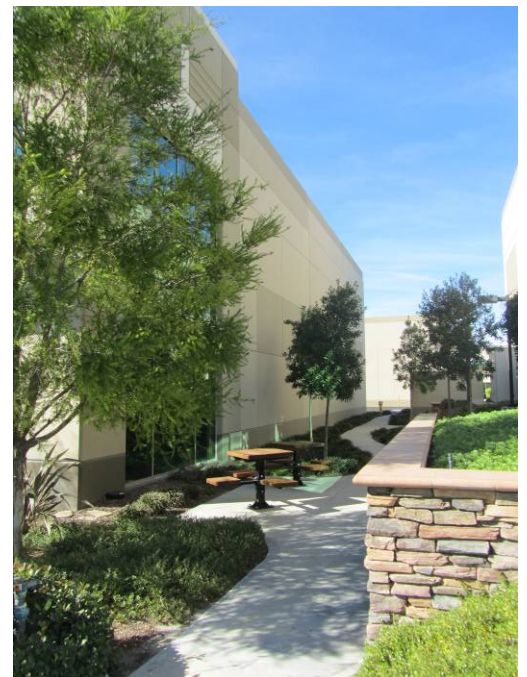


Figure 75. Outdoor seating area provided between buildings.

## **2. Building Orientation**

- Multiple building developments should be oriented in a manner that will form gateways through facade enhancement, maximize public view, and capture public interest along adjacent major streets.
- Retail and office space should be located on the front of the building, visible from the public realm and adjacent to visitor parking. Flex areas used for warehousing, distribution, light manufacturing, research and development and other uses without a visitor component should be located to the sides or rear of the building.
- The organization of buildings, parking areas, and landscaping shall recognize the existing characteristics of the site and shall relate to the surrounding development in scale and character.
- Buildings should generally be placed at or near setback lines with development oriented in a manner that will provide visual interest, especially for development located along the I-10 Freeway.
- Buildings should be oriented in a manner that takes advantage of passive solar design.
- Buildings shall be oriented to provide a buffer between surrounding properties and outdoor work areas, loading, and storage.

## **3. Site Elements**

### **Fences and Walls**

- Walls and fencing materials shall consist of wrought iron, tubular steel, stone, stucco, or brick, and shall be compatible with the overall design character/style of the development. The use of chain-link fence material is not allowed if visible from the public right-of-way.

- Walls and fences shall be integrated with landscaping along the base of the wall or fence.
- Wall heights and surfaces shall be articulated with varying facade depths or pilasters to promote architectural interest, and shall include a cap along the top of the wall.
- Landscaping shall be used in combination with walls and fences to visually soften blank surfaces and to deter graffiti.

### Screening

- Loading bays and service areas shall be screened by building placement, decorative walls or landscaping to the fullest extent feasible so that views of loading areas are minimized from visitor areas and adjacent public streets.
- Trash storage enclosures and outdoor mechanical equipment shall be screened from public view, especially adjacent to the I-10 freeway.
- Roof-mounted equipment shall be screened from public view through use of parapet walls or other screening devices. Special consideration shall be given to the screening of roof-mounted equipment on building rooftops that are visible from the I-10 freeway. **See Figure 76.**

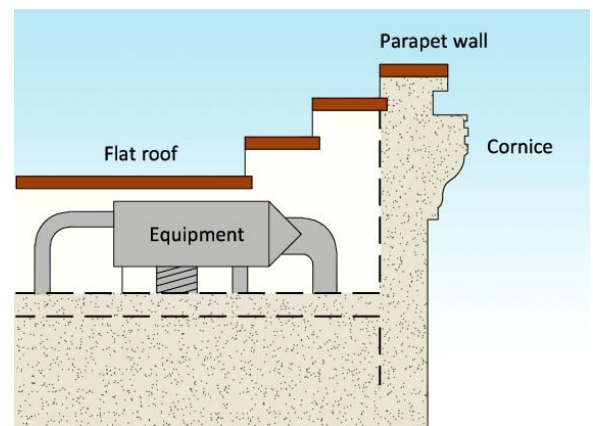


Figure 76. Screening of roof mounted equipment.

### Trash Enclosures

- Trash enclosures shall be incorporated as part of the building design.
- If trash enclosures cannot be located out of public view, the design of trash storage areas shall incorporate architectural screening elements and landscaping compatible with the design of buildings and landscaping on the site. **See Figure 77.**



Figure 77. Trash enclosures with architectural screening elements.



- Trash enclosures shall integrate horizontal screening such as trellises.

### Lighting

- Outdoor lighting plans shall take into consideration the location and potential growth pattern of nearby trees (existing and planned) so that appropriate lighting levels are maintained over time.
- Energy efficiency shall be considered through use of proper light location and placement, as well as use of energy-efficient bulbs or fixtures.
- Lighting fixtures shall include hoods or other design techniques to reduce glare and light pollution, especially along major streets and the I-10 freeway and adjacent to residential zones, and to prevent light spillover onto adjacent properties.
- Lighting shall be provided in project entryways, walkways, parking lots, and plazas or courtyards to promote safety. **See Figure 78.**
- Lighting may be mounted on poles or bollards, affixed to building walls, or placed within paved or landscaped areas. Appropriate materials and construction methods shall be used to ensure proper function of project lighting fixtures.
- Decorative light fixtures shall be consistent with the architectural design of the building.



Figure 78. Lighting along pedestrian walkway.

## 4. Parking and Access

### Parking

- Parking lots shall not be the dominant visual element on the site.

- Parking lots adjacent to and visible from public streets shall be appropriately screened to minimize undesirable visual impacts.
- Surface parking areas shall integrate trees and landscape improvements to reduce the heat island effect.
- Large parking lots (usually over 100 spaces) shall be divided into multiple, smaller areas and provided with canopy trees located throughout the parking area to reduce the effects of heat and the visual impacts of large parking areas.
- Employee parking areas should be located behind the building or alongside of the building so as not to be visible from adjacent streets.
- Internal vehicular and pedestrian circulation within a development involving multiple buildings or lots shall interconnect in an obvious and consistent manner. **See Figure 79.**
- Parking shall be provided within walking distance of all tenants and public sidewalks.
- Parking lot design shall include water quality stormwater facilities consistent with City standards. **See Figure 80.**

#### Access

- The use of common (shared) access points and driveways is encouraged; placement of vehicle access points close to building entries shall be avoided to minimize pedestrian and vehicular conflicts.
- Entry drives shall be clearly marked by special features, (e.g., enhanced paving, prominent landscape features, low-level decorative walls, and well-designed monument-type signs). **See Figure 81.**

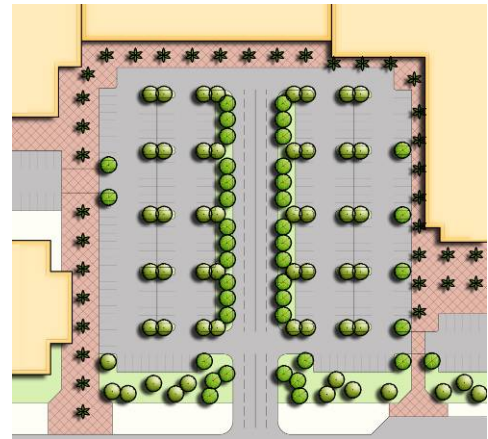


Figure 79. Pedestrian circulation is consistent along perimeter of parking lot.



Figure 80. On-site storm water capture system.



Figure 81. Entry drive.

- Access to each development site shall be clearly visible to pedestrians and motorists.
- Service and loading areas should take access from shared access points to reduce curb cuts along streets.

### 5. Architecture

#### Mass and Scale

- The mass and scale of the buildings shall respect the visual and physical relationship to the adjacent buildings and surrounding sensitive uses. Taller building elements should be placed towards the center of the site, with lower elements adjacent to surrounding properties.
- Buildings should be stepped back when adjacent to or in close proximity to sensitive uses (e.g., residential, schools, etc.).
- Vertical and horizontal offsets shall be provided to reduce the visual bulk of the building. **See Figure 82.**
- Buildings should be designed to accommodate a wide range of uses, from office to small scale retail and service to light manufacturing. Interior spaces should allow for a variety of configurations, combining and dividing spaces as needed based on the uses.



Figure 82. Façade articulation.

#### Building Facades

- Building facades shall incorporate architectural elements such as windows, pillars, wall plane breaks to minimize blank walls and to create visual interest.
- All building elevations, whether front, side, or rear shall be architecturally detailed.

- Architectural accents (e.g., cornices, tiles, trim around windows, grooves in building faces, accent band details, bulkheads, etc.) shall be used to create variation along building facades. **See Figure 83.**
- Higher facades and rooftops should be incorporated at corners and intersections, and appropriate massing and scale shall be considered for the remainder of the building spanning public street frontage. **See Figure 83.**
- The orientation of windows in buildings adjacent to a residential zone shall preclude a direct line of sight into residential properties.
- Visitor entries to retail and office uses shall be easily identified through the use of prominent architectural elements, signage, landscaping, lighting, canopies, roof form, hardscape, architectural projections, columns, vertical elements, or other design features that help emphasize a space's entry. **See Figure 84.**
- Roofs shall be designed as an integral component of building form, mass, and facade. Building form should be enhanced by sloped or offset roof planes, eave heights, and rooflines. **See Figure 85.**

### Color and Materials

- Colors and materials for all structures on-site should consist of earth tones. Use of at least two to three different colors, materials or textures is encouraged.
- Building materials shall be durable and able to withstand long-term exposure to the elements.



Figure 83. Enhanced corner elements.



Figure 84. Awnings articulate entries to tenant spaces.



Figure 85. Offset roof planes.

- Large expanses of smooth material (e.g., concrete) shall be broken up with expansion joints, reveals, or changes in texture and color.
- To the fullest extent feasible, buildings should use large windows along walls and skylights in rooftop designs to capture natural light during working hours.

## **6. Landscaping**

- Landscaping shall be in scale with adjacent structures, streets, and public spaces, and shall be sized appropriately when fully grown.
- Landscaped areas should incorporate a three-tiered planting system:
  - 1) trees;
  - 2) shrubs and vines; and
  - 3) ground covers

See suggested Plant Palette in Table 6-6.

- Special landscape features, such as specimen trees, shall be provided at major focal points (e.g., project entries, building entries, and pedestrian gathering areas).
- Entry and exit points shall be highlighted through a combination of distinctive landscape and hardscape features.
- Development on corner lots shall be enhanced with a combination of specimen trees, accent plantings, upgraded perimeter wall surfaces, hardscape treatments and landscape lighting adjacent to the street intersection.
- Drought-tolerant and low-maintenance trees, vines, and groundcovers shall be used on-site. Drip irrigation systems shall be installed where feasible to ensure the highest possible level of water conservation.



- Planting materials shall be used in plaza areas to provide shade and soften the appearance of hard walls.
- The use of vines is encouraged on walls to soften the appearance of buildings and screen walls, and to help deter graffiti. **See Figure 86.**
- Planting materials shall be installed to provide a buffer against noise and should be integrated with walls or fences to achieve desired sound reduction.
- Landscaping and trellises with vines are encouraged for screening trash storage areas, service areas and mechanical equipment.
- Setbacks adjacent to residential zones shall include dense landscaping to provide visual screening and noise abatement.
- Landscaped berms along site edges may be used to screen parking, loading and service areas and to serve as a sound reduction measure. **See Figure 87.**
- Surface parking lots shall be well-landscaped to reduce heat island effect and visually reduce the expanse of paved area.
- Pervious paving materials are strongly encouraged for sidewalks, pathways, parking lots, plazas or gathering areas or other paved surfaces on-site.
- An automatic irrigation system using current equipment and technology shall be provided for planted areas.
- Run-off retention and on-site water filtration/stormwater treatment features and bioswales should be a part of the overall landscape design, and can also serve as buffering methods for adjacent businesses. **See Figure 88.**



Figure 86. Wall incorporates landscaping at the base.



Figure 87. Landscaped berm buffers parking.



Figure 88. On site water filtration.

- Trees shall be selected and placed to provide canopy and shade for walkways, pedestrian open spaces, and parking areas.
- Landscape material in the setback and visible from the public right-of-way shall blend with and seem a part of the public right-of-way landscaping.
- Tree and shrub planting shall be in large masses.
- Plant material selected shall be suited to the specific soil and micro climatic conditions.
- Trees shall be healthy and have a uniform branching pattern.
- All ground cover shall be healthy and densely foliated and comprised of well rooted cuttings or container plants.
- Availability and specific site conditions should be considered in final selection.
- Ground cover shall achieve 100% coverage in one year.
- Informal tree masses should be planted in a mix of sizes.



## F. Special Commercial Uses

### 1. Drive-Through Uses

#### Site Design

- The predominant feature along the street frontage should be the building, not parking lots or the drive-through aisle.
- The building shall be located to maximize the distance for vehicle queuing while screening the drive-through operations. **See Figure 89.**
- When adjacent to residential zones, outdoor order kiosks, loading/unloading areas, and storage areas shall be located as far as possible from residential properties.
- Drive-through aisles shall be located in the rear of the building away from the street frontage whenever possible. If the drive-through aisle is located between the building and the street, dense landscaping and landscaped berms or screen walls (42 inches high or less) shall be provided to screen the drive-through aisle from street view. **See Figure 90.**



Figure 89. Example of appropriately landscaped and screened drive-through aisle.

#### Building Design

- All building elevations shall receive the same level of architectural detailing.
- Buildings shall incorporate roof designs with built-in equipment wells or other built-in screening methods, so that screening devices do not appear added-on.
- If the drive-through facility is a pad building within a shopping center, the architecture shall relate to and be compatible with the design of the center. The only feature that identifies the franchise shall be the company's logo and signs.



Incorporate retail or other compatible uses on ground floor whenever possible.

Figure 90. Liner shops.

## 2. Parking Garages

### Site Design

- Where appropriate, parking garages should incorporate ground floor retail adjacent to the public sidewalk.
- A minimum 5-foot wide landscaped strip shall be provided on all sides of the parking structure except where ground floor retail space is provided.

### Building Design

- Parking garages shall be designed to help reduce the mass and scale of the garage and to ensure their compatibility with surrounding uses.
- Conceal view of vehicles in the garage through a combination of screen walls and plantings. **See Figure g1.**
- Avoid a monolithic appearance. This can be accomplished as follows:
  - Minimize horizontal and vertical banding by balancing both horizontal and vertical elements.
  - Use simple, clean geometric forms, and coordinated massing.
  - Step back upper levels of the garage 5 to 10 feet above the first floor. **See Figure g2.**
- Coordinate openings in the parking garage with the size and modulation of adjacent windows, structural bays, and storefronts if the parking garage contains other uses.
- Size openings in the parking garage to resemble large windows as in an office building.
- Use masonry materials that are predominantly light in color, but avoid unpainted concrete.



Figure g1. Parking structure with landscaping.



Figure g2. Horizontal and vertical articulation breaks up parking structure elevation.

- Avoid a sloping ramp appearance by providing level and uniform wall panels between floors.
- Visually define and differentiate between pedestrian and vehicular entrances through appropriate architectural detailing. **See Figure 93.**



Figure 93. Paving differentiates between pedestrian and vehicular entries.

### Access and Circulation

- Vehicle stacking areas for entering and exiting traffic shall be sufficient in length to minimize traffic backup into surrounding streets or within the garage. A minimum of two vehicle lengths of stacking distance shall be provided between the back of the sidewalk and the control gate.
- One inbound lane shall be provided for a garage with a capacity of up to 500 vehicles. At least two inbound lanes shall be provided for garages with a capacity of more than 500 vehicles.
- The maximum aisle length shall not exceed 400 feet without providing a cross aisle.
- Ramp grades shall not exceed 10 percent and parking areas shall not exceed a slope of four to five percent.

### Security and Lighting

- The design of the garage shall eliminate possible hiding places and openings that could allow random pedestrian access.
- During periods when parking activity is substantially less than the garage capacity (i.e., during night operations), there shall be a means of securing unused parking levels from use, including stairwells and elevators. If the garage is not operated on a 24-hour basis the entire facility shall be secured from access during hours when the facility is closed.

- For security reasons, at least one or two sides of the stair tower shall include glass running vertically the height of the tower. Elevators shall be provided with glass-back cabs and shafts. **See Figure 94.**
- Stairs and elevators shall be located adjacent to a street on the exterior of the structure where lobbies can be exposed to outside view.
- The use of security cameras is required.
- A minimum of five foot-candles shall be provided inside the structure and a minimum of three foot-candles for exterior parking areas. Higher levels are recommended for remote areas subject to security problems such as stairways, elevators, and other pedestrian access points.
- Lighting levels shall be equally distributed to provide uniform illumination over all parking areas.
- Light sources shall be shielded so that the source of the illumination is not seen from outside the structure.

### **3. Service Stations/Truck Stops**

#### **Site Design**

- The site shall be designed to accommodate anticipated circulation patterns and those patterns should be defined by paving and by well-placed landscaped areas.
- In areas developed with buildings adjacent to the sidewalk, service stations shall also be oriented to the sidewalk, placing any service bay door and car wash openings on the rear of the structure.
- Where commercial development abuts the service station, two-way vehicular access



Figure 94. Glass-back elevator cab and shaft.

integrated with the adjacent commercial development shall be provided where feasible.

- The site design for projects located at street corners shall provide a strong design element at the corner to help frame the public right-of-way and anchor the corner. **See Figure 95.**
- Parking spaces for vehicles left for repair shall be located in the least visible areas of the site and screened from public view.
- Service or car wash bays shall not face toward a public street or toward residential zone if the building is within 200 feet of a residential zone.
- Work bays shall be oriented so that the interior of the bays are not visible or audible from a public street, adjacent residential zones, or designated open space. **See Figure 96.**
- Each pump island shall include a vehicle stacking area for at least two vehicles (38-feet), on at least one end of the pump island and shall not restrict vehicle circulation and parking areas.
- A gasoline tanker truck unloading zone shall be provided and shall not obstruct vehicle circulation and parking areas.



Figure 95. Corner landscaping element.

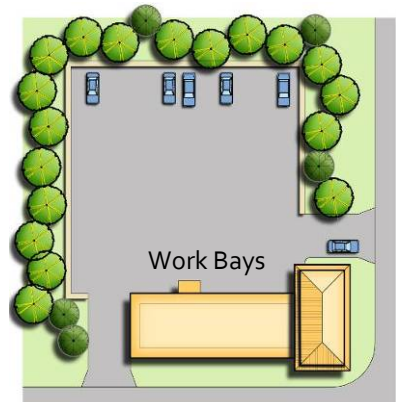


Figure 96. Work bays face interior.

## Building Design

- Service station buildings shall be designed to complement and be compatible with the predominant architectural theme and scale of the area. If located within a multi-use center, the architectural design shall be compatible with the design of the center.
- The design of the building should be clean and simple, and shall relate to surrounding buildings through use of similar scale, materials, colors, and/or detailing.

- Building elevations facing public streets and residential zones shall be architecturally detailed to provide interest and the appearance of quality development.
- The roof design of service stations, including pump island canopies, shall incorporate full, pitched roof treatments with a low to moderate slope. **See Figure 97.**
- Building materials shall have the appearance of substance and permanency (e.g., masonry).



Figure 97. Sloped roof on pump island canopies.

### Landscaping and Walls

- A three-foot high, landscaped berm, a dense hedge, or a low-profile wall shall be provided along all street frontages where parking is provided. **See Figure 98.**
- A minimum 6-foot high decorative masonry wall shall be provided along side and rear property lines not abutting public streets. A minimum 5-foot wide landscaped planter shall be provided adjacent to the wall in areas accessible to the public.



Figure 98. Landscaped berm.

### Site Elements

- Gates, fencing, and walls shall remain free of signs or other advertisements.
- The use of chain-link fencing is prohibited.
- Where security is an issue, fencing shall consist of open grille work, and the use of surveillance cameras is encouraged.
- Electric fences, barbed-wire, concertina wire, or other security wire is prohibited.

## 5. Truck Stops

### Site Design

- The site shall be designed to accommodate anticipated circulation patterns and those patterns should be defined through paving and well-placed landscaped areas.
- In truck stops that provide maintenance facilities, any service bay doors and car wash openings shall be oriented away from the public street or freeway or placed to the rear of the site.
- The site design for projects located at street corners shall provide a strong design element at the corner to help frame the public right-of-way and anchor the corner.
- Parking spaces for vehicles left for minor repair shall be located in the least visible areas of the site and screened from public view.
- Truck stops shall be located within an industrial area within close proximity to an I-10 freeway on/off ramp.
- Service or car wash bays shall not face toward a public street nor toward a residential zone if the building is within 200 feet of a residential zone.
- Work bays shall be oriented so that the interior of the bays are not visible or audible from a public street, adjacent residential zones, or designated open space.
- A gasoline tanker truck unloading zone shall be provided and shall not obstruct vehicle circulation and parking areas.

### Building Design



- Truck stop buildings shall be designed to complement and be compatible with the predominant architectural theme and scale of the area.
- The design of the building should be clean and simple, and shall relate to surrounding buildings through use of similar scale, materials, colors, and/or detailing.
- Building elevations facing public streets and residential zones shall be architecturally detailed to provide interest and the appearance of quality development.
- The roof design of fueling stations, including pump island canopies, shall incorporate full, pitched roof treatments with a low to moderate slope.
- Building materials shall have the appearance of substance and permanency.

### **Landscaping and Walls**

- A three-foot high, landscaped berm or a dense hedge shall be provided along all street frontages where parking is provided.
- A minimum six-foot high decorative masonry wall shall be provided along side and rear property lines not abutting public streets. A minimum five-foot wide landscaped planter shall be provided adjacent to the wall in areas accessible to the public.

### **Site Elements**

- Gates, fencing, and walls shall remain free of signs or other advertisements.
- The use of chain-link fencing is prohibited if visible from a public street or the I-10 freeway.

- Where security is an issue, fencing shall consist of open grille work, and the use of surveillance cameras is encouraged.
- Barbed wire, electric wire, concertina wire, or other security wire is prohibited.

## 6. Shopping Centers

### Site Design

- Large commercial sites shall be separated from residentially-zoned properties by streets, landscaped buffers and/or decorative masonry walls.
- Portions of primary buildings and/or freestanding satellite buildings shall be located at the street setback lines to enclose the site and help frame the street. **See Figure 99.**
- Buildings within the center shall have a logical spatial and functional relationship to each other and shall provide for convenient pedestrian circulation throughout the center.
- Parking shall be provided within convenient walking distances of all tenants. Walking paths to buildings from the public street shall be provided. **See Figure 100.**
- To reduce the visual impact of large paved areas, parking lots shall be broken up into smaller areas separated by landscaping, pedestrian circulation areas and drive aisles.
- Storage areas and loading facilities shall be limited in number and shall be designed, located, and screened to minimize their visibility from outside public areas, surrounding streets, freeways, and freeway on/off ramps.



Figure 99. Buildings placed at street setback lines.



Figure 100. Walking paths.

■

## Building Design

- Buildings, hardscape, landscape, site furnishings and signage should reflect a unified theme. **See Figure 101.**
- Where a shopping center is adjacent to a residential zone, the scale of the shopping center shall be reduced to be compatible with the adjoining use by:
  - Keeping buildings as small as possible, particularly in height;
  - Reducing scale through building wall articulation, added detailing and avoiding large scale design elements;
  - Developing the center as a complex of smaller buildings connected by pedestrian-oriented open spaces; and
  - Setting the buildings further away from the residential zone and providing dense landscape screening.
- Long, linear buildings shall be avoided. Where such buildings are unavoidable, their length shall be mitigated by changes in building height, wall plane, and spatial volumes and by varied use of window areas, arcades, roof elements, and building materials. **See Figure 102.**
- If the shopping center contains a large scale building, integration of smaller-scale shops along the exterior of the building with entrances from the exterior of the building are desirable in order to create a more human scale and pedestrian-oriented character.
- Side and rear elevations of commercial buildings that are visible from residential zones or public rights-of-way shall be architecturally consistent with the front elevations of the building.
- Blank walls adjacent to main pedestrian areas shall be avoided.



Figure 101. Unified theme.



Figure 102. Articulation along wall plane.

- Flat roofs, mansard roofs, and veneer parapets are strongly discouraged in favor of full, pitched roof treatments. In large centers, a combination of flat roofs with decorative cornices and full, pitched roofs may be acceptable if the design presents a balanced appearance. **See Figure 103.**
- All roof-top and ground-mounted equipment shall be screened from view.
- Outdoor sales and storage areas shall be designed to blend with the architecture of the main building. The height of the screening elements shall be tall enough to screen all stored materials. **See Figure 104.**



Figure 103. Appropriate roofing.



Figure 104. Outdoor sales area.

### **12.10 Development Incentives**

This Section offers development incentives to produce greater land use efficiencies and reduce incremental costs for new development.

#### **A. Applicability**

The incentives in this Section shall apply to all new development that meet(s) the applicable eligibility criteria.

#### **B. Definitions**

For the purposes of this Section, lot consolidation shall have the following meaning:

1. Lot consolidation. A legal action in which a lot line is removed or abandoned; a lot line is adjusted; lots are merged; or other equivalent action is taken, for the purpose of allowing a structure or development to be built so that it extends over what were previously two or more separate lots. A lot consolidation cannot create additional lots and cannot make existing lots nonconforming. All lots must be identical in ownership.

#### **C. Lot Consolidation Incentives**

1. Eligibility requirements. In order to be eligible for the by-right development incentives indicated in Subparagraph 2, the minimum consolidated or integrated lot size for a development shall be 52,500 gross square feet.
2. By-right incentives. Eligible projects shall receive one or more of the following incentives:
  - a. Expedited application processing. Applications for eligible projects shall receive expedited project processing (i.e., projects will move to front of line for assignment to a planner for review), irrespective of the number of lots involved.
  - b. Parking Reduction. Required parking standards may be reduced up to a maximum of 20 percent, provided that the adequacy of proposed parking can be demonstrated in a parking study prepared in compliance with Section 12.6 Parking and Loading Standards, as approved by the Director of Community Development.
  - c. Allowable Bonuses. Allowable increases in intensity (i.e., floor area ratio [FAR]) and in maximum height shall be in the amounts listed in Table 12-10 Allowable Bonuses for Lot Consolidation. The intensity and height bonus incentives shall apply to the total gross square footage of the consolidated lots.

| Table 12-10<br>Allowable Bonuses for Lot Consolidation |                                  |                    |                               |
|--------------------------------------------------------|----------------------------------|--------------------|-------------------------------|
| <i>Base Intensity (FAR)</i>                            | <i>Allowable Intensity Bonus</i> | <i>Base Height</i> | <i>Allowable Height Bonus</i> |
| 0.8                                                    | 15%                              | 60 ft              | 15 ft                         |

**D. Green Building Incentives**

1. Eligibility requirements. Projects that are seeking green building certification by a third-party entity (e.g., LEED, etc.) shall be eligible for the by-right development incentives indicated in Subparagraph 2.
2. By-right incentives.
  - a. Expedited application processing. Applications for eligible projects shall receive expedited project processing (i.e., projects will move to front of line for assignment to a planner for review).
  - b. Parking Reduction. Required parking standards may be reduced up to a maximum of 20 percent, provided that the adequacy of proposed parking can be demonstrated in a parking study prepared in compliance with Section 12.6 Parking and Loading Standards, as approved by the Director of Community Development.
  - c. Allowable Bonuses. Allowable increases in intensity (i.e., floor area ratio [FAR]) and in maximum height shall be in the amounts listed in Table 12-11 Allowable Bonuses or Green Building. The intensity and height bonus incentives shall apply to the total gross square footage of the project site.

| Table 12-11<br>Allowable Bonuses for Green Building |                                  |                    |                               |
|-----------------------------------------------------|----------------------------------|--------------------|-------------------------------|
| <i>Base Intensity (FAR)</i>                         | <i>Allowable Intensity Bonus</i> | <i>Base Height</i> | <i>Allowable Height Bonus</i> |
| 0.8                                                 | 15%                              | 60 ft              | 15 ft                         |

**e. Application and Review Process for Incentives**

1. Written submittal. Interested parties shall submit a written request for approval of incentives to the Director of Community Development on forms provided by the Community Development Department.
2. Determination. The Director of Community Development shall determine whether the proposed new development meets the eligibility criteria in Paragraphs C.1. or D.1. Additional factors to be considered when reviewing applications for incentives shall include the following:

- a. Detriment. The proposal will not detrimentally affect access, design, or other public safety and welfare concerns.
  - b. Covenants or conditions. The proposal will not violate restrictive covenants contained on the face of the final plat or conditions of plat approval.
  - c. Right-of-way easements. The proposal will not invalidate any easement(s) unless the adjustment establishes replacement easement(s) that is properly filed with the city.
- 4. Conditions. Conditions may be imposed in connection with the granting of any incentive where the Director of Community Development deems that conditions are necessary to protect the public health, safety, and welfare.



### **12.11 Entitlement Procedures**

#### **A. Purpose**

These administrative procedures have two major purposes:

1. Ensure that development conforms to the SWIP Specific Plan ("Plan").
2. Ensure that the City's review is as expedited as possible while remaining legal and proper.

#### **B. Summary of Processing Procedures**

1. Conformity with the Plan. The Director of Community Development shall review each application for conformity with the development regulations in this Chapter. Conformity has two components:
  - a. Standards. Compliance with the Standards is mandatory and the City may not approve a project that fails to comply with the Standards.
  - b. Guidelines. The City may exercise discretion in evaluating the project's compliance with the Guidelines.
2. Project Review. Applications for development approvals shall be filed with the Department and will be returned for revision. Applications must strive to meet the "Guidelines," but applicants may propose alternate ways to achieve the goals of the Guidelines.
3. Timing of Permits and Approvals. Required planning approvals shall be obtained before the issuance of any grading, building, or other construction permit, and before the proposed use is constructed, otherwise established, or put into operation.
4. Processing Requirements. Applications for planning permits shall be processed in compliance with Table 12-12 Hearing Bodies.
5. Timing of Project Review. Project review shall be required before the issuance of a Building or Grading Permit, Business License, or Certificate of Occupancy for any new structure (not including fences or walls) and/or existing structures to be reconstructed or remodeled (including facade improvements).

## Southwest Industrial Park Specific Plan

Speedway Industrial District

Table 12-12 – Hearing Bodies

| Reviewing Bodies                       |        |      |    |    |     | Appeal Body |    |
|----------------------------------------|--------|------|----|----|-----|-------------|----|
|                                        | D.A.B. | CD   | PC | CC | PR  | PC          | CC |
| Administrative site plan               | X*     | X    |    |    |     | X           |    |
| Administrative site plan, amendment    | X*     | X    |    |    |     | X           |    |
| Building relocation                    |        | X    |    |    |     |             | X  |
| Certificate of appropriateness         |        |      |    |    |     |             | X  |
| Code of the City of Fontana, Amendment | X      |      | Xf | X  |     |             |    |
| Conditional Use Permit                 | X      |      | X  |    |     |             | X  |
| Density bonus                          | X      | X    | Xf | X  |     |             |    |
| Design review                          | X      |      | X  |    |     |             | X  |
| Design review, amendment               | X      | X    | X  |    |     |             | X  |
| Design review, signs                   |        | X    |    |    |     | X           |    |
| Development agreements                 | X      | X    | Xf | X  |     |             |    |
| Development agreements, amendment      | X      | X    | Xf | X  |     |             |    |
| General plan amendments                | X      | X    | Xf | X  |     |             |    |
| Home occupation                        |        | X    |    |    |     | X           |    |
| Interpretation                         | X*     |      | X  |    |     |             | X  |
| Lot line adjustment                    |        | X*** |    |    |     |             |    |
| Parcel maps, tentative                 | X      | X    | X  |    |     |             | X  |
| Parcel maps, final                     |        | X*** |    |    |     |             |    |
| Pre-Annexation Agreement               |        |      | Xf | X  |     |             |    |
| Specific Plan                          |        |      | Xf | X  | X** |             |    |
| Specific plan, amendment               |        |      | Xf | X  | X** |             |    |
| Tract maps, tentative                  | X      |      | X  |    |     |             | X  |
| Tract maps, final                      |        |      |    | X  |     |             |    |
| Variances                              | X      |      | X  |    |     |             | X  |
| Zone changes                           | X      |      | Xf | X  |     |             |    |
| Administrative Variance                | X      | X    |    |    |     | X           |    |
| Minor Use Permit                       | X      | X    |    |    |     | X           |    |

**Notes:**

Decisions of any "Reviewing Body" may be appealed to the City Council, except where State law limits such appeal to the City Engineer. If the Planning Commission is listed above as the "Appeal Body", the Commission must first review an Appeal before it may be forwarded to the City Council for consideration.

DAB—Development Advisory Board

CD—Community Development Director

PC—Planning Commission

CC—City Council

PR—Parks and Recreation Commission

X\*—At the discretion of the Director of Community Development or his/her designee

X\*\*—If Public Park(s) are considered

X\*\*\*—City Engineer has final approval

f—Recommending body to the City Council

**C. Administration and Enforcement**

The Director of Community Development shall enforce the provisions in this Specific Plan. All officers, employees, and officials of the City of Fontana, who are vested with the duty or authority to issue permits or licenses shall conform with this Specific Plan and shall not issue any permit or license, or approve any use or building, which would be in conflict with this Specific Plan. Any permit, license or approval issued that is in conflict with the requirements of this Specific Plan shall be considered null and void.

**D. Amendments to the Specific Plan**

The SWIP Specific Plan may be amended utilizing the same procedures by which it was originally adopted. In addition, subsequent amendments to this Specific Plan shall demonstrate the amendment meets the intent of the Specific Plan's existing policy framework, or specific findings to demonstrate the amendment enhances the Plan or is necessary to more effectively implement the Specific Plan. All sections or portions of the Specific Plan proposed to be amended or that may be affected by the amendment must be identified during the amendment process. A concurrent amendment to the General Plan would not be required provided that the Director of Community Development determines that substantive changes would not influence the goals, objectives, policies, or programs of the General Plan.

Allowing flexibility in the administration of the Specific Plan enhances the effectiveness of the Specific Plan as a comprehensive, "living" planning document. The following minor modifications to the Specific Plan qualify for processing as an administrative amendment to the Specific Plan subject to the review and approval of the Director of Community Development:

- Changes in the location of infrastructure and public facilities (e.g., internal roads, drainage facilities, etc.).
- Minor change in roadway alignment.

**E. Similar Use Determination**

1. **Applicability and Authority.** Unlisted uses in Table 10-2 are prohibited uses, unless the Director of Community Development finds a proposed use to be similar to an expressly allowed use. A Similar Use Determination is a process for determining when an unlisted use is similar in nature to a permitted or conditionally permitted use and may be permitted. As specified by Municipal Code Section 30-4 Other Uses to be Determined by the Director of Community Development, the Director of Community Development shall have the responsibility and authority to make Similar Use Determinations.
2. **Ministerial Action.** A Similar Use Determination shall constitute a ministerial action.
3. **Application Contents and Filing.** An application for similar use shall be in writing on forms provided by the Director of Community Development.

4. Determination Findings. In determining “similarity,” the Director of Community Development shall make all of the following findings:
  - a. The characteristics of and activities associated with the proposed use are equivalent to one or more of the listed uses and will not involve a higher level of activity or environmental impacts than the uses listed in the land use district;
  - b. The proposed use will be consistent with the purposes of the applicable land use district; and
  - c. The proposed use will be consistent with the General Plan and this SWIP Specific Plan.
5. Notice of Determination. A Similar Use Determination shall be made in writing and shall contain the facts that support the determination. The Community Development Department shall maintain all determinations on record for review by the general public upon request. The notice shall include:
  - a. A brief statement explaining the criteria and standards considered relevant to the decision;
  - b. A statement of the standards and facts relied upon in rendering the decision; and
  - c. An explanation of appeal rights and appeal deadlines. The determination of similar use by the Director of Community Development shall be subject to appeal to the Planning Commission.

**F. *Nonconforming Lots, Structures, and Uses***

1. Nonconformance provisions are established to:
  - a. Bring all uses, structures, sites and signs into conformance with the developmental requirements and design guidelines in the Code;
  - b. Limit the occurrences and extent of nonconformance by prohibiting expansion, intensification, reinstatement, alteration, restoration after destruction, and reestablishment after abandonment; and
  - c. Gradually phase out nonconforming uses, structures, lots and signs.
2. Applicability
  - a. Nonconforming uses, structures, signs and lots may be maintained, expanded, altered and/or abated only in accordance with the provisions of this Specific Plan.

- b. Any Designated Historic Landmark, or any property listed on the California Register of Historical Resources or National Register of Historic Places, shall be exempt from the provisions of this Section with respect to the restoration and maintenance of structures, provided that any construction plans are approved through a Certificate of Appropriateness by the Historic Preservation Commission/Planning Commission.
- 3. Nonconforming Uses. A use that lawfully occupied a building or land at the time this Specific Plan became effective, and that does not conform to the use regulations of the land use district in which it is located, is deemed a "legal nonconforming use." A legal nonconforming use may continue, subject to the following:
  - a. Discontinuation of Use
    - i. Loss of legal nonconforming status. If a legal nonconforming use is discontinued for a period of 90 or more days, regardless of the owner's intent, it shall lose its legal nonconforming status and the continued use of the property shall be required to conform to all provisions of this Specific Plan.
    - ii. Extension of legal nonconforming status. Wherein special circumstances exist, the Director of Community Development may extend the legal nonconforming status of a use, for up to an additional 90-day period. Furthermore, an additional extension may be granted by the Planning Commission, for up to an additional 90-day period. The total time period of all time extensions shall not exceed 180 days.
    - iii. Extension of legal nonconforming use.
      - (1) An application for a Minor Use Permit shall be filed with the Community Development Department on a City application form, together with all required fees, plans, maps, reports, special studies, exhibits, and any other information deemed necessary by the Director of Community Development to process the application. The application shall be filed prior to the expiration of the 90-day period.
      - (2) The application shall be reviewed by the Director of Community Development within 30 days following application filing. The Director of Community Development shall notify the applicant, in writing, as to whether the application is complete. If the application is not complete, the Director of Community Development shall specify those parts of the application that are not complete and shall identify the manner by which it can be made complete. If written notification is not provided to the applicant within 30 days following application filing, the application shall be deemed complete.
      - (3) The Director of Community Development shall investigate the facts bearing on the application and provide the information necessary for action on the application, consistent with this Specific Plan and the General Plan. The applicant shall have made a good faith effort

through the submittal of documentation and has diligently pursued compliance with this Specific Plan.

- (4) The application shall be reviewed by the Director of Community Development at a duly noticed public hearing, whom shall then approve, modify or deny such application. The decision of the Director of Community Development shall be final and conclusive in the absence of a timely filed appeal to the Planning Commission. An appeal of the Director of Community Development's decision shall be filed within 10 days from the date of the decision of the Director of Community Development. An appeal of the Director of Community Development's decision shall be reviewed by the Planning Commission. The decision of the Planning Commission shall be final and conclusive in the absence of a timely filed appeal to the City Council.
- (5) The applicant may appeal the decision of the Planning Commission to the final deciding body, the City Council. The City Council decision shall be final and conclusive. If the application to extend the legal nonconforming use is approved by the City Council, the extension shall be granted for 90 days from the date of approval.
- (6) If the Director of Community Development or appointed designee has determined that the applicant has failed to show a good faith effort towards continually processing the extension of legal nonconforming use application (i.e., revising plans, withdrawing the application, placing the project on hold, etc.), the legal nonconforming use shall cease within 60 days from the application submittal date.
- (7) In granting an extension of the legal nonconforming status, the Director of Community Development may attach reasonable conditions and restrictions to the request, in addition to those required by this Specific Plan, which will ensure that the use:
  - Will not endanger the public health, safety or general welfare;
  - Will not injure the value of adjoining or abutting property;
  - Will not result in any significant environmental impacts; and
  - Will be in harmony with the area in which it is located.
- (8) In approving an extension of the legal nonconforming status, the Director of Community Development or Planning Commission shall consider and clearly establish the following findings of fact:
  - The non-conforming use has been discontinued within the 90-day period.
  - A physical and/or economic hardship has prevented the nonconforming use from being in compliance prior to the expiration of the 90-day period;

- Approving the extension will not adversely affect the health, safety or general welfare.
  - b. Change in Ownership, Tenancy or Management. A change in ownership, tenancy or management of a nonconforming use shall not affect its legal nonconforming status, provided that the use did not discontinue pursuant to the section entitled "1) Loss of legal nonconforming status" or the type of use and/or intensity of use do not change.
  - c. New Development. New development on any lot or parcel upon which a legal nonconforming use exists shall require that all uses on the property conform to the provisions of this Specific Plan.
  - d. Alteration and Expansion of Use
    - i. A nonconforming use shall not be enlarged or extended in such a way as to occupy any part of any structure or property that it did not occupy prior to the creation of the nonconformity.
    - ii. A structure fully or partially occupied by any nonconforming use shall not be moved, altered or enlarged, unless required by law, or unless the moving, alteration or enlargement will result in the elimination of the nonconforming use.
  - e. Intensification of Use. A nonconforming use shall not be intensified in such a way as to increase the discrepancy between existing conditions and the standards set forth in this Specific Plan.
4. **Nonconforming Structures.** A structure lawfully existing at the time this Specific Plan became effective, any portion of which does not comply with the requirements of the land use district in which it is located, including setbacks, separations, height and design, is deemed a "legal nonconforming structure." A legal nonconforming structure may continue to exist, subject to the following:
- a. Damage or Destruction
    - i. A legal nonconforming structure that is damaged or partially destroyed by fire, flood, wind, earthquake or other calamity, or the public enemy, or other cause which is beyond the control of the property owner, and which could not otherwise have been prevented by reasonable care and maintenance of the structure, may be reconstructed up to the original size, placement and density, provided that total cost of such reconstruction does not exceed more than 50 percent of the structure's current fair market value. The structure may be restored and the nonconforming use may be resumed, provided that restoration is started within six months, unless extended by the Director of Community Development, and diligently pursued.



- ii. In the event that the cost of repairing such damage exceeds 50 percent of the current fair market value of the structure prior to such damage occurring, the structure may be reconstructed up to the original size, placement and density, subject to all of the following:
  - The Planning Commission, at a duly noticed public hearing, must find that continuing the nonconforming structure will not result in an annoyance to and/or reduction of any surrounding property; and
  - The extent of damage or partial destruction shall be based upon a comparison of the estimated cost of restoring the structure to its condition prior to such damage or partial destruction with its value at the time the structure was damaged or partially destroyed. Estimates for such purpose shall be made by or reviewed by the Building Official; and
  - The restoration is commenced within 6 months and diligently pursued to completion.
  - An application for a Nonconforming Structure shall be filed with the Community Development Department on a City application form, together with all required fees, plans, maps, reports, special studies, exhibits, and any other information deemed necessary by the Director of Community Development to process the application. The application shall be filed prior to the expiration of the 90-day period.
  - A structure or development that has been damaged or destroyed by fire, flood, wind, earthquake, or other calamity, or by public enemy, or other cause which is beyond the control of the property owner, and which could not otherwise have been prevented may be reconstructed up to the original size, placement and density, except a multiple family dwelling or development which has been abandoned for a period of 90 or more days prior to being involuntarily damaged or destroyed, or a multiple family dwelling or development constituting a public nuisance prior to being involuntarily damaged or destroyed may not be reconstructed unless the structure is made to comply to all provisions of this Specific Plan.
- b. Alterations and Expansion
  - i. A nonconforming structure shall not be moved, altered or enlarged so as to increase the discrepancy between existing conditions and the most current standard as prescribed by the land use district in which the structure is located, except alteration and/or enlargement to a single family dwelling conducted pursuant to section "e) Nonconforming Single-Family Residential Structures".
  - ii. Within land use districts, reasonable repairs and alterations may be made to legal nonconforming structures, provided that no structural alterations shall be made which would prolong the life of supporting members of a structure, such as bearing walls, columns, beams or girders. Structural elements may be

modified only if such modification or repair is immediately necessary to protect the public health and safety, occupants of the legal nonconforming structure, or adjacent property, as determined by the Building Official. The total cost of such repairs or alterations may not exceed 50 percent of the replacement cost of the nonconforming structure.

- c. **New Structures.** Any new structure constructed on a lot or parcel with an existing legal nonconforming structure shall be constructed in conformance with all applicable provisions of this Specific Plan. However, in no case may a new nonresidential structure be constructed on the same lot as an existing legal nonconforming residential structure.
        - d. **Abatement of Nonconforming Structures Posing a Threat to the Public Health, Safety and General Welfare.** A structure which is nonconforming because of a violation or deficiency that poses a threat to the public health, safety or general welfare, as determined by the Building Official, and which fails to resolve, repair or improve such, or to fully mitigate the hazard involved, shall be abated, condemned or demolished upon the issuance by the City of a nuisance abatement, condemnations or demolition order.
        - e. **Nonconforming Single-Family Residential Structures.** In addition to the requirements of subsections a and d above, a nonconforming single family residential lot and/or structure that was lawfully established and maintained before the adoption of this Specific Plan, but which under the provisions of this Specific Plan does not conform with the regulations of the land use district in which it is located with respect to use, design and/or development standards, and which is continuously used and maintained for single family residential purposes, shall be subject to the following:
          - i. **Alterations and expansions to structures within nonresidential zones.**
            - Necessary repairs and desirable alterations, as deemed appropriate by the Director of Community Development, may be made to a legal nonconforming single family residential structure that is nonconforming as to use.
            - A single family dwelling that is nonconforming as to its location within a land use district that does not permit single family dwellings, and in which the residential use was lawfully established and continuously maintained, shall be subject to the development regulations of the Municipal Code Chapter 30 Zoning and Development Code that pertain to the R1 zoning district and off-street parking and loading regulations.
  5. **Nonconforming Signs.** A sign lawfully existing at the time this Specific Plan became effective, any portion of which does not comply with the requirements of Section 12.7 Sign Standards, is deemed a "legal nonconforming sign." A sign that presents a hazard to public safety, as determined by the City, shall be removed upon the issuance of a

- notice by the City. A legal nonconforming sign may continue to exist, subject to the following:
- a. A nonconforming sign may not be altered, enlarged, extended, or moved, except in conformity with the requirements of Section 12.7 Sign Standards, or as otherwise required by law;
  - b. Where a use or a structure associated with a nonconforming sign is abandoned or discontinued, any sign associated with a new use of the site shall be in full conformity with the requirements of Section 12.7 Sign Standards.
6. **Nonconforming to Development Standards.** The development that is not in compliance with the site development standards prescribed by the regulations of the land use district in which the lot or parcel is located, including area, coverage, configuration, dimensions, parking, landscaping, screen walls, fences and enclosure trash receptacles, is deemed "legal nonconforming," provided such development was lawfully created and existing at the time this Specific Plan, which created the nonconformity, became effective.
- a. A development that is nonconforming as to landscaping, screen walls, fences and enclosure of trash receptacles, shall be altered to comply with the district regulations covering the following standards, or as a condition of any subsequent Development Plan or Conditional Use Permit approval.
7. **Nonconforming Lots.** A lot or parcel that is not in compliance with the site development standards prescribed by the regulations of the land use district in which the lot or parcel is located, including area and configuration is deemed "legal nonconforming lot," provided such lot or parcel was lawfully created and existing at the time this Specific Plan, which created the nonconformity, became effective.
- a. A lot or parcel that is nonconforming as to minimum area or dimension shall be granted all development rights and uses of the land use district within which it is located.
    - i. The landscaping of setback areas insofar as a setback exists;
    - ii. The landscaping of parking areas, provided fulfilling the requirement does not reduce off-street parking or loading spaces to fewer than prescribed in this Specific Plan;
    - iii. The screening of storage areas; and
    - iv. The enclosure of trash receptacles.
8. **Elimination of Nonconforming Adult Business Uses.** Nonconforming adult business uses shall be eliminated in compliance with Municipal Code Chapter 30 Zoning and Development Code.



## Chapter 13.0 – Residential Truck District



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### **13.1 Purpose**

The Residential Truck District (RTD) is primarily intended to allow the continued use of residences in existing residential neighborhoods for a home based business related to a truck use. General features of the Residential Truck District include:

- Continued and expanded use and operation of a home based truck business
- Maintain the aesthetic integrity of the area through enhanced landscaping, screening, and fencing

## **13.2 Applicability**

### **A. Projects Subject to Development Regulations**

This Chapter contains the development regulations that govern all future private development actions in the RTD, including new construction, additions, or renovations to existing structures and/or new land uses proposed for existing facilities.

### **B. Right of Continued Use**

This Chapter shall not require any change in any existing building or structure for which a building permit has been previously issued, or for approved plans on file in the Community Development Department before the effective date of this Specific Plan. Changes in the property's ownership or tenants of legal existing uses shall likewise require no change in any existing building or structure. Nonconforming standards and provisions shall be governed by Section 13.10 Entitlement Procedures.

### **C. Other Requirements**

This Chapter does not eliminate the need for obtaining any other permits required by the City, or any permit, approval or entitlement required by any other applicable special district or agency, and/or the regulations of any State or Federal agency.

### **D. Types of Development Regulations**

The Development Regulations are of two types – Standards and Guidelines – as follows:

1. Standards address those aspects of development that are essential to achieve the goals of the Specific Plan. They include specifications for allowable land uses and site development (e.g., building height, setbacks, etc.). Conformance with Standards is mandatory. Standards are indicated by use of the words "shall," "must," or "is / is not permitted."
2. Guidelines provide guidance for new development in terms of aesthetics and design details. They are intended to direct building and site design in a way that results in the desired character for the RTD. Whereas conformance with the Standards is mandatory, conformance with the Guidelines is preferred and/or recommended. Provisions that fall into this category are indicated by the use of the words "should," "may" or "are encouraged to." In various cases, the Guidelines provide a choice of treatments that will achieve the desired effect. Developers are permitted to propose alternative design details if they are able to show that the details implement the Specific Plan objectives with respect to the desired character of the RTD.

**E. Minimum Requirements**

The provisions in this Chapter shall be minimum requirements. When this Chapter provides for discretionary authority on the part of the Director of Community Development, Planning Commission, or City Council, that discretion may be exercised to impose more stringent requirements if deemed necessary to accomplish the objectives of the RTD.

**F. Overview of Development Regulations**

1. Relationship of Land Use Districts. The development regulations in this Chapter apply to properties within the RTD. Exhibit 13-1 – Land Use Plan indicates the location of the RTD and its relationship to the other land use districts in the Specific Plan area.
2. Standard, Guidelines and Procedures. The development regulations are divided into the following sections: 13.3 Allowable Land Uses and Permit Requirements; 13.4 Development Regulations; 13.5 Landscape Regulations; 13.6 Parking Standards; 13.7 Sign Standards; 13.8 Design Guidelines; and 13.9 Entitlement Procedures. Projects must meet all development standards in order to achieve approval in the development review process. Projects are encouraged to adhere to the recommendations contained in 13.8 Design Guidelines.
3. Steps for Using Chapter. Table 13-1 – Process Procedures illustrates the steps for using this Chapter.

**Table 13-1 – Process Procedures**

| <i>Instructions</i>                                                                                                         | <i>Information Source</i>                 | <i>Where to Find in this Chapter</i> |
|-----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|--------------------------------------|
| Locate property and its street frontage                                                                                     | Land Use Plan                             | Exhibit 13-1                         |
| Identify the allowable uses and refer to the definitions of the uses                                                        | Allowable Land Uses & Permit Requirements | Table 13-2                           |
|                                                                                                                             | Definitions                               | Appendix A                           |
| Comply with the requirements for density, lot dimensions, height limits, and setbacks                                       | Density and Dimensional Standards         | Table 13-3                           |
| Comply with fence, wall, and screening standards                                                                            | Fence, Wall, and Screening Standards      | Table 13-4                           |
| Comply with landscaping requirements                                                                                        | Landscape Regulations                     | Section 13.5                         |
| Comply with parking requirements                                                                                            | Parking and Loading Standards             | Section 13.6                         |
| Comply with sign requirements                                                                                               | Sign Standards                            | Section 13.7                         |
| Review the design guidelines for preferred site layout, building orientation and architectural detail, fencing, and parking | Design Guidelines                         | Section 13.8                         |
| Submit project application and proceed through project approval process                                                     | Entitlement Procedures                    | Section 13.9                         |

# Southwest Industrial Park Specific Plan

Residential Truck District

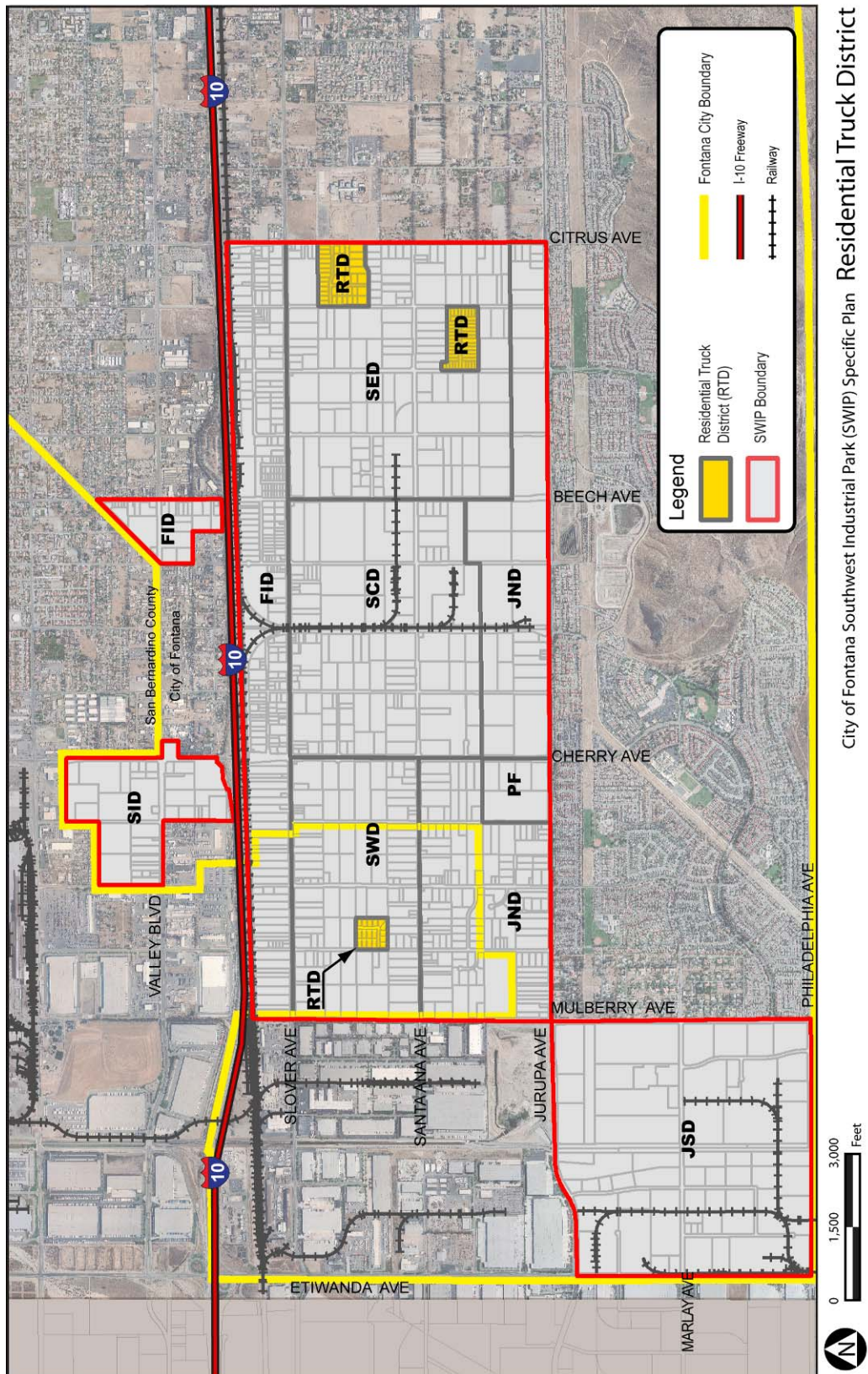


Exhibit 13-1 – Land Use Plan.

### **13.3 Allowable Land Uses and Permit Requirements**

This Section identifies allowable land uses and their permit requirements.

#### **A. Allowed Uses**

Table 13-2 – Allowable Land Uses and Permit Requirements identifies the types of land uses allowed in the RTD and the use permit required to establish each use.

#### **B. Uses Not Listed**

Uses not listed in Table 13-2 are prohibited land uses.

#### **C. Other Applicable Regulations**

The provisions contained in this SWIP Specific Plan constitute the primary land use and development standards for the Specific Plan area. These regulations are in addition to the provisions in the City of Fontana Municipal Code.

This Specific Plan provides all development standards and guidelines necessary to approve subsequent project applications, unless otherwise noted. Permit processing procedures (e.g., noticing, hearing, appeals, and expiration procedures) and enforcement procedures are provided in Municipal Code Chapter 30 (Zoning and Development Code) shall apply, unless otherwise noted. Where there is a conflict between the provisions in this Specific Plan and those in the Zoning and Development Code, the Specific Plan provisions shall prevail to the extent allowable under Federal or State law. Where there is no conflict, both shall be applied concurrently.

#### **D. Definitions**

Definitions for land uses are provided in Appendix A Definitions. If no definition is provided, the definitions in the Municipal Code shall apply. The Director of Community Development shall interpret the definitions; make a similar use determination in compliance with Subsection 13.9.D Entitlement Procedures- Similar Use Determination; and/or refer any questions to the Planning Commission for its determination.

**Table 13-2 – Allowable Land Uses and Permit Requirements**

| <i><b>Land Use</b></i>                                    | <i><b>Permit Requirement</b></i>                        |
|-----------------------------------------------------------|---------------------------------------------------------|
|                                                           | "P"= Use Permitted by Right                             |
|                                                           | "C"= Conditional Use Permit Required                    |
|                                                           | "M" = Minor Use Permit Required                         |
| <b>Residential Truck District (RTD)</b>                   |                                                         |
| <b>Entertainment, Recreation and Public Assembly Uses</b> |                                                         |
| Open Space / Park                                         | <b>P</b>                                                |
| Public Assembly Facilities                                | <b>C</b>                                                |
| <b>Residential Uses</b>                                   |                                                         |
| Granny Housing                                            | <b>P</b>                                                |
| Home Occupation                                           | <b>P</b>                                                |
| Second Dwelling Unit                                      | <b>P</b>                                                |
| Single Family Dwelling                                    | <b>P</b>                                                |
| <b>Other Uses</b>                                         |                                                         |
| Truck Uses                                                | <b>P (1)</b>                                            |
| Public Facilities                                         | <b>P</b>                                                |
| Signs                                                     | <b>P</b>                                                |
| Temporary Uses                                            | Municipal Code Chapter 30, Division 14 (Temporary Use). |

Notes:

(1) See Section 13.6.D. Oversize Vehicle Parking.



### 13.4 Development Standards

New land uses and structures and alterations to existing land uses and structures in the RTD shall be designed, constructed, and established in compliance with the requirements in this Section.

#### A. Density and Dimensional Standards

Single-family residential uses shall comply with the standards in Table 13-3 – Density and Dimensional Standards. The Director of Community Development is authorized to approve modifications of 10 percent or less of any land use district setback, lot width, lot depth, building coverage, building height, or wall height standard in compliance with the administrative variance procedures in Municipal Code Section 30-51.6 (Findings necessary for granting a variance).

The Director of Community Development may grant an administrative variance from the requirements of this chapter where practical difficulties, unnecessary hardships, or results contrary to the intent of this chapter would occur from the strict and literal interpretation and enforcement of the Code. An administrative variance may be granted upon conditions which will ensure the protection of the public safety, health and welfare. To grant an administrative variance, the Director of Community Development must find from the facts presented that the following conditions exist.

- (1) That because of circumstances applicable to the property including size, shape, topography, location or surroundings, the strict application of this chapter will deprive the property of privileges enjoyed by other property in the vicinity and under identical zoning classification;
- (2) That the granting of such an administrative variance will be subject to conditions assuring that the variance shall not constitute a grant of special privileges inconsistent with the limitations upon other properties in the vicinity and zoning district in which the property is located;
- (3) That the administrative variance does not authorize a use or activity which is not a specifically allowed use in the zoning district in which the property is located; and
- (4) That the granting of one administrative variance will not be contrary to the general plan.

| Table 13-3 – Density and Dimensional Standards           |                     |
|----------------------------------------------------------|---------------------|
| <i>Development Feature</i>                               | <i>Requirements</i> |
| <b>DENSITY</b>                                           |                     |
| Maximum number of dwelling units per adjusted gross acre | 2.0 maximum         |
| <b>LOT DIMENSIONS, LOT SIZE, AND LOT COVERAGE</b>        |                     |

## Southwest Industrial Park Specific Plan

### Residential Truck District

|                                                                                                                                                                                                                                             |                                                                                                                                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| Width @ required front setback                                                                                                                                                                                                              | 80ft minimum                                                                                                                   |
| Width @ front lot line                                                                                                                                                                                                                      | 80 ft minimum                                                                                                                  |
| Depth                                                                                                                                                                                                                                       | 150 ft minimum                                                                                                                 |
| Lot size                                                                                                                                                                                                                                    | 21,780 sq ft minimum                                                                                                           |
| Lot coverage                                                                                                                                                                                                                                | Maximum 45% of total site's adjusted gross acreage                                                                             |
| <b>DWELLING UNIT SIZE</b>                                                                                                                                                                                                                   |                                                                                                                                |
| One-story                                                                                                                                                                                                                                   | 1,850 sq ft minimum                                                                                                            |
| Two-story                                                                                                                                                                                                                                   | 2,000 sq ft minimum (1)                                                                                                        |
| <b>BUILDING HEIGHT</b>                                                                                                                                                                                                                      | 35 ft maximum                                                                                                                  |
| <b>SETBACKS – PRIMARY STRUCTURES (2)</b>                                                                                                                                                                                                    |                                                                                                                                |
| Front (3)(4)                                                                                                                                                                                                                                | 25 ft minimum                                                                                                                  |
| Side, interior                                                                                                                                                                                                                              | 5 ft minimum                                                                                                                   |
| Side, corner lot                                                                                                                                                                                                                            | 10 ft minimum                                                                                                                  |
| Rear                                                                                                                                                                                                                                        | 20 ft minimum; or on cul-de-sac or knuckle – Average of both rear corners of dwelling; provided average is not less than 20 ft |
| <b>PATIO AND BALCONY SETBACKS</b>                                                                                                                                                                                                           |                                                                                                                                |
| Rear                                                                                                                                                                                                                                        | 15 ft minimum                                                                                                                  |
| Side                                                                                                                                                                                                                                        | 15 ft minimum                                                                                                                  |
| (1) Each dwelling unit shall provide a minimum one-half bath ("powder room"), consisting of at least a water closet (toilet) and sink, on the first or ground floor when the first or ground floor contains habitable living space.         |                                                                                                                                |
| (2) See Municipal Code Section 30-167 (Projections into Yards) for architectural features.                                                                                                                                                  |                                                                                                                                |
| (3) The habitable space of a building may encroach into the required front setback area in compliance with the Plotting and Design Criteria. Side-on garages may encroach into the required front setback area up to a maximum of six feet. |                                                                                                                                |
| (4) Secondary Highways (Citrus and Poplar) and Collector Streets (Catawba)                                                                                                                                                                  |                                                                                                                                |

### **B. Accessory Buildings, Structures, and Sheds**

Detached accessory buildings, structures and sheds, with the exception of pools, spas, and hot tubs regulated by Municipal Code Section 30-178, shall be subject to the following requirements:

1. Private garages and carports, attached.
  - a. On lots of less than one net acre, the total area is not to exceed 1,000 square feet or 25 percent of the living area of the principal residence, whichever is greater.
  - b. On lots of one net acre or larger but less than two acres, the area shall not exceed 1,500 square feet or 25 percent of the living area of the principal residence, whichever is greater.
  - c. On lots of two acres or larger but less than four net acres, the area shall not exceed 2,000 square feet or 25 percent of the living area of the principal residence, whichever is greater.
  - d. On lots of four acres or larger, the area shall not exceed 3,000 square feet or 25 percent of the living area of the principal residence, whichever is greater.

2. Detached garages and carports, storage buildings, workshops, hobby shops, recreation rooms, and other similar uses.
  - a. On lots of less than one net acres, the combined area of accessory structures shall not exceed 1,000 square feet or 25 percent of the living area of the principal residence, however, whichever is greater.
  - b. On lots of one net acre or larger but less than two net acres, the combined area of accessory structures shall not exceed 1,500 square feet or 25 percent of the living area of the principal residence, whichever is greater.
  - c. On lots of two net acres or larger but less than four acres, the combined area of accessory structures shall not exceed 2,000 square feet or 25 percent of the living area of the principal residence, whichever is greater.
  - d. On lots of four net acres or larger, the combined area of accessory structures shall not exceed 3,000 square feet or 25 percent of the living area of the principal residence, whichever is greater.
3. Accessory structures shall be architecturally compatible with or superior to the primary dwelling unit; metal and aluminum sided and roofed buildings are prohibited.
4. Setbacks.
  - a. The following setbacks shall be maintained:

| <b><i>Property Line</i></b> | <b><i>Required Setback</i></b> |
|-----------------------------|--------------------------------|
| Front                       | 25 ft                          |
| Side                        | 5 ft min, 15 ft aggregate      |
| Rear                        | 10 ft                          |

- b. Reverse corner lot. On reverse corner lots, accessory structures shall not extend beyond the required front setback of the abutting key lot and shall maintain a distance of five feet from the side lot line of the abutting key lot.
- c. Two-story structures. Two-story accessory structures are not permitted within any part of a required rear setback area. If additional rear yard area beyond the minimum required setback area is provided, a two-story structure may be placed within the additional area, provided the following setbacks are maintained:

| <b><i>Property Line</i></b> | <b><i>Required Setback</i></b> |
|-----------------------------|--------------------------------|
| Front                       | 60 ft                          |
| Side                        | 7 ft                           |
| Rear                        | 25 ft                          |

- d. Distance from alley centerline. Accessory structures shall be located a minimum distance of 15 feet from the centerline of an alley or recorded easement.

- e. Distance from primary structure. Accessory structures shall be located a minimum distance of six feet away from the primary structure. If the two structures are connected by a breezeway, the minimum separation distance shall also be six feet.

5. Sheds.

- a. Location. Sheds shall be permitted subject to the following:

- (1) The shed shall not exceed eight feet in height.
- (2) The size of the shed shall not exceed 120 square feet in floor area.
- (3) There shall be no more than one shed for each 7,200 square feet of lot area.
- (4) Architectural compatibility with the primary structure is encouraged; metal, aluminum, and vinyl sheds are allowed provided the regulations of this section are met.
- (5) The following setbacks shall be maintained:

| <i>Property Line</i> | <i>Required Setback</i> |
|----------------------|-------------------------|
| Side                 | 3 ft                    |
| Rear                 | 3 ft                    |

- b. Corner lot. On corner lots, sheds shall not be visible from the public right-of-way.

6. Temporary shade awnings and easy-ups. Temporary shade awnings and easy-ups are prohibited within the yard area between the front or side of a dwelling or garage and any public right-of-way.

**C. Additions to Existing Single-Family Structures**

1. Single-story additions. Single-story additions, including screened and/or enclosed patio structures, shall comply with the following:

- a. All RTD development standards.
- b. Side setbacks for additions shall be equal to or greater than the existing side setback of the existing structure.
- c. The architecture of the proposed addition shall be compatible in design with the existing structure. The roofing shall be of the same style and material as the existing structure, with the exception of open and enclosed patio covers.

2. Two-story additions. Second-story additions shall comply with the following:

- a. All RTD development standards.

- b. Side setbacks for additions shall be equal to or greater than the existing side setback of the existing structure.
- c. The architecture of the proposed addition shall be compatible in design with the existing structure. The roofing shall be of the same style and material as the existing structure, with the exception of open and enclosed patio covers.
- d. Window locations to ensure privacy.
  - i. Windows shall be situated so that they are not directly opposite those windows of adjacent residential dwelling units.
  - ii. Window locations shall take into account adjacent properties, recreation areas, and amenities (pools, spas, etc.).
  - iii. Where conflicts between proposed window locations occur, visual intrusion mitigation measure(s) shall be provided (e.g., high windows, wing walls, view-obscuring window treatment, window alignment, etc.).

**D. Fences and Walls**

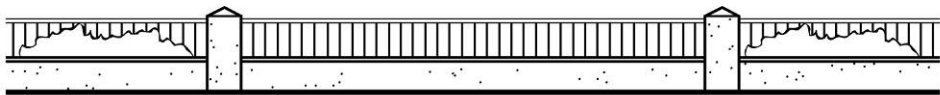
- 1. Standards. Table 13-4 Standards for Fences, Walls, and Screening contains standards for fences, walls, and screening.

| <b>Table 13-4 – Fence, Walls, and Screening Standards</b>                                                           |                                                         |                                                                                                           |
|---------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| <i>Location</i>                                                                                                     | <i>Materials<br/>See Section 13.8 Design Guidelines</i> | <i>Maximum Height (1)</i>                                                                                 |
| Within front setback area                                                                                           | Solid fencing/wall                                      | 36 inches                                                                                                 |
|                                                                                                                     | Open fencing/wall                                       | 5 ft                                                                                                      |
| Within street-side setback area                                                                                     | Solid or open fencing/wall                              | 6 ft                                                                                                      |
| Within interior side setback area                                                                                   | Solid or open fencing/wall                              | 6 ft; or<br>8 ft if abutting properties differ in elevation or are commercial or industrial types of uses |
| Within rear setback area                                                                                            | Solid or open fencing/wall                              | 6 ft; or<br>8 ft if abutting properties differ in elevation or are commercial or industrial types of uses |
| Outside of a required setback area                                                                                  | Solid or open fencing/wall                              | 6 ft                                                                                                      |
| At intersections of alleys, streets, and driveways within rear setback area                                         | Solid or open fencing/wall                              | 30 inches                                                                                                 |
| Note: (1) All fences and walls shall meet the City's line of sight regulations, as determined by the City Engineer. |                                                         |                                                                                                           |

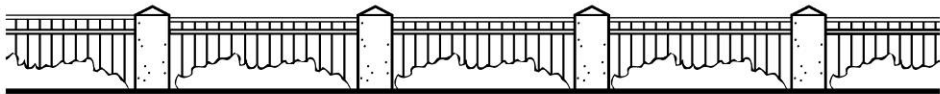
2. **Materials.**
  - a. Open fencing shall mean fencing with over 50 percent of the surface area open for free passage of light and air and through which the area behind the fence is visible to public view. See Exhibit 13-2 Open and Solid Fencing.
  - b. Solid fencing shall mean fencing with 50 percent or less of the surface area open for free passage of light and air and designed to conceal the area behind the fence from public view. See Exhibit 13-2 Open and Solid Fencing.
  - c. Barbed wire fences, electric fences, or similar fencing material is prohibited.
  - d. Chain link fencing is allowed on interior property lines that are not visible from public rights-of-way.
3. Screening and buffering. Roof-mounted and ground-mounted mechanical equipment, utilities, storage, and solid waste storage areas shall be screened from adjoining properties and public right-of-ways by a visual barrier (e.g., wall, fence, landscape material, etc.) to the satisfaction of the Director of Community Development. Where only landscaping is used for screening, it shall be planted with five-gallon (minimum size) shrubs spaced to provide a continuous dense screen.

***E. Outdoor Activities and Storage***

Material or equipment shall not be stored anywhere in the front yard area except for temporary storage during construction on the same site. Boats, campers, motor vehicles, trailers, equipment, materials, or antenna that are stored in required side or rear setback areas shall comply with Table 13-3 Density and Dimensional Standards.



Elevation of Wall / Wrought Iron Combination

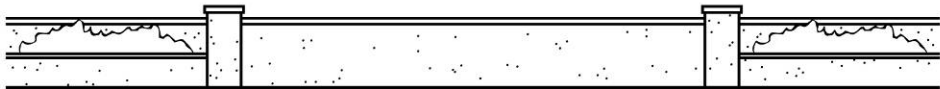


Elevation of Wrought Iron with Pilasters

*Examples of Open Fencing*



Elevation of Staggered Wall



Elevation of Planters / Wall



Elevation of Wall with Breaks

*Examples of Solid Fencing*

Exhibit 13.2 – Open and Solid Fencing.



### 13.5 Landscape Standards

#### A. Required landscaping

This section provides the required minimum standards for all landscaped areas within any new and rehabilitated private development project.

1. Landscaped area means the entire parcel less the building footprint, driveways, nonirrigated portions of parking lots, and hardscapes (e.g., driveways, approaches, sidewalks, etc.). Decorative hardscapes used to enhance the landscape will be considered as part of the landscape area; this would include cobble rock, decomposed granite, brickwork, stamped concrete, gravel, pavers, and water features.
2. Landscape setbacks along public rights-of-way shall incorporate landscape buffers with undulating and variable height earth-mounding (berms), and/or low walls, and required plant materials as shown in Table 13-5 Landscape Standards.
3. Block wall and wrought iron fencing shall be located 10 feet behind the ultimate right-of-way.
4. The developer shall submit to the City's Department of Engineering, a Landscape Documentation Package that conforms to the Water Efficient Landscape Ordinance in Municipal Code, Chapter 28 Vegetation.
5. All new development landscaping shall comply with the standards shown in Table 13-5 Landscape Standards. Additional guidelines that should be considered are provided in Section 13.9 Design Guidelines.

**Table 13-5 – Landscape Standards**

*Note: The Director of Community Development may require additional setbacks.*

|                                                                                                           |                                                                                                                                                                                                  |
|-----------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Front Yard Landscaping<br>Mixture of turf (natural and synthetic), shrubs, trees, and decorative features | Minimum 50% of total front yard area shall be landscaped.<br>Other 50% may be covered by non-decorative hardscape features (e.g. concrete, asphalt, gravel, driveways, sidewalks, porches, etc.) |
| Decorative features<br>Brick, stone, art, fountains, ponds, etc.                                          | Up to 25 % of the total 50 % landscaping of front yard area                                                                                                                                      |
| Minimum plant sizes and quantities                                                                        |                                                                                                                                                                                                  |
| Trees                                                                                                     | Two fifteen-gallon trees – One street tree and one front yard tree<br>Corner lots – Additional trees for each 30 linear feet of side yard.                                                       |
| Shrubs                                                                                                    | One shrub for each 9 sq ft of landscape area<br>50% - 5 gallon<br>50% - 1 gallon                                                                                                                 |
| Groundcover                                                                                               | 12-inch maximum on center spacing that will cover area within one year of initial planting                                                                                                       |

### 13.6 Parking Standards

#### A. Applicability

This section contains regulations for off-street parking and loading. Regulations identify required number of parking and loading spaces for all new development projects and those proposing substantial modification to existing buildings. Please refer to Municipal Code Chapter 30 Zoning and Development Code for all parking and loading-related information or regulations not specifically addressed in this section.

#### B. General Parking and Loading Regulations

Required off-street parking spaces shall be located on the same property as the use that they are intended to serve.

#### C. Required Number of Parking Spaces

Each land use shall provide the number of off-street parking spaces indicated in Table 13-6 Parking Requirements by Land Use.

| Table 13-6 – Parking Requirements by Land Use             |                                                                                                                                                                                                                                                       |
|-----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Land Use</i>                                           | <i>Motor Vehicle Spaces (minimum #)</i>                                                                                                                                                                                                               |
| <b>Entertainment, Recreation and Public Assembly Uses</b> |                                                                                                                                                                                                                                                       |
| Open Space/Park                                           | Public - Determined by Parks and Recreation Department<br>Private - 1 space for each 4,000 sq ft of total park area<br>Bicycles -- 1 space per 33 vehicle parking spaces                                                                              |
| <b>Residential Uses</b>                                   |                                                                                                                                                                                                                                                       |
| Second Dwelling Units                                     | 2-car enclosed garage.                                                                                                                                                                                                                                |
| Single Family Dwellings                                   | 2 enclosed spaces / 1 to 4 bdrms;<br>3 enclosed spaces / 5 to 6 bdrms; and<br>1 additional enclosed space for every 1 bdrm over 6 bdrms<br>Tandem spaces allowed only for 3 <sup>rd</sup> and 4 <sup>th</sup> spaces<br>1 truck space (12 ft x 70 ft) |

#### D. Oversize Vehicle Parking

Oversize vehicles, including recreational vehicles, commercial trucks exceeding a manufacturer's gross vehicle weight rating of 10,000 pounds, and tractor trailer trucks, may be parked on a residential property subject to the following standards:

1. A maximum of one oversize vehicle may be parked on any lot at a time, provided that the lot is a minimum one acre in size.
2. The owner or operator of the vehicle shall be a resident of the home on the parcel where parked.

3. Parking and storage shall be within the rear yard area. All parts of a vehicle shall be at least five feet away from each interior lot line; and at least 70 feet from a structure used for human habitation or public assembly (e.g., parks, churches, etc.) on adjoining properties. The area of human habitation shall not include cabanas, patios, attached or detached private garages or storage structures.
4. Vehicles shall be screened from public view with a six-foot high solid or open fence or wall.
5. Vehicles shall not be left to idle with engines or refrigeration units running between the hours of 8:00 pm and 7:00 am, unless the noise level of the operation is reduced to 45 dB(A) or less as measured at the lot line. At other times, the operator of the vehicle shall not idle the vehicle's engine for longer than 10 minutes.
6. The dispensing of fuel on-site in excess of 10 gallons is prohibited.
7. The property owner shall provide appropriate design measures to minimize dust.
8. Outdoor storage of equipment, materials, or supplies shall not be allowed.
9. Mechanical work and routine maintenance or repair work that causes an excessive amount of noise shall be conducted off-site. The following maintenance work shall not be conducted on-site:
  - a. Steam-cleaning or degreasing the vehicle.
  - b. Welding.
  - c. Use of pneumatic equipment, other than to repair a disabled vehicle.

### **13.7 Sign Standards**

Signs shall be prohibited in the RTD.

### **13.8 Design Guidelines**

#### **A. Design Objectives**

The Design Guidelines will promote and reinforce the City's commitment to high quality development. In general, the guidelines are intended to ensure that development preserves or improves the positive characteristics of the City's image. The objectives of these guidelines are to:

- Promote orderly development by implementing the SWIP Specific Plan objectives, policies, and principles found in Chapter 2 Policy Framework.
- Protect and enhance property values by ensuring that development fits properly within the context of its surroundings and does not negatively impact adjacent uses.
- Encourage individual creativity and innovative solutions by allowing flexibility in how a particular guideline is met as long as the intent of the guideline is achieved.
- Ensure functional pedestrian and motor vehicle circulation within a project and convenient pedestrian linkages to and from adjacent residential, commercial, industrial, and school areas.

#### **B. Design Intent**

The RTD encourages high-quality residential architecture that enhances neighborhood character. Scale, building articulation, and site layout are important contributions to the neighborhood character. The following section provides guidance to develop well-designed homes that can accommodate existing businesses.

#### **C. Residential Uses**

##### **General Architecture and Site Design**

- Single family homes shall reflect the mass and scale of the surrounding neighborhood.
- Residential architecture shall be consistent with the existing residential architecture in the area.
- Buildings shall be oriented to provide some privacy, yet still relate to the street and the surrounding community. Doors should be visible from the street and windows should allow residents to have "eyes on the street" for natural surveillance.

- Two-story residences are encouraged to have a single-story element to provide transition to the two-story massing. Two story masses should be located towards the center of buildings with building height and massing stepping down at the edges to avoid the appearance of large, two-story “boxes”.
- Avoid creating a two-story structure that may directly overlook into neighboring properties. Privacy of adjacent uses shall be considered in the scale and massing of structures.
- Living spaces shall be the primary visual emphasis for the dwelling and garages shall be de-emphasized. Garages shall be setback from the main house façade whenever possible.
- Building details shall be in proportion to the overall building massing.
- Building additions or remodeled areas should employ details, materials and colors that are consistent with the original building. Additions should not appear “tacked on.”

### **Roofs**

- Roofs should be simple in form as to not preclude building additions at a later date.
- Roof form, materials and colors should be consistent with the architectural style of the house. **See Figure 1.**
- Skylights with exposed metal shall be anodized or factory finished to match surrounding roof materials.
- Skylights are encouraged to meet the following guidelines:



Figure 1. Mission tile consistent with Spanish style house.



- Glass shall be clear, flat and non-reflective. Skylights shall be mounted on the same plane and angle as the associated roof.
- Domed and/or bubble skylights are not appropriate.
- Skylights shall be located to minimize visibility from off-site.

**See Figure 2.**



Inappropriate:  
Domed Skylight



Appropriate:  
Flat Skylight

Figure 2. Skylights.

### Front Elevation

- Front elevations shall be well-articulated and detailed to relate to the surrounding neighborhood.
- Emphasis shall be placed on the front entry to create a welcoming appearance for the dwelling. Entries should incorporate features such as porches or large recessed entry alcoves. **See Figure 3.**
- Create visually interest by popping out or recessing portions of the front façade.
- Second story balconies may be used to add interest and provide outdoor living space along the front elevation. **See Figure 4.**
- Enhanced window treatments shall be provided on all elevations. Treatments may include:
  - Recessing window by a minimum of 4 inches,
  - Providing window surrounds at least 4 inches in width and 2 inches in depth,
  - Providing shutters sized as if to cover the window if closed, and
  - Integration of windows into popouts with columns or overhangs, as consistent with the architectural style of the house.

**See Figure 5.**



Figure 3. Porch creates a welcoming entry.



Figure 4. Second story balcony.



Figure 5. Enhanced window treatment.

- Create interesting rooflines through off-set roof planes, eave heights, ridge lines, and/or dormers. **See Figure 6.**

#### Side and Rear Elevations

- The window style, and window treatment and surrounds on visible side and/or rear elevations shall be consistent with the same elements on the front elevation.
- The design of the roof and roof elements on the visible side and/or rear elevations shall incorporate features or be consistent with the same element features contained on the front elevation, but not necessarily to the same level of detail (i.e. fewer roof plane changes).



Figure 6. Dormer windows.

#### Garages, Parking and Accessory Structures

- If provided, porte-cocheres shall be architecturally integrated to the main house, with details that mirror the level of ornamentation found on the main house. **See Figure 7.**
- If provided, porte-cocheres shall be located on the driveways that lead to the garage.
- Oversize vehicle parking shall be screened from view from the public street. Screening may be achieved through decorative walls, landscaping of six feet in height, and/or placement behind buildings. **See Figure 8.**
- Accessory structures such as detached garages, storage/work buildings and trellis/canopies shall be permanently anchored to a foundation and utilize materials that are permanent in nature.
- Accessory structures shall be architecturally consistent with the main building and utilize similar detailing, materials, and colors.



Figure 7. Porte-cochere.

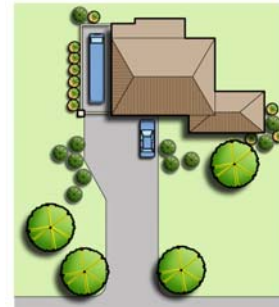


Figure 8. Appropriate oversized vehicle parking.

- Provide well-detailed garage doors consistent with the architecture of the dwelling to reduce the overall visual mass of the garage.

### Colors and Materials

- Building materials should be durable, low-maintenance, and able to withstand long-term exposure to elements.
- Exterior materials, textures and colors shall complement the architectural style of the house.
- Limit the number of building materials used on a façade. As a general rule, use no more than two different materials (excluding glass windows) on a single façade. Frequent changes in materials should be avoided. **See Figure 9.**
- Changes in material should generally occur when there is a change in the plane of the façade. If possible, the change in material shall occur on inside corners of the building. If a change is proposed along the line of a single plane, a pronounced expansion joint or trim piece shall be used to define a clear separation. Stone shall turn corners and not be used only on one wall of a façade.
- Inappropriate building materials that are discouraged on facades include:
  - o Plywood
  - o Hardboard
  - o Unfinished lumber
  - o Aluminum siding
  - o Textured T1-11 siding
  - o Plastics/Plastic Laminates
  - o Rolled roofing/rock
  - o Highly reflective materials
  - o Unfinished metal, aluminum or similar material



Figure 9. Number of materials limited to two plus glass.

- Metal buildings shall be prohibited.
- Colors and materials should be durable and not readily deteriorate with exposure to the elements.
- Colors should be complementary to one another and appropriate for the chosen architectural style of the building. **See Figure 10.**
- Avoid highly contrasting materials.
- Colors shall be non-reflective.
- Color applications on a façade should generally be limited to one or two main colors and two to three accent colors that complement the main color(s) of the house.
- Painted building surfaces shall have a matte finish. Trim work may have a glossy finish.



Figure 10. Colors complement building architecture.

### Equipment

- Mechanical equipment such as air-conditioning units, utility meters, pool/spa equipment and similar above-ground devices shall be screened from off-site views by the use of architectural devices and/or plant materials. Where feasible, these areas are to be integrated into the building's architecture. Noise emission from such devices is to be contained. **See Figure 11.**
- Service, trash, and storage areas are to be completely enclosed as part of the building's architecture. All exposed metal related to utilities (meters, outlet covers, etc.) is to be painted to match adjacent natural and/or building materials.



Figure 11. Avoid mechanical equipment that is not screened from off-site views.

### Balconies and Porches

- Porch elements such as columns should provide enough mass and scale to appear they are supporting roof elements of a porch. Avoid columns that appear thin or weak in appearance. **See Figure 12.**
- Balconies and projections should proportionately complement each other and integrate into the overall architectural massing of the home. Balconies should be roofed when they exceed four feet in depth.
- Balconies shall not be placed where they can overlook private spaces of adjacent homes, without adequate privacy screening.



Inappropriate: Columns that appear thin in proportion to the porch

Figure 12. Porch Columns.

### Landscaping

- Utilize landscaping as an integral component to overall project design.
- Landscape designs emphasizing water-efficient plants are encouraged. **See Figure 13.**



Figure 13. Example of drought-tolerant planting.

### Walls and Fences

- The design of fences and walls, as well as the materials used, shall be consistent with the overall house design.

### Lighting

- Exterior light sources shall be placed, shielded and/or directed away from neighboring properties and streets.
- Lighting fixtures and their structural support shall be the same scale and design of the chosen architectural style. **See Figure 14.**



Figure 14. Light fixture matches architectural style.

- Consideration of the latest technical and operational energy conservation concepts in lighting designs are highly encouraged.
- The preservation of the nighttime is highly encouraged. Exterior night lighting shall be kept to an absolute minimum as necessary for safety and address identification at entrances, driveways and buildings. All light fixtures shall be activated for short-term use only.



### **13.9 Entitlement Procedures**

#### **A. Purpose**

These administrative procedures have two major purposes:

1. Ensure that development conforms to the SWIP Specific Plan ("Plan").
2. Ensure that the City's review is as expedited as possible while remaining legal and proper.

#### **B. Summary of Processing Procedures**

1. Conformity with the Plan. The Director of Community Development shall review each application for conformity with the development regulations in this Chapter. Conformity has two components:
  - a. Standards. Compliance with the Standards is mandatory and the City may not approve a project that fails to comply with the Standards.
  - b. Guidelines. The City may exercise discretion in evaluating the project's compliance with the Guidelines.
2. Project Review. Applications for development approvals shall be filed with the Department and may be returned for revision. Applicants must meet all items identified as "Standards". Applications must strive to meet the "Guidelines," but applicants may propose alternate ways to achieve the goals of the Guidelines.
3. Timing of Permits and Approvals. Required planning approvals shall be obtained before the issuance of any grading, building, or other construction permit, and before the proposed use is constructed, otherwise established, or put into operation.
4. Processing Requirements. Applications for planning permits shall be processed in compliance with Table 6-12 – Hearing Bodies.
5. Timing of Project Review. Project review shall be required before the issuance of a Building or Grading Permit, Business License, or Certificate of Occupancy for any new structure (not including fences or walls) and/or existing structures to be reconstructed or remodeled (including facade improvements).



## Southwest Industrial Park Specific Plan

Residential Truck District

Table 13-7 – Hearing Bodies

| Reviewing Bodies                       |        |      |    |    |     | Appeal Bodies |    |
|----------------------------------------|--------|------|----|----|-----|---------------|----|
|                                        | D.A.B. | CD   | PC | CC | PR  | PC            | CC |
| Administrative site plan               | X*     | X    |    |    |     | X             |    |
| Administrative site plan, amendment    | X*     | X    |    |    |     | X             |    |
| Building relocation                    |        | X    |    |    |     |               | X  |
| Certificate of appropriateness         |        |      |    |    |     |               | X  |
| Code of the City of Fontana, Amendment | X      |      | Xf | X  |     |               |    |
| Conditional Use Permit                 | X      |      | X  |    |     |               | X  |
| Density bonus                          | X      | X    | Xf | X  |     |               |    |
| Design review                          | X      |      | X  |    |     |               | X  |
| Design review, amendment               | X      | X    | X  |    |     |               | X  |
| Design review, signs                   |        | X    |    |    |     | X             |    |
| Development agreements                 | X      | X    | Xf | X  |     |               |    |
| Development agreements, amendment      | X      | X    | Xf | X  |     |               |    |
| General plan amendments                | X      | X    | Xf | X  |     |               |    |
| Home occupation                        |        | X    |    |    |     | X             |    |
| Interpretation                         | X*     |      | X  |    |     |               | X  |
| Lot line adjustment                    |        | X*** |    |    |     |               |    |
| Parcel maps, tentative                 | X      | X    | X  |    |     |               | X  |
| Parcel maps, final                     |        | X*** |    |    |     |               |    |
| Pre-Annexation Agreement               |        |      | Xf | X  |     |               |    |
| Specific Plan                          |        |      | Xf | X  | X** |               |    |
| Specific plan, amendment               |        |      | Xf | X  | X** |               |    |
| Tract maps, tentative                  | X      |      | X  |    |     |               | X  |
| Tract maps, final                      |        |      |    | X  |     |               |    |
| Variances                              | X      |      | X  |    |     |               | X  |
| Zone changes                           | X      |      | Xf | X  |     |               |    |
| Administrative Variance                | X      | X    |    |    |     | X             |    |
| Minor Use Permit                       | X      | X    |    |    |     | X             |    |

**Notes:**

Decisions of any "Reviewing Body" may be appealed to the City Council, except where State law limits such appeal to the City Engineer. If the Planning Commission is listed above as the "Appeal Body", the Commission must first review an Appeal before it may be forwarded to the City Council for consideration.

DAB—Development Advisory Board

CD—Community Development Director

PC—Planning Commission

CC—City Council

PR—Parks and Recreation Commission

X\*—At the discretion of the Director of Community Development or his/her designee

X\*\*—If Public Park(s) are considered

X\*\*\*—City Engineer has final approval

f—Recommending body to the City Council

**C. Administration and Enforcement.**

The Director of Community Development shall enforce the provisions in this Specific Plan. All officers, employees, and officials of the City of Fontana, who are vested with the duty or authority to issue permits or licenses shall conform with this Specific Plan and shall not issue any permit or license, or approve any use or building, which would be in conflict with this Specific Plan. Any permit, license or approval issued that is in conflict with the requirements of this Specific Plan shall be considered null and void.

**D. Amendments to the Specific Plan.**

The SWIP Specific Plan may be amended utilizing the same procedures by which it was originally adopted. In addition, subsequent amendments to this Specific Plan shall demonstrate the amendment meets the intent of the Specific Plan's existing policy framework, or specific findings to demonstrate the amendment enhances the Plan or is necessary to more effectively implement the Specific Plan. All sections or portions of the Specific Plan proposed to be amended or that may be affected by the amendment must be identified during the amendment process. A concurrent amendment to the General Plan would not be required provided that the Director of Community Development determines that substantive changes would not influence the goals, objectives, policies, or programs of the General Plan.

Allowing flexibility in the administration of the Specific Plan enhances the effectiveness of the Specific Plan as a comprehensive, "living" planning document. The following minor modifications to the Specific Plan qualify for processing as an administrative amendment to the Specific Plan subject to the review and approval of the Director of Community Development:

- Changes in the location of infrastructure and public facilities (e.g., internal roads, drainage facilities, etc.).
- Minor change in roadway alignment.
- Adjustment of planning area boundaries provided the total acreage of the affected planning area does not increase or decrease by more than 20 percent of the total stated in the approved Specific Plan.
- Minor changes to the Design Guidelines, which are intended to be flexible in nature.
- Minor deviations (less than 10 percent) from the development standards in this Chapter.
- Other minor modifications similar to those listed above and deemed minor by the Director of Community Development, which are in keeping with the intent of the SWIP Specific Plan.

**E. Similar Use Determination**

1. Applicability and Authority. Unlisted uses in Table 6-2 are prohibited uses, unless the Director of Community Development finds a proposed use to be similar to an expressly allowed use in compliance with this Section. A Similar Use Determination is a process for determining when an unlisted use is similar in nature to a permitted or conditionally permitted use and may be permitted. As specified by Municipal Code Section 30-4 Other Uses to be determined by the Director of Community Development, the Director of Community Development shall have the responsibility and authority to make Similar Use Determinations.
2. Ministerial Action. A Similar Use Determination shall constitute a ministerial action.
3. Application Contents and Filing. An application for similar use shall be in writing on forms provided by the Director of Community Development.
4. Determination Findings. In determining “similarity,” the Director of Community Development shall make all of the following findings:
  - a. The characteristics of and activities associated with the proposed use are equivalent to one or more of the listed uses and will not involve a higher level of activity or environmental impacts than the uses listed in the land use district;
  - b. The proposed use will be consistent with the purposes of the applicable land use district; and
  - c. The proposed use will be consistent with the General Plan and this SWIP Specific Plan.
5. Notice. A Similar Use Determination shall be made in writing and shall contain the facts that support the determination. The Community Development Department shall maintain all determinations on record for review by the general public upon request. The notice shall include:
  - a. A brief statement explaining the criteria and standards considered relevant to the decision;
  - b. A statement of the standards and facts relied upon in rendering the decision; and
  - c. An explanation of appeal rights and appeal deadlines. The determination of similar use by the Director of Community Development shall be subject to appeal to the Planning Commission.

***F. Dedication and Maintenance of Gateway Intersection Enhancements***

1. When dedication and maintenance is required.
  - a. Whenever a development project is proposed on land that is designated as a location for gateway intersection enhancements in Section 6.8.B Public Right-of-Way Streetscape- Gateways, the developer shall:
    - i. Dedicate any necessary right-of-way area to the City or provide an easement in favor of the City for the installation of gateway intersection enhancements;
    - ii. Construct the gateway intersection enhancements to the standards indicated in Section 6.8., Public Right-of-Way Streetscape; and
    - iii. Enter into an agreement with the City that specifies perpetual maintenance.
  - b. The applicable review authority shall impose the dedication (or easement) requirement as a condition of project approval.
  - c. The City Attorney and the Director of Community Development shall approve the form and content of any dedication or easement instrument used to ensure the installation and perpetual maintenance of the gateway intersection enhancements.

***G. Nonconforming Lots, Structures and Uses***

1. Nonconformance provisions are established to:
  - a. Bring all uses, structures, sites and signs into conformance with the developmental requirements and design guidelines in this Specific Plan;
  - b. Limit the occurrences and extent of nonconformance by prohibiting expansion, intensification, reinstatement, alteration, restoration after destruction, and reestablishment after abandonment; and
  - c. Gradually phase out nonconforming uses, structures, lots and signs.
2. Applicability
  - a. Nonconforming uses, structures, signs and lots may be maintained, expanded, altered and/or abated only in accordance with the provisions of this Specific Plan.

- b. Any Designated Historic Landmark, or any property listed on the California Register of Historical Resources or National Register of Historic Places, shall be exempt from the provisions of this Section with respect to the restoration and maintenance of structures, provided that any construction plans are approved through a Certificate of Appropriateness by the Historic Preservation Commission/Planning Commission.
- 3. Nonconforming Uses. A use that lawfully occupied a building or land at the time this Specific Plan became effective, and that does not conform to the use regulations of the land use district in which it is located, is deemed a "legal nonconforming use." A legal nonconforming use may continue, subject to the following:
  - a. Discontinuation of Use
    - i. Loss of legal nonconforming status. If a legal nonconforming use is discontinued for a period of 90 or more days, regardless of the owner's intent, it shall lose its legal nonconforming status and the continued use of the property shall be required to conform to all provisions of this Specific Plan.
    - ii. Extension of legal nonconforming status. Wherein special circumstances exist, the Director of Community Development may extend the legal nonconforming status of a use, for up to an additional 90-day period. Furthermore, an additional extension may be granted by the Planning Commission, for up to an additional 90-day period. The total time period of all time extensions shall not exceed 180 days.
    - iii. Extension of legal nonconforming use.
      - (1) An application for a Minor Use Permit shall be filed with the Community Development Department on a City application form, together with all required fees, plans, maps, reports, special studies, exhibits, and any other information deemed necessary by the Community Development Department to process the application. The application shall be filed prior to the expiration of the 90-day period.
      - (2) The application shall be reviewed by the Director of Community Development within 30 days following application filing. The Director of Community Development shall notify the applicant, in writing, as to whether the application is complete. If the application is not complete, the Director of Community Development shall specify those parts of the application that are not complete and shall identify the manner by which it can be made complete. If written notification is not provided to the applicant within 30 days following application filing, the application shall be deemed complete.

- (3) The Director of Community Development shall investigate the facts bearing on the application and provide the information necessary for action on the application, consistent with this Specific Plan and the General Plan. The applicant shall have made a good faith effort through the submittal of documentation and has diligently pursued compliance with this Specific Plan.
- (4) The application shall be reviewed by the Director of Community Development at a duly noticed public hearing, whom shall then approve, modify or deny the application. The decision of the Director of Community Development shall be final and conclusive in the absence of a timely filed appeal to the Planning Commission. An appeal of the Director of Community Development's decision shall be filed within 10 days from the date of the decision. An appeal of the Director of Community Development's decision shall be reviewed by the Planning Commission. The decision of the Planning Commission shall be final and conclusive in the absence of a timely filed appeal to the City Council.
- (5) The applicant may appeal the decision of the Planning Commission to the final deciding body, the City Council. The City Council decision shall be final and conclusive. If the application to extend the legal nonconforming use is approved by the City Council, the extension shall be granted for 90 days from the date of approval.
- (6) If the Director of Community Development or appointed designee has determined that the applicant has failed to show a good faith effort towards continually processing the extension of legal nonconforming use application (i.e., revising plans, withdrawing the application, placing the project on hold, etc.), the legal nonconforming use shall cease within 60 days from the application submittal date.
- (7) In granting an extension of the legal nonconforming status, the Director of Community Development may attach reasonable conditions and restrictions to the request, in addition to those required by this Specific Plan, which will ensure that the use:
  - Will not endanger the public health, safety or general welfare;
  - Will not injure the value of adjoining or abutting property;
  - Will not result in any significant environmental impacts; and
  - Will be in harmony with the area in which it is located.
- (8) In approving an extension of the legal nonconforming status, the Director of Community Development or Planning Commission shall consider and clearly establish the following findings of fact:

- The non-conforming use has been discontinued within the 90-day period.
    - A physical and/or economic hardship has prevented the nonconforming use from being in compliance prior to the expiration of the 90-day period;
    - Approving the extension will not adversely affect the health, safety or general welfare.
  - b. Change in Ownership, Tenancy or Management. A change in ownership, tenancy, or management of a nonconforming use shall not affect its legal nonconforming status, provided that the use did not discontinue pursuant to Section 3.ai entitled " Loss of legal nonconforming status," or the type of use and/or intensity of use does not change.
  - c. New Development. New development on any lot or parcel upon which a legal non conforming use exists shall require that all uses on the property conform to the provisions of this Specific Plan.
  - d. Alterations and Expansion of Use
    - i. A nonconforming use shall not be enlarged or extended in such a way as to occupy any part of any structure or property that it did not occupy prior to the creation of the nonconformity.
    - ii. A structure fully or partially occupied by any nonconforming use shall not be moved, altered or enlarged, unless required by law, or unless the moving, alteration or enlargement will result in the elimination of the nonconforming use.
  - e. Intensification of Use. A nonconforming use shall not be intensified in such a way as to increase the discrepancy between existing conditions and the standards set forth in this Specific Plan.
4. Nonconforming Structures. A structure lawfully existing at the time this Specific Plan became effective, any portion of which does not comply with the requirements of the land use district in which it is located, including setbacks, separations, height and design, is deemed a "legal nonconforming structure." A legal nonconforming structure may continue to exist, subject to the following:
- a. Damage or Destruction
    - i. A legal nonconforming structure that is damaged or partially destroyed by fire, flood, wind, earthquake or other calamity, or the public enemy, or other cause which is beyond the control of the property owner, and which could not otherwise have been prevented by reasonable care and maintenance of the structure, may be reconstructed up to the original size, placement and



density, provided that total cost of such reconstruction does not exceed more than 50 percent of the structure's current fair market value. The structure may be restored and the nonconforming use may be resumed, provided that restoration is started within 6 months, unless extended by the Director of Community Development, and diligently pursued.

ii. In the event that the cost of repairing such damage exceeds 50 percent of the current fair market value of the structure prior to such damage occurring, the structure may be reconstructed up to the original size, placement and density, subject to all of the following:

- The Planning Commission, at a duly noticed public hearing, must find that continuing the nonconforming structure will not result in an annoyance to and/or reduction of any surrounding property; and
- The extent of damage or partial destruction shall be based upon a comparison of the estimated cost of restoring the structure to its condition prior to such damage or partial destruction with its value at the time the structure was damaged or partially destroyed. Estimates for such purpose shall be made by or reviewed by the Building Official; and
- The restoration is commenced within six months and diligently pursued to completion;
- An application for a Nonconforming Structure shall be filed with the Community Development Department on a City application form, together with all required fees, plans, maps, reports, special studies, exhibits, and any other information deemed necessary by the Planning Division to process the application. The application shall be filed prior to the expiration of the 90-day period.
- A structure or development that has been damaged or destroyed by fire, flood, wind, earthquake, or other calamity, or by public enemy, or other cause which is beyond the control of the property owner, and which could not otherwise have been prevented may be reconstructed up to the original size, placement and density, except a multiple family dwelling or development which has been abandoned for a period of 90 or more days prior to being involuntarily damaged or destroyed, or a multiple family dwelling or development constituting a public nuisance prior to being involuntarily damaged or destroyed may not be reconstructed unless the structure is made to comply to all provisions of this Specific Plan.

b. Alterations and Expansion

i. A nonconforming structure shall not be moved, altered or enlarged so as to increase the discrepancy between existing conditions and the most current standard as prescribed by the land use district in which the structure is located, except alteration and/or enlargement to a single family dwelling

conducted pursuant to section (e) "Nonconforming Single-Family Residential Structures".

- ii. Within land use districts, reasonable repairs and alterations may be made to legal nonconforming structures, provided that no structural alterations shall be made which would prolong the life of supporting members of a structure, such as bearing walls, columns, beams or girders. Structural elements may be modified only if such modification or repair is immediately necessary to protect the public health and safety, occupants of the legal nonconforming structure, or adjacent property, as determined by the Building Official. The total cost of such repairs or alterations may not exceed 50 percent of the replacement cost of the nonconforming structure.
- c. New Structures. Any new structure constructed on a lot or parcel with an existing legal nonconforming structure shall be constructed in conformance with all applicable provisions of this Specific Plan. However, in no case may a new nonresidential structure be constructed on the same lot as an existing legal nonconforming residential structure.
- d. Abatement of Nonconforming Structures Posing a Threat to the Public Health, Safety, and General Welfare. A structure which is nonconforming because of a violation or deficiency that poses a threat to the public health, safety or general welfare, as determined by the Building Official, and which fails to resolve, repair or improve such, or to fully mitigate the hazard involved, shall be abated, condemned or demolished upon the issuance by the City of a nuisance abatement, condemnations, or demolition order.
- e. Nonconforming Single-Family Residential Structures. In addition to the requirements of subsections a and d above, a nonconforming single family residential lot and/or structure that was lawfully established and maintained before the adoption of this Specific Plan, but which under the provisions of this Specific Plan does not conform with the regulations of the land use district in which it is located with respect to use, design and/or development standards, and which is continuously used and maintained for single family residential purposes, shall be subject to the following:
- f. Alterations and expansions to structures within nonresidential zones.
  - i. Necessary repairs and desirable alterations, as deemed appropriate by the Director of Community Development, may be made to a legal nonconforming single family residential structure that is nonconforming as to use.
  - ii. A single family dwelling that is nonconforming as to its location within a land use district that does not permit single family dwellings, and in which the residential use was lawfully established and continuously maintained, shall be subject to the development regulations of the Municipal Code Chapter 30

Zoning and Development Code that pertain to the R1 zoning district and off-street parking and loading regulations..

5. Nonconforming Signs. A sign lawfully existing at the time this Specific Plan became effective, any portion of which does not comply with the requirements of Section 6.7 Sign Standards, is deemed a "legal nonconforming sign." A sign that presents a hazard to public safety, as determined by the City, shall be removed upon the issuance of a notice by the City. A legal nonconforming sign may continue to exist, subject to the following:
  - a. A nonconforming sign may not be altered, enlarged, extended, or moved, except in conformity with the requirements of Section 6.7 Sign Standards, or as otherwise required by law;
  - b. Where a use or a structure associated with a nonconforming sign is abandoned or discontinued, any sign associated with a new use of the site shall be in full conformity with the requirements of Section 6.7 Sign Standards.
6. Nonconforming to Development Standards. The development that is not in compliance with the site development standards prescribed by the regulations of the zoning district in which the lot or parcel is located, including area, coverage, configuration, dimensions, parking, landscaping, screen walls, fences and enclosure trash receptacles, is deemed "legal nonconforming," provided such development was lawfully created and existing at the time this Specific Plan, which created the nonconformity, became effective.
  - a. A development that is nonconforming as to landscaping, screen walls, fences and enclosure of trash receptacles, shall be altered to comply with the district regulations covering the following standards, or as a condition of any subsequent Development Plan or Conditional Use Permit approval.
7. Nonconforming Lots. A lot or parcel that is not in compliance with the site development standards prescribed by the regulations of the land use district in which the lot or parcel is located, including area and configuration is deemed a "legal nonconforming lot," provided such lot or parcel was lawfully created and existing at the time this Specific Plan, which created the nonconformity, became effective.
  - a. A lot or parcel that is nonconforming as to minimum area or dimension shall be granted all development rights and uses of the land use district within which it is located.
    - i. The landscaping of setback areas insofar as a setback exists;
    - ii. The landscaping of parking areas, provided fulfilling the requirement does not reduce off-street parking or loading spaces to fewer than prescribed in this Specific Plan;

- iii. The screening of storage areas; and
  - iv. The enclosure of trash receptacles.
- 8. Elimination of Nonconforming Adult Business Uses. Nonconforming adult business uses shall be eliminated in compliance with Municipal Code Chapter 30 Zoning and Development Code.
- 9. Abatement of Nonconforming Uses, Structures, Lots and Signs. Whenever a use, structure, site or sign becomes nonconforming because of a change of land use district boundaries or a change of the regulations prescribed for the district in which the site is located, the period of time prescribed in this Specific Plan for the abatement period for the elimination of the use, the removal of the structure or sign, or the improvement of the lot or parcel shall begin on the effective date of the change of district boundaries or regulations.

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## Chapter 14.0 – Public Facilities District



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#### ***14.1 Purpose***

The purpose of the Public Facilities (Kaiser High School) District is to accommodate the existing Kaiser High School Facility within the SWIP Specific Plan area.

#### ***14.2 Applicability***

1. This Section does not eliminate the need for obtaining permits required by the City, or any permit, approval, or entitlement required by any other applicable special district or agency, and/or the regulations of any State or Federal agency.
2. Exhibit 14-1 (Land Use Plan) indicates the location of the Public Facilities District and its relationship to the other land use districts in the Specific Plan area.

#### ***14.3 Allowed Land Uses***

The only allowed land use is Kaiser High School.

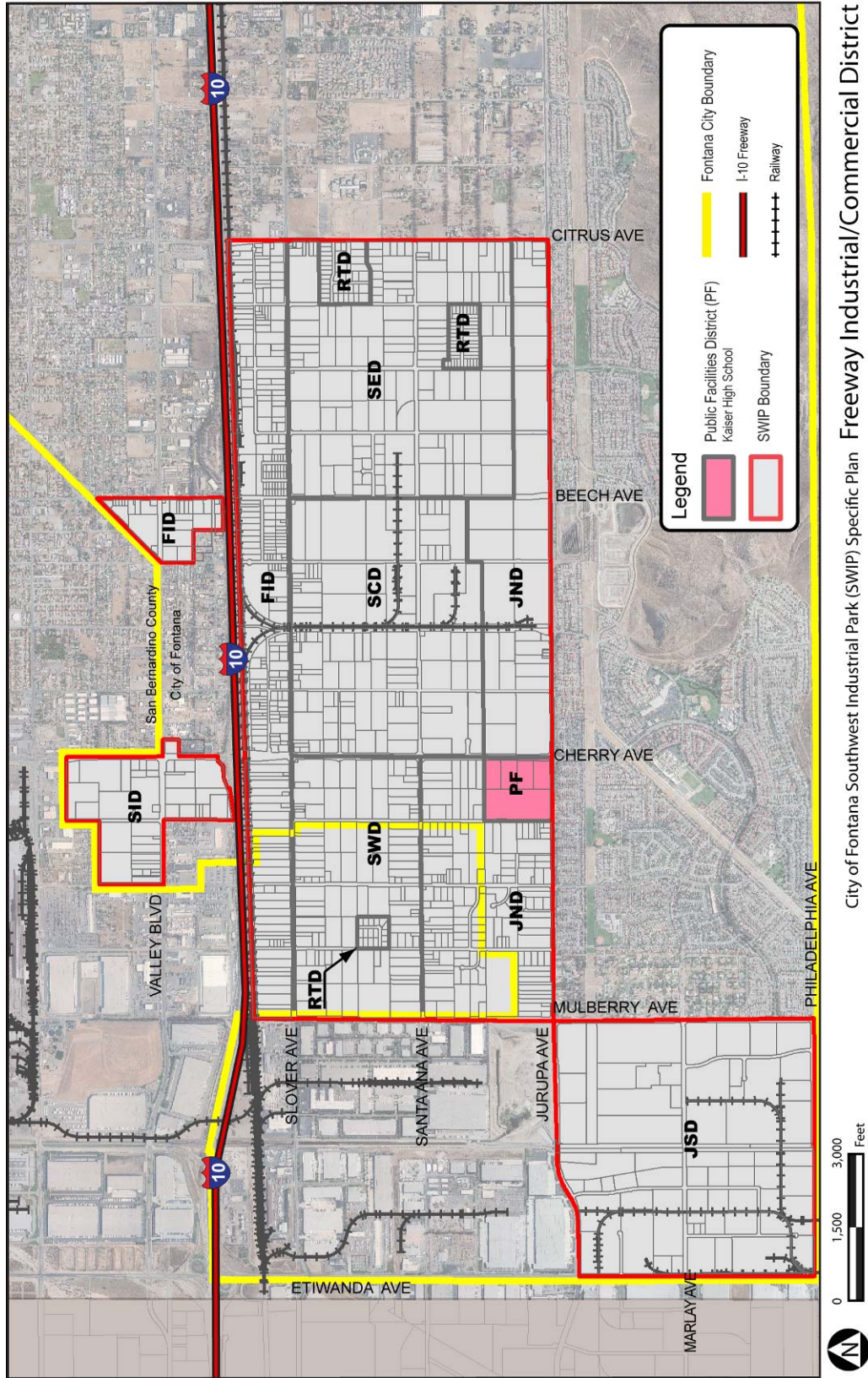


Exhibit 14-1 – Land Use Plan

## Appendix A – Definitions



*Definitions*

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This Appendix provides definitions of terms and phrases used in this Specific Plan that are technical or specialized or that may not reflect common usage. If any of the definitions in this Appendix conflict with definitions in other provisions of the Municipal Code, these definitions shall control for the purposes of administering this SWIP Specific Plan. If a word is not defined in this Appendix or in the Municipal Code, the Director of Community Development shall determine the most appropriate definition in compliance with this Specific Plan.

- **Abutting.** Having lot lines or zone boundaries in common.
- **Accessory Building.** See Municipal Code Section 30-11 (List of Definitions). A building detached from the main building or structure on the same lot, the use of which is incidental and subordinate to the main building or structure.
- **Adjacent.** The condition of being near to, or close to, but not having a common boundary or dividing line. Properties that are separated by a public access easement, alley, public or private right-of-way, street (other than arterial highways or commuter roadways identified in the Circulation Element), or by a creek, river, stream, or other natural or artificial waterway shall be considered as adjacent to one another.
- **Adult Business.** See Municipal Code Section 30-11 (List of Definitions) and Municipal Code Chapter 15, Article XVIII (Adult-Oriented Business Regulations).
- **Alcohol Sales.**
  1. **Off-Site.** An establishment that sells, serves, or gives away alcoholic beverages for consumption off the premises and that is applying for or has obtained any ABC License for off-site consumption.
  2. **On-Site.** An establishment that sells, serves, or gives away alcoholic beverages for consumption on the premises and that is applying for or has obtained any ABC License for on-site consumption.
- **Ancillary Parking Facilities.** A place for the parking of operational and street legal motor vehicles on a temporary basis within an off-street parking area, including institutional, private, and public parking structures that accommodate temporary or transitional parking. Includes parking areas that serve uses with limited turnover during a normal working weekday (e.g., parking for mass transit systems, employee-type parking, etc.).
- **Animal Kennel Services.** An establishments in which four or more animals that are at least four months of age are kept, boarded, bred, trained, or sold.
- **Antenna.** Any system of wires, poles, rods, towers, whips, reflecting discs, or similar devices used for transmission or reception of electromagnetic waves. Includes all satellite dish antennae, as well as any and all antenna structures used for the reception of television, radio waves, and microwaves. See Municipal Code Chapter 32 (Wireless Telecommunications Towers and Antennas).



*Definitions*

- **ATM (Automated Teller Machine).** An automated device used by the public to conduct banking and financial transactions electronically (i.e., withdrawing cash from, or depositing cash or checks into, a bank, savings, credit union, credit card or similar account). Does not apply to retail point-of-sale transactions within a fully enclosed structure.
- **Auction.** See "Vehicle Auction."
- **Bar, Lounge, or Nightclub.** An establishment that sells or serves alcoholic beverages for consumption on the premises and is holding or applying for a public premise license from the California State Department of Alcoholic Beverage Control (ABC) (i.e., ABC License Type 42 [On Sale Beer & Wine-Public Premises], ABC License Type 48 [On Sale General-Public Premises], and ABC License Type 61 [On Sale Beer-Public Premises]). Persons under 21 years of age are not allowed to enter and remain on the premises. The establishment shall include any immediately adjacent area that is owned, leased, rented, or controlled by the licensee.
- **Broadcasting Office or Studio.** Commercial and public communications facilities, including radio and television broadcasting and receiving stations and studios, with facilities entirely enclosed within buildings.
- **Bulkhead.** A horizontal or inclined outside door over a stairway leading to a cellar.
- **Business Support Services.** Establishments that primarily render services rather than selling goods. Services may include copy shops, printing services, engraving, package and postal services, photo processing, janitorial services, and similar operations.
- **Caretaker Housing.** A permanent residence on the site of a nonresidential use. The residence is secondary or accessory to the principal nonresidential use of the site and houses a caretaker employed for security purposes or to provide 24-hour care or monitoring of people, plants, animals, equipment, or other conditions on the site.
- **Car Wash/Detailing.** An establishment engaged in the washing, waxing, or cleaning of automobiles or similar light-duty vehicles. Includes either of the following:
  1. **Full Service.** A car wash establishment where operating functions are performed entirely by an operator/owner with the use of washing, waxing, and drying equipment supplemented with manual detailing by the operator/owner.
  2. **Self Service or Accessory.** An establishment where washing, drying, polishing, or vacuuming of an automobile is done by the car driver or occupant.
- **Catering Service.** An establishment that prepares and delivers food and beverages for off-site consumption.
- **Commercial Use.** Activity involving the sale of goods or services carried out for profit.

- **Drive-Through Facility.** An establishment that provides goods or services accessible to persons who remain in their motor vehicles.
- **Dwelling, Single-Family Attached.** A building or portion thereof used and/or designed as one dwelling unit, located on a single lot, and constructed with one or two common walls with a single-family unit on another lot.
- **Dwelling, Single-Family Detached.** A building used for one dwelling unit, located on a single lot, and separated from any other dwelling unit.
- **Dwelling Unit, Second.** See "Second Dwelling Unit."
- **Factory/Warehouse Outlet Store.** A retail establishment in which a manufacturer sells its stock directly to the public through its own brand-name store.
- **Financial Facility.** An establishment that provides for the custody, loan, or exchange of money and for the extension of credit.
- **Flex-Tech Multi-Use Facility.** A type of development designed and intended to allow a combination of office, research and development, retail sales, and/or industrial, warehouse, and distribution uses with flexibility to shift between different uses. Flex-tech multi-use development typically provides office or sales space on the front side of a building and "flex areas" on the back side with tall interior clear ceiling heights that typically range from 16 to 26 feet. Flex areas are used for additional offices and sales space and/or research and development, warehousing, distribution, light manufacturing, and high-tech operations. A facility will house tenants in separate suites and will provide a wide variety of features (e.g., storage space of a warehouse; utilities infrastructure for call centers or data centers; superior exterior finish and environmental controls for a retail store; etc.). See Exhibit A-1 Sectional View of Two-Story Flex-Tech Multi-Use Facility.

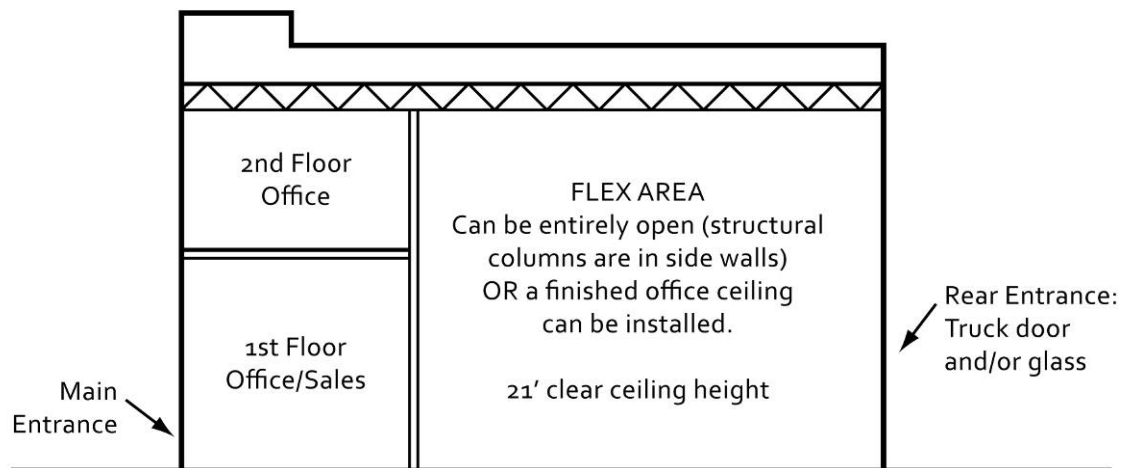


Exhibit A-1 – Sectional View of Two-Story Flex-Tech Multi-Use Facility

*Definitions*

- **Food Service.**
  - 1. **Outdoor Dining.** An outdoor dining area contiguous and accessory to a restaurant.
  - 2. **Restaurant.** A commercial establishment where food and beverages are prepared, and may be served and consumed on or off the premises. Includes fast food restaurants, take-out restaurants, and full-service restaurants.
- **Granny Housing.** See Municipal Code Section 30-11 (List of Definitions). A dwelling unit to be constructed, or which is attached or detached from, a primary residence on a parcel zoned for a single-family residence, if the dwelling unit is intended for the sole occupancy of one adult or two adult persons who are 55 years of age or over, and the area of floor space of the attached dwelling unit does not exceed 30 percent of the existing living area or the area of the floor space of the detached dwelling unit does not exceed 1,200 square feet.
- **Handcraft Industries, Small-Scale Manufacturing.** Establishments that manufacture and/or assemble small products primarily by hand, including jewelry, pottery, and other ceramics, as well as small glass and metal art and craft products. Also includes manufacturing establishments not classified in another major manufacturing group, including: brooms and brushes; buttons, costume novelties; jewelry; musical instruments; pens, pencils, and other office and artists materials; sporting and athletic goods; toys; professional, controlling, and scientific instruments; monuments and headstones; and other miscellaneous manufacturing industries.
- **High Cube Warehousing/Distribution Center.** See "Warehousing/Distribution Center, High Cube."
- **Home Occupations.** Any accessory activity carried out for gain which is conducted within a dwelling unit incidental to the residential use of the dwelling unit and does not adversely affect the uses permitted in the district of which it is a part, and which is not a medical marijuana dispensary. No products may be sold nor signs displayed other than those permitted, no persons are employed other than occupants of the residence, and no mechanical equipment may be used other than that necessary or convenient for domestic purposes.
- **Hotel.** A building in which there are six or more guest rooms where lodging with or without meals is provided for compensation, and where no provision is made for cooking in any individual room or suite. Access to the guest facilities shall be through a main lobby so as to monitor and control the actual use of the facility by patrons.
- **Industrial Equipment, Materials, Supplies, Truck, and Truck Trailer Storage.** Any land or buildings used for the storage of equipment, vehicles, trucks, truck trailers, containers and tanks, machinery (new or used), and raw or finished building materials used by the owner or occupant of the premises in the conduct of any building trade, industrial, manufacturing, or distribution activities.

- **Industrial Repair.** A service facility where various types of electrical, electronic, and **mechanical** equipment, and appliances and machines are repaired and/or maintained away from the site of the equipment owner. Includes motor vehicle services such as heavy and light repair, part replacement, maintenance, custom repair, painting, and body work.
- **Industrial Use.** Those fields of economic activity including construction; manufacturing; transportation, communication, electric, gas, and sanitary services; and wholesale trade.
- **Logistics and Distribution Facility.** Warehouse/distribution facilities used for the storage and/or consolidation of manufactured goods (and to a lesser extent, raw materials) before their distribution to retail locations or other warehouses. Warehouse/distribution centers are generally greater than 100,000 square feet in size, with a land coverage ratio of approximately 50 to 80 percent, and a dock-high loading door ratio of approximately 1:5,000 – 10,000 square feet. They are characterized by a small employment count due to a high level of automation; significant movement and storage of products, materials, or equipment; truck activities frequently outside of the peak hour of the adjacent street system; and good freeway access, including:
  - Freight Yards/Forwarding Terminals
  - High Cube Distribution Centers
  - Moving Agencies
  - Parcel Delivery Terminals
  - Railroad Freight Stations
  - Shipping/Receiving Yards
  - Truck Terminals
- **Lot Consolidation.** A legal action in which a lot line is abandoned, a lot line is adjusted, lots are merged, or other equivalent action is taken, for the purpose of allowing a structure or development to be built so that it extends over what were previously two or more separate lots.
- **Manufacturing.** Establishments that convert substances, components, or raw materials to a product through mechanical, physical, or chemical processes.
- **Light Manufacturing.** Establishments that assemble, fabricate, and convert already processed raw materials into products and whose operation may create limited impacts on surrounding land uses. Includes:
  1. **Appliance Manufacturing.** Establishments that manufacture small portable appliances, devices, or instruments used for domestic functions (e.g., vacuum cleaners, televisions, toasters, hairdryers, mixers, fans, radios, food processors, sewing machines, etc.) and large non-portable appliances used for domestic functions (e.g., washers, dryers, refrigerators, freezers, stoves, etc.).

2. **Electronics and Equipment Manufacturing.** Establishments that manufacture machinery, apparatus, and supplies for the generation, storage, transmission, transformation, and use of electrical energy. May include the assembly of manufactured parts.
  3. **Furniture and Fixture Manufacturing.** Establishments that produce wood and metal products: household furniture; bedsprings and mattresses; all types of office furniture, partitions, shelving, lockers, and store furniture; and miscellaneous drapery hardware, window blinds, and shades. Includes wood and cabinet shops and sign shops.
  4. **Glass Product Fabrication.** Establishments that make glass products from purchased glass.
  5. **Machinery Manufacturing.** Establishments that make or process raw materials into finished machines or parts for machines.
  6. **Paper Product Manufacturing.** Establishments that convert paper or paperboard without manufacturing the paper, pulp, or paperboard. Includes envelope manufacturing, converted paper products, paper coating and glazing, paper bags, assembly of paperboard boxes, wallpaper, etc.
  7. **Product Assembly and Distribution.** Establishments that assemble small products and electronic equipment from parts manufactured elsewhere. Includes computers, telephones, and automobiles; office and store machines and devices; service industry and household machines.
- **General Manufacturing.** Establishments that convert raw materials into a product and whose intensive nature and scale of operation that may have an impact on surrounding land uses. Includes:
    1. **Chemical Product Manufacturing.** Establishments that manufacture basic organic and inorganic chemical products (e.g., synthetic dyes and pigments; soaps and cleaning compounds; fertilizer materials; insecticidal, herbicidal, fungicidal and pesticidal preparations; photographic chemicals, etc.).
    2. **Concrete, Gypsum, and Plaster Product Manufacturing.** Establishments that produce bulk concrete, concrete building block, brick, and all types of pre-cast and pre-fab concrete products. Also includes the manufacture of gypsum products, including plasterboard.
    3. **Food Products Manufacturing.** Establishments that can, cure, and process raw agricultural and seafood products, and convert raw agricultural and seafood products to finished food products. Includes: meat, poultry, and seafood canning, curing, byproduct processing; fish canning and curing, meat products, sauerkraut, vinegar, yeast, rendering or refining of fats and oils, and sugar processing; and miscellaneous food items prepared from raw products.

4. **Glass Product Manufacturing.** Establishments that manufacture glass and/or glass products by melting silica sand or cullet, including the production of flat glass and other glass products that are pressed, blown, or shaped from glass produced in the same establishment.
  5. **Plastics, Synthetics, and Rubber Product Manufacturing.** Establishments that manufacture rubber products including: rubber footwear, mechanical rubber goods, heels and soles, flooring, and other rubber products from natural, synthetic, or reclaimed rubber. Also includes establishments that make products from recycled or reclaimed plastics or styrofoam; mold primary plastics for other manufacturers; manufacture miscellaneous finished plastics products, fiberglass, and fiberglass application services.
  6. **Pulp and Pulp Product Industries.** Establishments that manufacture pulp, paper, or paperboard. Includes pulp, paper, and paperboard mills.
  7. **Stone and Cut Stone Product Manufacturing.** Establishments that cut, shape, and finish marble, granite, slate, and other stone for construction and miscellaneous uses.
  8. **Structural Clay and Pottery Product Manufacturing.** Establishments that produce brick and structural clay products, including pipe, china plumbing fixtures, and vitreous china articles, fine earthenware, and porcelain products.
  9. **Textile and Leather Product Manufacturing.** Establishments that transform basic fibers (natural or synthetic) into a product, including yarn or fabric, that can be further manufactured into usable items (apparel, lace, carpets, curtains, upholstery, thread, twine, cordage, etc.) and industries that transform hides into leather by tanning or curing.
  10. **Transportation Product Assembly.** Establishments that manufacture or assemble complete equipment for transporting people and goods. Includes: passenger automobiles, trucks, commercial motor vehicles and buses, and special-purpose motor vehicles; chassis or passenger car bodies; boat building and repairing; aircraft manufacturing; motorcycles, bicycles, and parts.
- **Mini-Storage Facility.** A structure or group of structures where individual storage spaces are leased to individuals, organizations, or businesses for self-service storage of personal property, goods, and wares.
  - **Motel.** An establishment providing temporary accommodations containing six or more rooms some of which have direct access to the parking areas without the necessity of passing through the main lobby of the building.
  - **Motor Vehicle Rentals, Sales, and Leases.** Establishments that sell, rent, or lease new and used passenger automobiles, panel trucks or vans, trailers, and recreational vehicles

(RVs). Minor maintenance may be an allowed accessory use. Does not include truck sales ("Truck Sales").

- **Nightclubs, taverns, bars.** a use providing preparation and retail sale for on-site consumption of alcoholic beverages, as licensed by the Alcoholic Beverage Control, and may offer facilities for dancing or performing floor shows.
- **Offices.** A building with a group of rooms used by a business, corporate headquarters, professional, organization, service industry, or government to provide executive, management, administrative, financial services, or medical services.
- **Open Space/Park.** A designated area for passive, active, recreational, or leisure uses.
- **Outdoor Dining.** See "Food Services."
- **Outdoor Display and Sales.** The temporary or permanent outdoor display of merchandise incidental to an adjacent primary use. Does not include the sale of motor vehicles, mobile homes, boats, and recreational vehicles, or building or landscaping materials. Outdoor displays shall comply with the standards in the Fontana Municipal Code Section 30.88 et seq. (Temporary Uses) for temporary sales and displays.
- **Parking Structure.** A structure with one or more levels or floors used exclusively for the parking or storage of motor vehicles. A parking structure may be totally below grade (as in an underground parking garage) or either partially or totally above grade with those levels being either open or enclosed. See also "Ancillary Parking Facility."
- **Personal Services.** An establishment that offers specialized goods and services purchased frequently by the consumer, including:
  - Acupuncture
  - Carpet Cleaning
  - Chiropractic clinics
  - Cosmetic Procedures (e.g., laser hair removal, tattoo removal, botox injections, etc.)
  - Dry Cleaning
  - Key Making
  - Health Clubs
  - Laundromats
  - Laundry cleaning, pressing, and dyeing
  - Shoe repair
  - Steam Cleaning
  - Tailors and Seamstresses
  - Tanning Salons
  - Tattoo Services and Body Piercing
  - Studios
- **Petroleum/Hazardous Materials Storage.** Any land or buildings used for the storage of fuel, flammable liquids, or other hazardous materials and chemicals used by the owner or occupant of the premises in the conduct of any building trade, industrial, manufacturing, or distribution activities.
- **Public Assembly Facility.** A facility designed to accommodate groups of people for conventions, conferences, seminars, product displays, recreation activities, and entertainment functions, along with accessory functions including temporary outdoor displays, and food and



beverage preparation and service for on-site consumption. May include cultural facilities (e.g., libraries, museums, art galleries, etc.) and places of worship.

- **Public Facility.** A facility that provides a needed service that contributes to the general public welfare, including:
  - Cogeneration Facilities
  - Drainage Ways/Structures
  - Electric Substations
  - Equipment
  - Power Stations
  - Pumping Stations
  - Transmission Lines
  - Water Reservoirs
  - Police, Fire and Emergency Service Stations
  - Transportation and Dispatch Facility
  - Library
  - School
- **Recreational Facility.** A commercial establishment where tickets are sold or fees are collected for the sole purpose of providing the general public with an indoor and/or outdoor area for participating in amusing or entertaining activities, including:
  - Arcade
  - Batting Cage
  - BMX Facility
  - Bowling Alley
  - Bungee Jumping
  - Go-Carting
  - Miniature Golf
  - Motorized Rides (i.e., rollercoasters or ferris wheels)
  - Movie Theater
  - Paintball
  - Rock Climbing
  - Skate Park
  - Skating Rink
  - Tracks, water areas, flight areas for radio-controlled cars, trucks, planes, boats, helicopters
  - Water Rides and Slides
- **Recreation Vehicle (RV).** A moveable vehicular structure without permanent foundation, which can be towed, hauled or driven and primarily designed as temporary living accommodation for recreational, camping and travel use. Recreational vehicles include but are not limited to travel trailers, truck campers, camping trailers and self-propelled motor homes.
- **Recycling Facility.** A facility where waste and other discarded materials are sorted, cleaned, treated or reconstituted for the purpose of using the altered form. Includes scrap metal dealers, aluminum collection centers, and paper recycling centers.
- **Research and Development.** Establishments engaged in industrial or scientific research, including product testing. Includes electronic research firms or pharmaceutical research laboratories. Excludes manufacturing, except of prototypes, and medical testing and analysis.
- **Restaurant.** See "Food Services."
- **Retail Sales, General.** Any retail establishment that specializes in the on-site indoor sales of newly finished, dated, or restored goods to consumers, including:

- Appliances
  - Automotive Supply Stores
  - Bakeries (retail only)
  - Carpeting and Floor Covering
  - Clothing and Accessories
  - Convenience Stores
  - Delicatessens
  - Drug and Discount Stores
  - Electrical Supplies
  - Electronic Equipment
  - Floor Covering Stores
  - Florists and Houseplant Stores
  - Furniture Stores
  - Garden Furniture and Supply Stores
  - Glass or Mirror Stores
  - Grocery Stores
  - Hardware Stores
  - Home Furnishings
  - Jewelry Stores
  - Leather Goods
  - Locksmith Establishments
  - Luggage and Leather Goods
  - Medical Supplies and Equipment
  - Mini Warehouses
  - Motor Vehicle Parts Stores
  - Office Supplies
  - Paint and Wallpaper
  - Pharmacies
  - Plumbing Supplies
  - Sporting Goods and Equipment
  - Travel Services
- **School, Commercial.** A business, secretarial, or vocational school offering specialized trade and commercial courses. May include facilities, institutions, and conference centers that offer specialized programs in personal growth and development (e.g., arts, communications, environmental awareness, fitness, and management, etc.) and the following specialized schools:
    - Art Schools
    - Business Schools
    - Computers Schools
    - Dance Schools
    - Drama Schools
    - Driver Education Schools
    - Electronics Schools
    - Establishments Providing Courses by Mail or Internet
    - Gymnastics Training Facilities
    - Language Schools
    - Music Schools
    - Photography Schools
    - Religious Ministry Training Facilities
    - Secretarial Schools
    - Seminaries
    - Tutoring Centers
    - Vocational Schools
  - **School, Trucking.** A trade school that provides an education in the operation of a tractor-trailer, 18-wheeler, semi, big rig, or similar truck. May include classroom instruction and on-the-job training and sleeping quarters. Truck driving schools may be operated by trucking companies.
  - **Second Dwelling Unit.** An attached or a detached residential dwelling unit that provides complete independent living facilities for one or more persons. Includes permanent areas for living, sleeping, eating, cooking, and sanitation on the same parcel on which the single-family dwelling is situated.
  - **Service.** An act, or any results of useful labor, which does not in itself produce a tangible commodity.

- **Service Establishment.** An establishment whose primary activity is the provision of assistance, as opposed to products, to individuals, business, industry, government, and other enterprises.
- **Service Station.** An establishment engaged in the retail sale of gasoline, diesel, and alternative fuel, lubricants, parts, and accessories. May include incidental "minor" maintenance and repair of automobiles, light trucks, vans, or similar size vehicles.
- **Shopping Center.** A group of multi-tenant architecturally unified commercial retail establishments built on a parcel that is planned, developed, and managed as a single operating unit.
- **Sign.** Any card, cloth, plastic, paper, metal or other material or painted character visible from outside of a structure for advertising purposes, mounted to the ground or any tree, building, wall, bush, rock, fence or structure, whether privately or publicly owned. Sign means any graphic announcement, declaration, demonstration, display, illustration, insignia or object used to advertise or promote the interest of any person or business when the sign is placed out-of-doors in view of the general public. Each chapter for each land use district in this Specific Plan has a section entitled "Sign Standards" that provides definitions and illustrations of specific sign types. Related definitions are as follows:
  1. **Animation.** More than one change in a sign's message or lighting within a single 24-hour period.
  2. **Exposed Incandescent Bulb Illumination.** The illumination of a sign by incandescent bulbs that are mounted directly to the face of a sign.
  3. **Exposed Neon Tube Illumination.** The illumination of a sign by neon tubes that are mounted directly to the face of a sign.
  4. **External Illumination.** The illumination of a sign by projecting light on to the face of the sign from a light source located outside of the sign, such as "gooseneck" lamps.
  5. **Frontage.** The length of a lot along a street or other principal public thoroughfare, but not including such length along an alley, railroad or freeway.
  6. **Halo Illumination.** The illumination of a sign by projecting light behind an opaque letter or emblem that results in the appearance of a ring of light around the unilluminated letter or emblem.
  7. **Internal Illumination.** The illumination of a sign by projecting light on a translucent panel from a light source located inside of an enclosed sign cabinet.
  8. **Linear Frontage Ratio.** The ratio of sign area to linear foot of building frontage. The Linear Frontage Ratio is one and one-half (1.5) square feet of total sign area is allowed for each linear foot of building frontage ("Building Frontage").

9. **Transom.** A crosspiece that separates a door from a window or fanlight (known as transom window or transom light) above it.
- **Sign Area.** The entire area within a single continuous perimeter composed of squares or rectangles that enclose the extreme limits of writing, representation, emblem, or any figure of similar character, with any frame, background area of sign, structural trim, or other material or color forming an integral part of the display or used to differentiate such signs from the background against which it is placed. If a sign is designed with more than one exterior surface, the area shall be computed as including only the maximum single display surface that is visible from any ground position at one time. The supports or uprights on which any such sign is supported shall not be included in determining the sign area unless such supports or uprights are designed in such a manner as to form an integral background of the display.
  - **Specialty/Antique Automotive Sales.** An establishment that sells rare cars, exotic cars, collector cars, muscle cars, antique cars, vintage cars, classic cars, or similar specialty cars. May also include a vehicle restoration facility intended to restore a car to its original condition.
  - **Street Frontage.** The lineal length of that portion of a lot abutting a street.
  - **Temporary Uses.** A use established for a fixed period of time with the intent to discontinue the use upon the expiration of the time period. See Division 14 (Temporary Use) in Municipal Code Chapter 30 (Zoning and Development Code).
  - **Truck.** Any heavy duty vehicle exceeding a gross vehicle weight rating of 18,500 pounds or any truck-tractor or semi-trailer.
 

**Trailer.** A trailer used in conjunction with a truck-tractor and designed so that a considerable part of its own weight or that of its load rests upon and is carried or drawn by the truck tractor.

**Truck-Tractor.** A motor vehicle designed and used primarily for drawing other vehicles and not constructed to carry a load other than a part of the weight of the vehicle and load drawn.
  - **Truck Sales, Rentals, and/or Leasing.** Establishments that sell, rent, or lease new and used heavy-duty trucks. Minor maintenance is an allowed accessory use. Does not include car, van, and recreational vehicle (RV) sales ("Motor Vehicle Rentals, Sales, and Leases").
  - **Truck Stop.** A facility located in close proximity to a freeway or other limited access highway that provides specialized services to the trucking industry, which may include fueling stations, restrooms, parking areas, convenience stores, showers, internet services, maintenance facilities, vehicle wash services, and on-site or adjacent motels.
  - **Truck/Trailer Storage.** The short-term or long-term parking or storage, outside an enclosed building, of trucks and truck trailers that are in usable condition and that are not specifically displayed as merchandise or offered for sale. A caretaker unit is required.

- **Truck Uses.** Oversize vehicles, including recreational vehicles, commercial vehicles exceeding a manufacturer's gross vehicle weight rating of 10,000 pounds, and tractor trailer trucks. See Section 13.6.D. Oversize Vehicle Parking.
- **Vehicle Auction.** A place where automobiles and/or recreational vehicles are offered for wholesale to persons/businesses bidding on the automobiles or recreational vehicles in competition with each other. In conjunction with the auction facility, ancillary uses may include: eating establishments, Department of Motor Vehicles (DMV) services, financing services, vehicle repair, painting, detailing and off-site storage for vehicles waiting to be auctioned at the facility.
- **Warehousing Facility.** The use of a building primarily for the storage of goods of any type, excluding bulk storage of materials which are flammable or explosive or which create hazardous or commonly recognized offensive conditions.
- **Warehousing/Distribution Center, High Cube.** A warehouse/distribution center greater than 200,000 square feet in size with a typical ceiling height of at least 28 feet, employing a high level of automation, and used primarily for distribution to other warehouses. A warehousing use engaged primarily in receipt and distribution of goods, products, supplies etc., with incidental storage and typically identified with a quick turnaround of goods. Excludes bulk storage of materials, which are flammable or explosive or create hazardous or commonly recognized offensive conditions.
- **Warehousing Retail.** A use primarily engaged in the selling of any type of goods directly to the ultimate consumer. Includes incidental wholesaling and storage of goods, but excludes bulk storage of materials which are flammable or explosive or which create hazardous or commonly recognized offensive conditions.
- **Warehousing, Wholesale.** Establishments or places of business primarily engaged in selling merchandise to other businesses, including retailers, industrial, commercial, institutional, or professional business users, other wholesalers, or acting as agents or brokers and buying merchandise for, or selling merchandise to, such individuals or companies.



## **C. Air Quality Data**

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Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name: I:\pdata\00000100\10P\WPWIN\EddieT\Programs\Air\URBEMIS\URBEMIS2007\Fontana SWIP-Specific Plan Update.urb924

Project Name: Fontana SWIP-Specific Plan Update

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

|                               | <u>ROG</u> | <u>NOx</u> | <u>CO</u> | <u>SO2</u> | <u>PM10</u> | <u>PM2.5</u> | <u>CO2</u> |
|-------------------------------|------------|------------|-----------|------------|-------------|--------------|------------|
| TOTALS (lbs/day, unmitigated) | 178.69     | 60.36      | 61.41     | 0.00       | 0.15        | 0.15         | 72,286.96  |

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

|                               | <u>ROG</u> | <u>NOx</u> | <u>CO</u> | <u>SO2</u> | <u>PM10</u> | <u>PM2.5</u> | <u>CO2</u>   |
|-------------------------------|------------|------------|-----------|------------|-------------|--------------|--------------|
| TOTALS (lbs/day, unmitigated) | 1,919.77   | 2,594.43   | 23,237.58 | 25.89      | 4,241.85    | 825.74       | 2,527,195.14 |

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

|                               | <u>ROG</u> | <u>NOx</u> | <u>CO</u> | <u>SO2</u> | <u>PM10</u> | <u>PM2.5</u> | <u>CO2</u>   |
|-------------------------------|------------|------------|-----------|------------|-------------|--------------|--------------|
| TOTALS (lbs/day, unmitigated) | 2,098.46   | 2,654.79   | 23,298.99 | 25.89      | 4,242.00    | 825.89       | 2,599,482.10 |



4/14/2010 4:00:06 PM

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

| <u>Source</u>                 | <u>ROG</u> | <u>NOx</u> | <u>CO</u> | <u>SO2</u> | <u>PM10</u> | <u>PM2.5</u> | <u>CO2</u> |
|-------------------------------|------------|------------|-----------|------------|-------------|--------------|------------|
| Natural Gas                   | 4.37       | 60.22      | 50.59     | 0.00       | 0.11        | 0.11         | 72,267.30  |
| Hearth                        |            |            |           |            |             |              |            |
| Landscape                     | 0.86       | 0.14       | 10.82     | 0.00       | 0.04        | 0.04         | 19.66      |
| Consumer Products             | 0.00       |            |           |            |             |              |            |
| Architectural Coatings        | 173.46     |            |           |            |             |              |            |
| TOTALS (lbs/day, unmitigated) | 178.69     | 60.36      | 61.41     | 0.00       | 0.15        | 0.15         | 72,286.96  |

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

| <u>Source</u>                 | <u>ROG</u> | <u>NOX</u> | <u>CO</u> | <u>SO2</u> | <u>PM10</u> | <u>PM25</u> | <u>CO2</u>   |
|-------------------------------|------------|------------|-----------|------------|-------------|-------------|--------------|
| Place of worship              | 87.83      | 119.38     | 1,054.24  | 1.18       | 194.38      | 37.83       | 115,557.52   |
| Regnl shop. center            | 566.07     | 840.82     | 7,418.81  | 8.33       | 1,368.73    | 266.34      | 813,598.26   |
| General office building       | 75.39      | 104.23     | 944.08    | 1.05       | 170.97      | 33.29       | 102,036.91   |
| Office park                   | 81.47      | 112.87     | 1,031.21  | 1.14       | 185.62      | 36.15       | 110,924.29   |
| Warehouse                     | 326.16     | 379.47     | 3,348.18  | 3.76       | 617.72      | 120.20      | 367,184.52   |
| General light industry        | 664.45     | 878.86     | 8,039.88  | 8.86       | 1,445.92    | 281.63      | 864,230.81   |
| Research & Development        | 118.40     | 158.80     | 1,401.18  | 1.57       | 258.51      | 50.30       | 153,662.83   |
| TOTALS (lbs/day, unmitigated) | 1,919.77   | 2,594.43   | 23,237.58 | 25.89      | 4,241.85    | 825.74      | 2,527,195.14 |

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2011 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

| <u>Summary of Land Uses</u> |         |           |            |           |             |              |
|-----------------------------|---------|-----------|------------|-----------|-------------|--------------|
| Land Use Type               | Acreage | Trip Rate | Unit Type  | No. Units | Total Trips | Total VMT    |
| Place of worship            |         | 9.11      | 1000 sq ft | 1,370.86  | 12,488.53   | 112,515.44   |
| Regnl shop. center          |         | 42.94     | 1000 sq ft | 2,056.30  | 88,297.52   | 792,293.63   |
| General office building     |         | 11.01     | 1000 sq ft | 883.06    | 9,722.49    | 98,950.65    |
| Office park                 |         | 11.42     | 1000 sq ft | 883.06    | 10,084.55   | 107,420.58   |
| Warehouse                   |         | 3.56      | 1000 sq ft | 11,193.68 | 39,849.50   | 357,569.54   |
| General light industry      |         | 6.97      | 1000 sq ft | 11,193.68 | 78,019.95   | 836,763.91   |
| Research & Development      |         | 8.11      | 1000 sq ft | 2,056.30  | 16,676.59   | 149,639.06   |
|                             |         |           |            |           | 255,139.13  | 2,455,152.81 |

| <u>Vehicle Fleet Mix</u>           |              |              |          |        |
|------------------------------------|--------------|--------------|----------|--------|
| Vehicle Type                       | Percent Type | Non-Catalyst | Catalyst | Diesel |
| Light Auto                         | 51.6         | 0.8          | 99.0     | 0.2    |
| Light Truck < 3750 lbs             | 7.3          | 2.7          | 94.6     | 2.7    |
| Light Truck 3751-5750 lbs          | 23.0         | 0.4          | 99.6     | 0.0    |
| Med Truck 5751-8500 lbs            | 10.6         | 0.9          | 99.1     | 0.0    |
| Lite-Heavy Truck 8501-10,000 lbs   | 1.6          | 0.0          | 81.2     | 18.8   |
| Lite-Heavy Truck 10,001-14,000 lbs | 0.5          | 0.0          | 60.0     | 40.0   |

| <u>Vehicle Fleet Mix</u>            |              |              |          |        |
|-------------------------------------|--------------|--------------|----------|--------|
| Vehicle Type                        | Percent Type | Non-Catalyst | Catalyst | Diesel |
| Med-Heavy Truck 14,001-33,000 lbs   | 0.9          | 0.0          | 22.2     | 77.8   |
| Heavy-Heavy Truck 33,001-60,000 lbs | 0.5          | 0.0          | 0.0      | 100.0  |
| Other Bus                           | 0.1          | 0.0          | 0.0      | 100.0  |
| Urban Bus                           | 0.1          | 0.0          | 0.0      | 100.0  |
| Motorcycle                          | 2.8          | 64.3         | 35.7     | 0.0    |
| School Bus                          | 0.1          | 0.0          | 0.0      | 100.0  |
| Motor Home                          | 0.9          | 0.0          | 88.9     | 11.1   |

| <u>Travel Conditions</u>              |             |           |            |            |          |          |
|---------------------------------------|-------------|-----------|------------|------------|----------|----------|
|                                       | Residential |           |            | Commercial |          |          |
|                                       | Home-Work   | Home-Shop | Home-Other | Commute    | Non-Work | Customer |
| Urban Trip Length (miles)             | 12.7        | 7.0       | 9.5        | 13.3       | 7.4      | 8.9      |
| Rural Trip Length (miles)             | 17.6        | 12.1      | 14.9       | 15.4       | 9.6      | 12.6     |
| Trip speeds (mph)                     | 30.0        | 30.0      | 30.0       | 30.0       | 30.0     | 30.0     |
| % of Trips - Residential              | 32.9        | 18.0      | 49.1       |            |          |          |
|                                       |             |           |            |            |          |          |
| % of Trips - Commercial (by land use) |             |           |            |            |          |          |
| Place of worship                      |             |           |            | 3.0        | 1.5      | 95.5     |
| Regnl shop. center                    |             |           |            | 2.0        | 1.0      | 97.0     |
| General office building               |             |           |            | 35.0       | 17.5     | 47.5     |
| Office park                           |             |           |            | 48.0       | 24.0     | 28.0     |
| Warehouse                             |             |           |            | 2.0        | 1.0      | 97.0     |

|                        | <u>Travel Conditions</u> |           |            |            |          |          |
|------------------------|--------------------------|-----------|------------|------------|----------|----------|
|                        | Residential              |           |            | Commercial |          |          |
|                        | Home-Work                | Home-Shop | Home-Other | Commute    | Non-Work | Customer |
| General light industry |                          |           |            | 50.0       | 25.0     | 25.0     |
| Research & Development |                          |           |            | 2.0        | 1.0      | 97.0     |

Urbemis 2007 Version 9.2.4

Combined Winter Emissions Reports (Pounds/Day)

File Name: I:\pdata\00000100\10P\WPWIN\EddieT\Programs\Air\URBEMIS\URBEMIS2007\Fontana SWIP-Specific Plan Update.urb924

Project Name: Fontana SWIP-Specific Plan Update

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

|                               | <u>ROG</u> | <u>NOx</u> | <u>CO</u> | <u>SO2</u> | <u>PM10</u> | <u>PM2.5</u> | <u>CO2</u> |
|-------------------------------|------------|------------|-----------|------------|-------------|--------------|------------|
| TOTALS (lbs/day, unmitigated) | 177.83     | 60.22      | 50.59     | 0.00       | 0.11        | 0.11         | 72,267.30  |

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

|                               | <u>ROG</u> | <u>NOx</u> | <u>CO</u> | <u>SO2</u> | <u>PM10</u> | <u>PM2.5</u> | <u>CO2</u>   |
|-------------------------------|------------|------------|-----------|------------|-------------|--------------|--------------|
| TOTALS (lbs/day, unmitigated) | 2,064.62   | 3,124.90   | 22,272.90 | 21.55      | 4,241.85    | 825.74       | 2,288,140.85 |

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

|                               | <u>ROG</u> | <u>NOx</u> | <u>CO</u> | <u>SO2</u> | <u>PM10</u> | <u>PM2.5</u> | <u>CO2</u>   |
|-------------------------------|------------|------------|-----------|------------|-------------|--------------|--------------|
| TOTALS (lbs/day, unmitigated) | 2,242.45   | 3,185.12   | 22,323.49 | 21.55      | 4,241.96    | 825.85       | 2,360,408.15 |

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

| <u>Source</u>                     | <u>ROG</u> | <u>NOx</u> | <u>CO</u> | <u>SO2</u> | <u>PM10</u> | <u>PM2.5</u> | <u>CO2</u> |
|-----------------------------------|------------|------------|-----------|------------|-------------|--------------|------------|
| Natural Gas                       | 4.37       | 60.22      | 50.59     | 0.00       | 0.11        | 0.11         | 72,267.30  |
| Hearth                            |            |            |           |            |             |              |            |
| Landscaping - No Winter Emissions |            |            |           |            |             |              |            |
| Consumer Products                 | 0.00       |            |           |            |             |              |            |
| Architectural Coatings            | 173.46     |            |           |            |             |              |            |
| TOTALS (lbs/day, unmitigated)     | 177.83     | 60.22      | 50.59     | 0.00       | 0.11        | 0.11         | 72,267.30  |

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Winter Pounds Per Day, Unmitigated

| <u>Source</u>                 | <u>ROG</u> | <u>NOX</u> | <u>CO</u> | <u>SO2</u> | <u>PM10</u> | <u>PM25</u> | <u>CO2</u>   |
|-------------------------------|------------|------------|-----------|------------|-------------|-------------|--------------|
| Place of worship              | 94.55      | 143.71     | 1,015.66  | 0.98       | 194.38      | 37.83       | 104,602.08   |
| Regnl shop. center            | 642.06     | 1,012.20   | 7,149.61  | 6.93       | 1,368.73    | 266.34      | 736,453.90   |
| General office building       | 82.31      | 125.59     | 901.24    | 0.87       | 170.97      | 33.29       | 92,402.24    |
| Office park                   | 89.19      | 136.04     | 981.38    | 0.95       | 185.62      | 36.15       | 100,464.92   |
| Warehouse                     | 321.78     | 456.82     | 3,226.69  | 3.13       | 617.72      | 120.20      | 332,368.55   |
| General light industry        | 708.26     | 1,059.37   | 7,647.99  | 7.38       | 1,445.92    | 281.63      | 782,756.45   |
| Research & Development        | 126.47     | 191.17     | 1,350.33  | 1.31       | 258.51      | 50.30       | 139,092.71   |
| TOTALS (lbs/day, unmitigated) | 2,064.62   | 3,124.90   | 22,272.90 | 21.55      | 4,241.85    | 825.74      | 2,288,140.85 |

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2011 Temperature (F): 60 Season: Winter

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

| <u>Summary of Land Uses</u> |         |           |            |           |             |              |
|-----------------------------|---------|-----------|------------|-----------|-------------|--------------|
| Land Use Type               | Acreage | Trip Rate | Unit Type  | No. Units | Total Trips | Total VMT    |
| Place of worship            |         | 9.11      | 1000 sq ft | 1,370.86  | 12,488.53   | 112,515.44   |
| Regnl shop. center          |         | 42.94     | 1000 sq ft | 2,056.30  | 88,297.52   | 792,293.63   |
| General office building     |         | 11.01     | 1000 sq ft | 883.06    | 9,722.49    | 98,950.65    |
| Office park                 |         | 11.42     | 1000 sq ft | 883.06    | 10,084.55   | 107,420.58   |
| Warehouse                   |         | 3.56      | 1000 sq ft | 11,193.68 | 39,849.50   | 357,569.54   |
| General light industry      |         | 6.97      | 1000 sq ft | 11,193.68 | 78,019.95   | 836,763.91   |
| Research & Development      |         | 8.11      | 1000 sq ft | 2,056.30  | 16,676.59   | 149,639.06   |
|                             |         |           |            |           | 255,139.13  | 2,455,152.81 |

| <u>Vehicle Fleet Mix</u>           |              |              |          |        |
|------------------------------------|--------------|--------------|----------|--------|
| Vehicle Type                       | Percent Type | Non-Catalyst | Catalyst | Diesel |
| Light Auto                         | 51.6         | 0.8          | 99.0     | 0.2    |
| Light Truck < 3750 lbs             | 7.3          | 2.7          | 94.6     | 2.7    |
| Light Truck 3751-5750 lbs          | 23.0         | 0.4          | 99.6     | 0.0    |
| Med Truck 5751-8500 lbs            | 10.6         | 0.9          | 99.1     | 0.0    |
| Lite-Heavy Truck 8501-10,000 lbs   | 1.6          | 0.0          | 81.2     | 18.8   |
| Lite-Heavy Truck 10,001-14,000 lbs | 0.5          | 0.0          | 60.0     | 40.0   |



| <u>Vehicle Fleet Mix</u>            |              |              |          |        |
|-------------------------------------|--------------|--------------|----------|--------|
| Vehicle Type                        | Percent Type | Non-Catalyst | Catalyst | Diesel |
| Med-Heavy Truck 14,001-33,000 lbs   | 0.9          | 0.0          | 22.2     | 77.8   |
| Heavy-Heavy Truck 33,001-60,000 lbs | 0.5          | 0.0          | 0.0      | 100.0  |
| Other Bus                           | 0.1          | 0.0          | 0.0      | 100.0  |
| Urban Bus                           | 0.1          | 0.0          | 0.0      | 100.0  |
| Motorcycle                          | 2.8          | 64.3         | 35.7     | 0.0    |
| School Bus                          | 0.1          | 0.0          | 0.0      | 100.0  |
| Motor Home                          | 0.9          | 0.0          | 88.9     | 11.1   |

| <u>Travel Conditions</u>              |             |           |            |            |          |          |
|---------------------------------------|-------------|-----------|------------|------------|----------|----------|
|                                       | Residential |           |            | Commercial |          |          |
|                                       | Home-Work   | Home-Shop | Home-Other | Commute    | Non-Work | Customer |
| Urban Trip Length (miles)             | 12.7        | 7.0       | 9.5        | 13.3       | 7.4      | 8.9      |
| Rural Trip Length (miles)             | 17.6        | 12.1      | 14.9       | 15.4       | 9.6      | 12.6     |
| Trip speeds (mph)                     | 30.0        | 30.0      | 30.0       | 30.0       | 30.0     | 30.0     |
| % of Trips - Residential              | 32.9        | 18.0      | 49.1       |            |          |          |
|                                       |             |           |            |            |          |          |
| % of Trips - Commercial (by land use) |             |           |            |            |          |          |
| Place of worship                      |             |           |            | 3.0        | 1.5      | 95.5     |
| Regnl shop. center                    |             |           |            | 2.0        | 1.0      | 97.0     |
| General office building               |             |           |            | 35.0       | 17.5     | 47.5     |
| Office park                           |             |           |            | 48.0       | 24.0     | 28.0     |
| Warehouse                             |             |           |            | 2.0        | 1.0      | 97.0     |

|                        | <u>Travel Conditions</u> |           |            |            |          |          |
|------------------------|--------------------------|-----------|------------|------------|----------|----------|
|                        | Residential              |           |            | Commercial |          |          |
|                        | Home-Work                | Home-Shop | Home-Other | Commute    | Non-Work | Customer |
| General light industry |                          |           |            | 50.0       | 25.0     | 25.0     |
| Research & Development |                          |           |            | 2.0        | 1.0      | 97.0     |

Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name: I:\pdata\00000100\10P\WPWIN\EddieT\Programs\Air\URBEMIS\URBEMIS2007\Fontana SWIP-Specific Plan Update.urb924

Project Name: Fontana SWIP-Specific Plan Update

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

AREA SOURCE EMISSION ESTIMATES

|                                 | <u>ROG</u> | <u>NOx</u> | <u>CO</u> | <u>SO2</u> | <u>PM10</u> | <u>PM2.5</u> | <u>CO2</u> |
|---------------------------------|------------|------------|-----------|------------|-------------|--------------|------------|
| TOTALS (tons/year, unmitigated) | 32.62      | 11.02      | 11.20     | 0.00       | 0.03        | 0.03         | 13,192.37  |

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

|                                 | <u>ROG</u> | <u>NOx</u> | <u>CO</u> | <u>SO2</u> | <u>PM10</u> | <u>PM2.5</u> | <u>CO2</u> |
|---------------------------------|------------|------------|-----------|------------|-------------|--------------|------------|
| TOTALS (tons/year, unmitigated) | 359.18     | 505.75     | 4,182.17  | 4.46       | 774.13      | 150.71       | 446,670.65 |

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

|                                 | <u>ROG</u> | <u>NOx</u> | <u>CO</u> | <u>SO2</u> | <u>PM10</u> | <u>PM2.5</u> | <u>CO2</u> |
|---------------------------------|------------|------------|-----------|------------|-------------|--------------|------------|
| TOTALS (tons/year, unmitigated) | 391.80     | 516.77     | 4,193.37  | 4.46       | 774.16      | 150.74       | 459,863.02 |

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Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

| <u>Source</u>                   | <u>ROG</u> | <u>NOx</u> | <u>CO</u> | <u>SO2</u> | <u>PM10</u> | <u>PM2.5</u> | <u>CO2</u> |
|---------------------------------|------------|------------|-----------|------------|-------------|--------------|------------|
| Natural Gas                     | 0.80       | 10.99      | 9.23      | 0.00       | 0.02        | 0.02         | 13,188.78  |
| Hearth                          |            |            |           |            |             |              |            |
| Landscape                       | 0.16       | 0.03       | 1.97      | 0.00       | 0.01        | 0.01         | 3.59       |
| Consumer Products               | 0.00       |            |           |            |             |              |            |
| Architectural Coatings          | 31.66      |            |           |            |             |              |            |
| TOTALS (tons/year, unmitigated) | 32.62      | 11.02      | 11.20     | 0.00       | 0.03        | 0.03         | 13,192.37  |

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

| <u>Source</u>                   | <u>ROG</u> | <u>NOX</u> | <u>CO</u> | <u>SO2</u> | <u>PM10</u> | <u>PM25</u> | <u>CO2</u> |
|---------------------------------|------------|------------|-----------|------------|-------------|-------------|------------|
| Place of worship                | 16.44      | 23.27      | 190.05    | 0.20       | 35.47       | 6.90        | 20,422.79  |
| Regnl shop. center              | 107.93     | 163.87     | 1,337.56  | 1.43       | 249.79      | 48.61       | 143,788.73 |
| General office building         | 14.18      | 20.32      | 169.69    | 0.18       | 31.20       | 6.08        | 18,035.63  |
| Office park                     | 15.34      | 22.01      | 185.16    | 0.20       | 33.88       | 6.60        | 19,607.41  |
| Warehouse                       | 59.26      | 73.96      | 603.65    | 0.65       | 112.73      | 21.94       | 64,893.20  |
| General light industry          | 123.93     | 171.37     | 1,443.44  | 1.53       | 263.88      | 51.40       | 152,765.77 |
| Research & Development          | 22.10      | 30.95      | 252.62    | 0.27       | 47.18       | 9.18        | 27,157.12  |
| TOTALS (tons/year, unmitigated) | 359.18     | 505.75     | 4,182.17  | 4.46       | 774.13      | 150.71      | 446,670.65 |

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2011 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

| <u>Summary of Land Uses</u> |         |           |            |           |             |              |
|-----------------------------|---------|-----------|------------|-----------|-------------|--------------|
| Land Use Type               | Acreage | Trip Rate | Unit Type  | No. Units | Total Trips | Total VMT    |
| Place of worship            |         | 9.11      | 1000 sq ft | 1,370.86  | 12,488.53   | 112,515.44   |
| Regnl shop. center          |         | 42.94     | 1000 sq ft | 2,056.30  | 88,297.52   | 792,293.63   |
| General office building     |         | 11.01     | 1000 sq ft | 883.06    | 9,722.49    | 98,950.65    |
| Office park                 |         | 11.42     | 1000 sq ft | 883.06    | 10,084.55   | 107,420.58   |
| Warehouse                   |         | 3.56      | 1000 sq ft | 11,193.68 | 39,849.50   | 357,569.54   |
| General light industry      |         | 6.97      | 1000 sq ft | 11,193.68 | 78,019.95   | 836,763.91   |
| Research & Development      |         | 8.11      | 1000 sq ft | 2,056.30  | 16,676.59   | 149,639.06   |
|                             |         |           |            |           | 255,139.13  | 2,455,152.81 |

| <u>Vehicle Fleet Mix</u>           |              |              |          |        |
|------------------------------------|--------------|--------------|----------|--------|
| Vehicle Type                       | Percent Type | Non-Catalyst | Catalyst | Diesel |
| Light Auto                         | 51.6         | 0.8          | 99.0     | 0.2    |
| Light Truck < 3750 lbs             | 7.3          | 2.7          | 94.6     | 2.7    |
| Light Truck 3751-5750 lbs          | 23.0         | 0.4          | 99.6     | 0.0    |
| Med Truck 5751-8500 lbs            | 10.6         | 0.9          | 99.1     | 0.0    |
| Lite-Heavy Truck 8501-10,000 lbs   | 1.6          | 0.0          | 81.2     | 18.8   |
| Lite-Heavy Truck 10,001-14,000 lbs | 0.5          | 0.0          | 60.0     | 40.0   |

| <u>Vehicle Fleet Mix</u>            |              |              |          |        |
|-------------------------------------|--------------|--------------|----------|--------|
| Vehicle Type                        | Percent Type | Non-Catalyst | Catalyst | Diesel |
| Med-Heavy Truck 14,001-33,000 lbs   | 0.9          | 0.0          | 22.2     | 77.8   |
| Heavy-Heavy Truck 33,001-60,000 lbs | 0.5          | 0.0          | 0.0      | 100.0  |
| Other Bus                           | 0.1          | 0.0          | 0.0      | 100.0  |
| Urban Bus                           | 0.1          | 0.0          | 0.0      | 100.0  |
| Motorcycle                          | 2.8          | 64.3         | 35.7     | 0.0    |
| School Bus                          | 0.1          | 0.0          | 0.0      | 100.0  |
| Motor Home                          | 0.9          | 0.0          | 88.9     | 11.1   |

| <u>Travel Conditions</u>              |             |           |            |            |          |          |
|---------------------------------------|-------------|-----------|------------|------------|----------|----------|
|                                       | Residential |           |            | Commercial |          |          |
|                                       | Home-Work   | Home-Shop | Home-Other | Commute    | Non-Work | Customer |
| Urban Trip Length (miles)             | 12.7        | 7.0       | 9.5        | 13.3       | 7.4      | 8.9      |
| Rural Trip Length (miles)             | 17.6        | 12.1      | 14.9       | 15.4       | 9.6      | 12.6     |
| Trip speeds (mph)                     | 30.0        | 30.0      | 30.0       | 30.0       | 30.0     | 30.0     |
| % of Trips - Residential              | 32.9        | 18.0      | 49.1       |            |          |          |
|                                       |             |           |            |            |          |          |
| % of Trips - Commercial (by land use) |             |           |            |            |          |          |
| Place of worship                      |             |           |            | 3.0        | 1.5      | 95.5     |
| Regnl shop. center                    |             |           |            | 2.0        | 1.0      | 97.0     |
| General office building               |             |           |            | 35.0       | 17.5     | 47.5     |
| Office park                           |             |           |            | 48.0       | 24.0     | 28.0     |
| Warehouse                             |             |           |            | 2.0        | 1.0      | 97.0     |

|                        | <u>Travel Conditions</u> |           |            |            |          |          |
|------------------------|--------------------------|-----------|------------|------------|----------|----------|
|                        | Residential              |           |            | Commercial |          |          |
|                        | Home-Work                | Home-Shop | Home-Other | Commute    | Non-Work | Customer |
| General light industry |                          |           |            | 50.0       | 25.0     | 25.0     |
| Research & Development |                          |           |            | 2.0        | 1.0      | 97.0     |



emfac.rts

Title : South Coast Air Basin Subarea Winter CYr 2030 Default Title

Version : Emfac2007 V2.3 Nov 1 2006

Run Date : 2010/04/05 15:57:26

Scen Year: 2030 -- All model years in the range 1986 to 2030 selected

Season : Winter

Area : Los Angeles (SC)

\*\*\*\*\*

Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter

Emfac2007 Emission Factors: V2.3 Nov 1 2006

(SC) Los Angeles (SC) Los Angeles (SC) Los Angeles

Table 1: Running Exhaust Emissions (grams/mile)

Pollutant Name: Reactive Org Gases Temperature: 70F Relative Humidity: 0%

| Speed MPH | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|-----------|-------|-------|-------|-------|-------|-------|-------|
| 5         | 0.049 | 0.098 | 0.147 | 1.679 | 1.539 | 4.674 | 0.189 |
| 35        | 0.007 | 0.015 | 0.023 | 0.194 | 0.308 | 1.803 | 0.031 |

Pollutant Name: Carbon Monoxide Temperature: 70F Relative Humidity: 0%

| Speed MPH | LDA   | LDT   | MDT   | HDT   | UBUS   | MCY    | ALL   |
|-----------|-------|-------|-------|-------|--------|--------|-------|
| 5         | 0.937 | 1.731 | 2.238 | 5.714 | 14.902 | 22.048 | 1.736 |
| 35        | 0.554 | 1.014 | 1.131 | 1.211 | 2.658  | 14.277 | 0.874 |

Pollutant Name: Oxides of Nitrogen Temperature: 70F Relative Humidity: 0%

| Speed MPH | LDA   | LDT   | MDT   | HDT   | UBUS   | MCY   | ALL   |
|-----------|-------|-------|-------|-------|--------|-------|-------|
| 5         | 0.082 | 0.180 | 0.318 | 5.936 | 16.603 | 1.382 | 0.501 |
| 35        | 0.046 | 0.100 | 0.198 | 2.292 | 7.675  | 1.260 | 0.227 |

Pollutant Name: Carbon Dioxide Temperature: 70F Relative Humidity: 0%

| Speed MPH | LDA     | LDT      | MDT      | HDT      | UBUS     | MCY     | ALL      |
|-----------|---------|----------|----------|----------|----------|---------|----------|
| 5         | 924.259 | 1184.523 | 1713.986 | 2938.000 | 2507.471 | 266.246 | 1214.428 |
| 35        | 300.664 | 385.438  | 521.338  | 1559.271 | 1696.396 | 139.890 | 424.983  |

Pollutant Name: Sulfur Dioxide Temperature: 70F Relative Humidity: 0%

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| Speed<br>MPH | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 5            | 0.009 | 0.011 | 0.016 | 0.028 | 0.024 | 0.003 | 0.012 |
| 35           | 0.003 | 0.004 | 0.005 | 0.015 | 0.016 | 0.002 | 0.004 |

Pollutant Name: PM2.5 Temperature: 70F Relative Humidity: 0%

| Speed<br>MPH | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 5            | 0.052 | 0.121 | 0.119 | 0.179 | 0.403 | 0.023 | 0.089 |
| 35           | 0.008 | 0.020 | 0.020 | 0.081 | 0.096 | 0.011 | 0.017 |

Pollutant Name: PM2.5 - Tire Wear Temperature: 70F Relative Humidity: 0%

| Speed<br>MPH | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 5            | 0.002 | 0.002 | 0.002 | 0.006 | 0.002 | 0.001 | 0.002 |
| 35           | 0.002 | 0.002 | 0.002 | 0.006 | 0.002 | 0.001 | 0.002 |

Pollutant Name: PM2.5 - Brake Wear Temperature: 70F Relative Humidity: 0%

| Speed<br>MPH | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 5            | 0.005 | 0.005 | 0.005 | 0.009 | 0.005 | 0.003 | 0.006 |
| 35           | 0.005 | 0.005 | 0.005 | 0.009 | 0.005 | 0.003 | 0.006 |

Pollutant Name: Gasoline - mi/gal Temperature: 70F Relative Humidity: 0%

| Speed<br>MPH | LDA    | LDT    | MDT    | HDT    | UBUS   | MCY    | ALL    |
|--------------|--------|--------|--------|--------|--------|--------|--------|
| 5            | 9.570  | 7.459  | 5.101  | 3.507  | 3.472  | 28.051 | 8.356  |
| 35           | 29.384 | 22.892 | 16.939 | 17.722 | 17.555 | 52.669 | 25.708 |

Pollutant Name: Diesel - mi/gal Temperature: 70F Relative Humidity: 0%

| Speed<br>MPH | LDA    | LDT    | MDT    | HDT   | UBUS  | MCY   | ALL   |
|--------------|--------|--------|--------|-------|-------|-------|-------|
| 5            | 29.156 | 29.156 | 19.452 | 4.096 | 4.026 | 0.000 | 6.174 |
| 35           | 29.156 | 29.156 | 19.452 | 5.943 | 4.026 | 0.000 | 7.727 |

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Title : South Coast Air Basin Subarea Winter CYr 2030 Default Title  
 Version : Emfac2007 V2.3 Nov 1 2006  
 Run Date : 2010/04/05 15:57:26  
 Scen Year: 2030 -- All model years in the range 1986 to 2030 selected  
 Season : Winter  
 Area : Los Angeles (SC)

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Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter  
 Emfac2007 Emission Factors: V2.3 Nov 1 2006

(SC) Los Angeles (SC) Los Angeles (SC) Los Angeles

Table 2: Starting Emissions (grams/trip)

Pollutant Name: Reactive Org Gases Temperature: 70F Relative Humidity:  
 ALL

| Time<br>min | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|-------------|-------|-------|-------|-------|-------|-------|-------|
| 5           | 0.006 | 0.010 | 0.040 | 0.056 | 0.157 | 0.653 | 0.020 |
| 10          | 0.011 | 0.020 | 0.079 | 0.110 | 0.306 | 0.804 | 0.036 |
| 20          | 0.021 | 0.038 | 0.154 | 0.209 | 0.580 | 1.094 | 0.067 |
| 30          | 0.030 | 0.055 | 0.224 | 0.296 | 0.822 | 1.369 | 0.096 |
| 40          | 0.039 | 0.071 | 0.289 | 0.371 | 1.032 | 1.628 | 0.122 |
| 50          | 0.047 | 0.087 | 0.349 | 0.436 | 1.211 | 1.871 | 0.146 |
| 60          | 0.055 | 0.101 | 0.405 | 0.488 | 1.357 | 2.048 | 0.168 |
| 120         | 0.084 | 0.161 | 0.626 | 0.549 | 1.526 | 2.313 | 0.243 |
| 180         | 0.082 | 0.157 | 0.627 | 0.583 | 1.619 | 2.342 | 0.244 |
| 240         | 0.087 | 0.166 | 0.666 | 0.615 | 1.709 | 2.490 | 0.259 |
| 300         | 0.092 | 0.176 | 0.705 | 0.647 | 1.797 | 2.634 | 0.273 |
| 360         | 0.097 | 0.186 | 0.743 | 0.677 | 1.881 | 2.776 | 0.288 |
| 420         | 0.102 | 0.195 | 0.781 | 0.706 | 1.962 | 2.915 | 0.302 |
| 480         | 0.107 | 0.205 | 0.818 | 0.734 | 2.041 | 3.051 | 0.316 |
| 540         | 0.112 | 0.214 | 0.855 | 0.762 | 2.116 | 3.184 | 0.330 |
| 600         | 0.116 | 0.223 | 0.892 | 0.788 | 2.189 | 3.313 | 0.344 |
| 660         | 0.121 | 0.233 | 0.928 | 0.813 | 2.258 | 3.440 | 0.358 |
| 720         | 0.126 | 0.242 | 0.964 | 0.837 | 2.325 | 3.564 | 0.371 |

Pollutant Name: Carbon Monoxide Temperature: 70F Relative Humidity:  
 ALL

| Time<br>min | LDA   | LDT   | MDT   | HDT   | UBUS   | MCY    | ALL   |
|-------------|-------|-------|-------|-------|--------|--------|-------|
| 5           | 0.084 | 0.153 | 0.486 | 0.863 | 1.658  | 2.978  | 0.239 |
| 10          | 0.166 | 0.303 | 0.959 | 1.691 | 3.249  | 3.583  | 0.456 |
| 20          | 0.324 | 0.590 | 1.867 | 3.242 | 6.228  | 4.742  | 0.870 |
| 30          | 0.474 | 0.863 | 2.723 | 4.653 | 8.938  | 5.834  | 1.258 |
| 40          | 0.615 | 1.120 | 3.529 | 5.923 | 11.378 | 6.857  | 1.620 |
| 50          | 0.747 | 1.362 | 4.283 | 7.054 | 13.549 | 7.813  | 1.957 |
| 60          | 0.870 | 1.589 | 4.987 | 8.043 | 15.450 | 8.702  | 2.267 |
| 120         | 1.367 | 2.499 | 7.569 | 9.393 | 18.043 | 12.321 | 3.317 |

|     |       |       |        |           |        |        |       |
|-----|-------|-------|--------|-----------|--------|--------|-------|
|     |       |       |        | emfac.rts |        |        |       |
| 180 | 1.287 | 2.363 | 7.313  | 9.668     | 18.571 | 11.950 | 3.209 |
| 240 | 1.393 | 2.559 | 7.893  | 9.952     | 19.115 | 12.967 | 3.440 |
| 300 | 1.486 | 2.733 | 8.409  | 10.244    | 19.678 | 13.906 | 3.648 |
| 360 | 1.567 | 2.884 | 8.860  | 10.546    | 20.257 | 14.768 | 3.832 |
| 420 | 1.636 | 3.012 | 9.246  | 10.857    | 20.854 | 15.552 | 3.992 |
| 480 | 1.694 | 3.118 | 9.567  | 11.177    | 21.469 | 16.259 | 4.129 |
| 540 | 1.739 | 3.201 | 9.823  | 11.506    | 22.100 | 16.888 | 4.242 |
| 600 | 1.772 | 3.261 | 10.015 | 11.843    | 22.750 | 17.439 | 4.332 |
| 660 | 1.793 | 3.299 | 10.142 | 12.190    | 23.416 | 17.912 | 4.399 |
| 720 | 1.802 | 3.314 | 10.204 | 12.547    | 24.100 | 18.308 | 4.442 |

ALL Pollutant Name: Oxides of Nitrogen Temperature: 70F Relative Humidity:

| Time<br>min | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|-------------|-------|-------|-------|-------|-------|-------|-------|
| 5           | 0.037 | 0.090 | 0.620 | 0.218 | 0.726 | 0.154 | 0.167 |
| 10          | 0.040 | 0.096 | 0.666 | 0.328 | 1.093 | 0.193 | 0.185 |
| 20          | 0.045 | 0.107 | 0.750 | 0.522 | 1.739 | 0.262 | 0.217 |
| 30          | 0.049 | 0.116 | 0.821 | 0.680 | 2.265 | 0.319 | 0.244 |
| 40          | 0.053 | 0.123 | 0.879 | 0.802 | 2.672 | 0.364 | 0.266 |
| 50          | 0.056 | 0.129 | 0.925 | 0.888 | 2.959 | 0.397 | 0.282 |
| 60          | 0.058 | 0.133 | 0.957 | 0.938 | 3.126 | 0.418 | 0.293 |
| 120         | 0.062 | 0.144 | 1.031 | 0.945 | 3.149 | 0.420 | 0.312 |
| 180         | 0.062 | 0.145 | 1.032 | 0.942 | 3.138 | 0.417 | 0.312 |
| 240         | 0.062 | 0.144 | 1.024 | 0.936 | 3.120 | 0.410 | 0.310 |
| 300         | 0.061 | 0.142 | 1.012 | 0.929 | 3.096 | 0.402 | 0.306 |
| 360         | 0.060 | 0.140 | 0.995 | 0.920 | 3.066 | 0.392 | 0.301 |
| 420         | 0.059 | 0.137 | 0.973 | 0.909 | 3.030 | 0.381 | 0.295 |
| 480         | 0.057 | 0.133 | 0.947 | 0.897 | 2.988 | 0.367 | 0.288 |
| 540         | 0.055 | 0.128 | 0.916 | 0.882 | 2.940 | 0.352 | 0.279 |
| 600         | 0.053 | 0.123 | 0.881 | 0.866 | 2.886 | 0.336 | 0.270 |
| 660         | 0.051 | 0.117 | 0.840 | 0.848 | 2.825 | 0.317 | 0.258 |
| 720         | 0.048 | 0.111 | 0.796 | 0.828 | 2.759 | 0.297 | 0.246 |

ALL Pollutant Name: Carbon Dioxide Temperature: 70F Relative Humidity:

| Time<br>min | LDA     | LDT     | MDT     | HDT     | UBUS    | MCY    | ALL     |
|-------------|---------|---------|---------|---------|---------|--------|---------|
| 5           | 11.975  | 15.290  | 21.569  | 2.820   | 3.840   | 13.276 | 14.055  |
| 10          | 13.441  | 17.182  | 24.486  | 5.625   | 7.659   | 15.473 | 15.977  |
| 20          | 16.864  | 21.593  | 31.184  | 11.188  | 15.234  | 19.787 | 20.379  |
| 30          | 20.941  | 26.837  | 39.036  | 16.688  | 22.723  | 23.995 | 25.526  |
| 40          | 25.672  | 32.915  | 48.042  | 22.126  | 30.127  | 28.094 | 31.418  |
| 50          | 31.057  | 39.826  | 58.203  | 27.502  | 37.447  | 32.087 | 38.055  |
| 60          | 37.097  | 47.570  | 69.518  | 32.815  | 44.681  | 35.972 | 45.437  |
| 120         | 86.467  | 110.702 | 159.716 | 55.812  | 75.994  | 53.423 | 104.049 |
| 180         | 98.145  | 125.675 | 181.577 | 65.938  | 89.782  | 57.659 | 118.290 |
| 240         | 109.805 | 140.621 | 203.340 | 75.466  | 102.755 | 61.647 | 132.460 |
| 300         | 121.447 | 155.538 | 225.003 | 84.396  | 114.915 | 65.386 | 146.560 |
| 360         | 133.071 | 170.427 | 246.568 | 92.729  | 126.261 | 68.876 | 160.591 |
| 420         | 144.678 | 185.288 | 268.033 | 100.464 | 136.793 | 72.118 | 174.550 |
| 480         | 156.266 | 200.122 | 289.400 | 107.601 | 146.512 | 75.110 | 188.440 |
| 540         | 167.836 | 214.927 | 310.667 | 114.141 | 155.416 | 77.855 | 202.260 |
| 600         | 179.388 | 229.704 | 331.836 | 120.083 | 163.507 | 80.351 | 216.009 |
| 660         | 190.923 | 244.453 | 352.906 | 125.428 | 170.785 | 82.598 | 229.688 |

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720      202.439    259.174    373.876    130.175    177.248    84.596    243.297

Pollutant Name: Sulfur Dioxide      Temperature: 70F    Relative Humidity:

ALL

| Time<br>min | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|-------------|-------|-------|-------|-------|-------|-------|-------|
| 5           | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 10          | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 20          | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 30          | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 40          | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 |
| 50          | 0.000 | 0.000 | 0.001 | 0.000 | 0.001 | 0.000 | 0.000 |
| 60          | 0.000 | 0.000 | 0.001 | 0.000 | 0.001 | 0.001 | 0.000 |
| 120         | 0.001 | 0.001 | 0.002 | 0.001 | 0.001 | 0.001 | 0.001 |
| 180         | 0.001 | 0.001 | 0.002 | 0.001 | 0.001 | 0.001 | 0.001 |
| 240         | 0.001 | 0.001 | 0.002 | 0.001 | 0.001 | 0.001 | 0.001 |
| 300         | 0.001 | 0.002 | 0.002 | 0.001 | 0.001 | 0.001 | 0.001 |
| 360         | 0.001 | 0.002 | 0.003 | 0.001 | 0.002 | 0.001 | 0.002 |
| 420         | 0.001 | 0.002 | 0.003 | 0.001 | 0.002 | 0.001 | 0.002 |
| 480         | 0.002 | 0.002 | 0.003 | 0.001 | 0.002 | 0.001 | 0.002 |
| 540         | 0.002 | 0.002 | 0.003 | 0.001 | 0.002 | 0.001 | 0.002 |
| 600         | 0.002 | 0.002 | 0.003 | 0.001 | 0.002 | 0.001 | 0.002 |
| 660         | 0.002 | 0.002 | 0.004 | 0.001 | 0.002 | 0.001 | 0.002 |
| 720         | 0.002 | 0.003 | 0.004 | 0.001 | 0.002 | 0.001 | 0.002 |

Pollutant Name: PM2.5      Temperature: 70F    Relative Humidity:

ALL

| Time<br>min | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|-------------|-------|-------|-------|-------|-------|-------|-------|
| 5           | 0.000 | 0.001 | 0.001 | 0.000 | 0.001 | 0.005 | 0.001 |
| 10          | 0.001 | 0.002 | 0.002 | 0.001 | 0.001 | 0.005 | 0.001 |
| 20          | 0.002 | 0.004 | 0.004 | 0.001 | 0.002 | 0.004 | 0.003 |
| 30          | 0.003 | 0.006 | 0.006 | 0.002 | 0.003 | 0.003 | 0.004 |
| 40          | 0.004 | 0.008 | 0.007 | 0.003 | 0.004 | 0.003 | 0.005 |
| 50          | 0.004 | 0.010 | 0.009 | 0.003 | 0.005 | 0.002 | 0.007 |
| 60          | 0.005 | 0.011 | 0.010 | 0.003 | 0.005 | 0.002 | 0.008 |
| 120         | 0.009 | 0.019 | 0.017 | 0.005 | 0.007 | 0.005 | 0.013 |
| 180         | 0.010 | 0.021 | 0.019 | 0.005 | 0.007 | 0.007 | 0.014 |
| 240         | 0.011 | 0.023 | 0.020 | 0.005 | 0.008 | 0.008 | 0.015 |
| 300         | 0.011 | 0.025 | 0.022 | 0.005 | 0.008 | 0.010 | 0.016 |
| 360         | 0.012 | 0.026 | 0.023 | 0.005 | 0.008 | 0.011 | 0.017 |
| 420         | 0.013 | 0.027 | 0.024 | 0.005 | 0.008 | 0.012 | 0.018 |
| 480         | 0.013 | 0.028 | 0.025 | 0.006 | 0.009 | 0.013 | 0.019 |
| 540         | 0.013 | 0.029 | 0.026 | 0.006 | 0.009 | 0.014 | 0.019 |
| 600         | 0.014 | 0.029 | 0.026 | 0.006 | 0.009 | 0.014 | 0.020 |
| 660         | 0.014 | 0.030 | 0.027 | 0.006 | 0.009 | 0.015 | 0.020 |
| 720         | 0.014 | 0.030 | 0.027 | 0.006 | 0.010 | 0.015 | 0.020 |

Version : Emfac2007 V2.3 Nov 1 2006

Run Date : 2010/04/05 15:57:26

Scen Year: 2030 -- All model years in the range 1986 to 2030 selected

Season : Winter

Area : Los Angeles (SC)

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Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter

Emfac2007 Emission Factors: V2.3 Nov 1 2006

Los Angeles (SC)                      Los Angeles (SC)                      Los Angeles  
(SC)

Table 4: Hot Soak Emissions (grams/trip)

Pollutant Name: Reactive Org Gases                      Temperature: 70F    Relative Humidity:  
ALL

| Time<br>min | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|-------------|-------|-------|-------|-------|-------|-------|-------|
| 5           | 0.030 | 0.046 | 0.034 | 0.003 | 0.037 | 0.141 | 0.034 |
| 10          | 0.055 | 0.085 | 0.063 | 0.006 | 0.068 | 0.263 | 0.063 |
| 20          | 0.094 | 0.145 | 0.109 | 0.010 | 0.117 | 0.458 | 0.108 |
| 30          | 0.121 | 0.187 | 0.141 | 0.013 | 0.150 | 0.601 | 0.139 |
| 40          | 0.132 | 0.203 | 0.153 | 0.014 | 0.163 | 0.659 | 0.151 |

Hot soak results are scaled to reflect zero emissions for trip lengths of less than  
5 minutes (about 25% of in-use trips).

Title : South Coast Air Basin Subarea Winter CYr 2030 Default Title

Version : Emfac2007 V2.3 Nov 1 2006

Run Date : 2010/04/05 15:57:26

Scen Year: 2030 -- All model years in the range 1986 to 2030 selected

Season : Winter

Area : Los Angeles (SC)

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Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter

Emfac2007 Emission Factors: V2.3 Nov 1 2006

Los Angeles (SC)                      Los Angeles (SC)                      Los Angeles  
(SC)

Table 5a: Partial Day Diurnal Loss Emissions  
(grams/hour)

Pollutant Name: Reactive Org Gases                      Temperature: ALL    Relative Humidity:  
ALL

| Temp<br>degF | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 70           | 0.036 | 0.069 | 0.067 | 0.002 | 0.002 | 0.395 | 0.056 |

Title : South Coast Air Basin Subarea Winter CYr 2030 Default Title  
 Version : Emfac2007 V2.3 Nov 1 2006  
 Run Date : 2010/04/05 15:57:26  
 Scen Year: 2030 -- All model years in the range 1986 to 2030 selected  
 Season : Winter  
 Area : Los Angeles (SC)

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Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter  
 Emfac2007 Emission Factors: V2.3 Nov 1 2006

Los Angeles (SC) Los Angeles (SC) Los Angeles  
 (SC)

Table 5b: Multi-Day Diurnal Loss Emissions

(grams/hour)

Pollutant Name: Reactive Org Gases Temperature: ALL Relative Humidity:  
 ALL

| Temp<br>degF | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 70           | 0.003 | 0.005 | 0.005 | 0.000 | 0.001 | 0.037 | 0.004 |

Title : South Coast Air Basin Subarea Winter CYr 2030 Default Title  
 Version : Emfac2007 V2.3 Nov 1 2006  
 Run Date : 2010/04/05 15:57:26  
 Scen Year: 2030 -- All model years in the range 1986 to 2030 selected  
 Season : Winter  
 Area : Los Angeles (SC)

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Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter  
 Emfac2007 Emission Factors: V2.3 Nov 1 2006

Los Angeles (SC) Los Angeles (SC) Los Angeles  
 (SC)

Table 6a: Partial Day Resting Loss Emissions

(grams/hour)

Pollutant Name: Reactive Org Gases Temperature: ALL Relative Humidity:  
 ALL

| Temp<br>degF | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 70           | 0.018 | 0.043 | 0.044 | 0.001 | 0.001 | 0.128 | 0.031 |



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Title : South Coast Air Basin Subarea Winter CYr 2030 Default Title  
 Version : Emfac2007 V2.3 Nov 1 2006  
 Run Date : 2010/04/05 15:57:26  
 Scen Year: 2030 -- All model years in the range 1986 to 2030 selected  
 Season : Winter  
 Area : Los Angeles (SC)

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Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter  
 Emfac2007 Emission Factors: V2.3 Nov 1 2006

Los Angeles (SC) Los Angeles (SC) Los Angeles  
 (SC)

Table 6b: Multi-Day Resting Loss Emissions

(grams/hour)

Pollutant Name: Reactive Org Gases Temperature: ALL Relative Humidity:  
 ALL

| Temp<br>degF | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 70           | 0.001 | 0.003 | 0.003 | 0.000 | 0.000 | 0.013 | 0.002 |

Title : South Coast Air Basin Subarea Winter CYr 2030 Default Title  
 Version : Emfac2007 V2.3 Nov 1 2006  
 Run Date : 2010/04/05 15:57:26  
 Scen Year: 2030 -- All model years in the range 1986 to 2030 selected  
 Season : Winter  
 Area : Los Angeles (SC)

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Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter  
 Emfac2007 Emission Factors: V2.3 Nov 1 2006

Los Angeles (SC) Los Angeles (SC) Los Angeles  
 (SC)

Table 7: Estimated Travel Fractions

Pollutant Name: Temperature: ALL Relative Humidity:  
 ALL

|       | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|-------|-------|-------|-------|-------|-------|-------|-------|
| %VMT  | 0.508 | 0.301 | 0.131 | 0.053 | 0.002 | 0.005 | 1.000 |
| %TRIP | 0.491 | 0.266 | 0.179 | 0.057 | 0.000 | 0.007 | 1.000 |
| %VEH  | 0.536 | 0.294 | 0.122 | 0.025 | 0.001 | 0.022 | 1.000 |

Title : South Coast Air Basin Subarea Winter CYr 2030 Default Title  
 Version : Emfac2007 V2.3 Nov 1 2006  
 Run Date : 2010/04/05 15:57:26  
 Scen Year: 2030 -- All model years in the range 1986 to 2030 selected  
 Season : Winter  
 Area : Los Angeles (SC)

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Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter  
 Emfac2007 Emission Factors: V2.3 Nov 1 2006

Los Angeles (SC) Los Angeles (SC) Los Angeles  
 (SC)

Table 8: Evaporative Running Loss Emissions

(grams/minute)

Pollutant Name: Reactive Org Gases Temperature: 70F Relative Humidity:  
 ALL

| Time<br>min | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|-------------|-------|-------|-------|-------|-------|-------|-------|
| 1           | 0.010 | 0.249 | 0.255 | 0.040 | 0.554 | 0.004 | 0.117 |
| 2           | 0.008 | 0.129 | 0.132 | 0.021 | 0.284 | 0.037 | 0.062 |
| 3           | 0.009 | 0.092 | 0.094 | 0.015 | 0.196 | 0.056 | 0.046 |
| 4           | 0.011 | 0.075 | 0.076 | 0.012 | 0.152 | 0.067 | 0.040 |
| 5           | 0.013 | 0.065 | 0.066 | 0.010 | 0.126 | 0.075 | 0.036 |
| 10          | 0.017 | 0.046 | 0.046 | 0.007 | 0.076 | 0.093 | 0.029 |
| 15          | 0.018 | 0.041 | 0.041 | 0.006 | 0.062 | 0.103 | 0.028 |
| 20          | 0.019 | 0.040 | 0.040 | 0.006 | 0.057 | 0.111 | 0.028 |
| 25          | 0.020 | 0.040 | 0.041 | 0.006 | 0.055 | 0.117 | 0.029 |
| 30          | 0.021 | 0.041 | 0.042 | 0.007 | 0.057 | 0.121 | 0.029 |
| 35          | 0.021 | 0.042 | 0.043 | 0.007 | 0.059 | 0.125 | 0.030 |
| 40          | 0.022 | 0.043 | 0.044 | 0.007 | 0.060 | 0.129 | 0.031 |
| 45          | 0.022 | 0.044 | 0.045 | 0.007 | 0.062 | 0.133 | 0.032 |
| 50          | 0.023 | 0.045 | 0.046 | 0.007 | 0.063 | 0.136 | 0.032 |
| 55          | 0.023 | 0.046 | 0.047 | 0.007 | 0.065 | 0.140 | 0.033 |
| 60          | 0.024 | 0.047 | 0.048 | 0.007 | 0.066 | 0.143 | 0.034 |

Title : South Coast Air Basin Subarea Winter CYr 2030 Default Title  
 Version : Emfac2007 V2.3 Nov 1 2006  
 Run Date : 2010/04/05 15:57:26  
 Scen Year: 2030 -- All model years in the range 1986 to 2030 selected  
 Season : Winter  
 Area : Orange (SC)

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Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter  
 Emfac2007 Emission Factors: V2.3 Nov 1 2006

Orange (SC) Orange (SC) Orange (SC)  
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Table 1: Running Exhaust Emissions (grams/mile)

Pollutant Name: Reactive Org Gases      Temperature: 70F    Relative Humidity: 0%

| Speed<br>MPH | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 5            | 0.046 | 0.089 | 0.138 | 1.239 | 2.137 | 4.681 | 0.144 |
| 35           | 0.007 | 0.013 | 0.022 | 0.157 | 0.406 | 1.805 | 0.026 |

Pollutant Name: Carbon Monoxide      Temperature: 70F    Relative Humidity: 0%

| Speed<br>MPH | LDA   | LDT   | MDT   | HDT   | UBUS   | MCY    | ALL   |
|--------------|-------|-------|-------|-------|--------|--------|-------|
| 5            | 0.900 | 1.609 | 2.176 | 5.172 | 19.624 | 22.103 | 1.610 |
| 35           | 0.534 | 0.948 | 1.157 | 1.092 | 3.637  | 14.313 | 0.856 |

Pollutant Name: Oxides of Nitrogen      Temperature: 70F    Relative Humidity: 0%

| Speed<br>MPH | LDA   | LDT   | MDT   | HDT   | UBUS   | MCY   | ALL   |
|--------------|-------|-------|-------|-------|--------|-------|-------|
| 5            | 0.079 | 0.163 | 0.305 | 4.734 | 18.829 | 1.387 | 0.343 |
| 35           | 0.045 | 0.091 | 0.185 | 1.981 | 8.995  | 1.264 | 0.171 |

Pollutant Name: Carbon Dioxide      Temperature: 70F    Relative Humidity: 0%

| Speed<br>MPH | LDA     | LDT      | MDT      | HDT      | UBUS     | MCY     | ALL      |
|--------------|---------|----------|----------|----------|----------|---------|----------|
| 5            | 923.835 | 1184.498 | 1699.345 | 2684.138 | 2449.583 | 266.203 | 1183.768 |
| 35           | 300.528 | 385.443  | 522.152  | 1462.009 | 1807.874 | 139.859 | 403.589  |

Pollutant Name: Sulfur Dioxide      Temperature: 70F    Relative Humidity: 0%

| Speed<br>MPH | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 5            | 0.009 | 0.011 | 0.016 | 0.026 | 0.024 | 0.003 | 0.011 |
| 35           | 0.003 | 0.004 | 0.005 | 0.014 | 0.017 | 0.002 | 0.004 |

Pollutant Name: PM2.5      Temperature: 70F    Relative Humidity: 0%

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|--------------|-------|-------|-------|-------|-------|-------|-------|
| Speed<br>MPH | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
| 5            | 0.051 | 0.117 | 0.124 | 0.189 | 0.433 | 0.024 | 0.088 |
| 35           | 0.008 | 0.019 | 0.021 | 0.076 | 0.104 | 0.011 | 0.016 |

Pollutant Name: PM2.5 - Tire Wear      Temperature: 70F    Relative Humidity:  
0%

| Speed<br>MPH | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 5            | 0.002 | 0.002 | 0.002 | 0.006 | 0.002 | 0.001 | 0.002 |
| 35           | 0.002 | 0.002 | 0.002 | 0.006 | 0.002 | 0.001 | 0.002 |

Pollutant Name: PM2.5 - Brake Wear      Temperature: 70F    Relative Humidity:  
0%

| Speed<br>MPH | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 5            | 0.005 | 0.005 | 0.005 | 0.008 | 0.005 | 0.003 | 0.005 |
| 35           | 0.005 | 0.005 | 0.005 | 0.008 | 0.005 | 0.003 | 0.005 |

Pollutant Name: Gasoline - mi/gal      Temperature: 70F    Relative Humidity:  
0%

| Speed<br>MPH | LDA    | LDT    | MDT    | HDT    | UBUS   | MCY    | ALL    |
|--------------|--------|--------|--------|--------|--------|--------|--------|
| 5            | 9.575  | 7.460  | 5.158  | 3.512  | 3.414  | 28.045 | 8.278  |
| 35           | 29.400 | 22.898 | 16.909 | 17.747 | 17.274 | 52.659 | 25.442 |

Pollutant Name: Diesel - mi/gal      Temperature: 70F    Relative Humidity:  
0%

| Speed<br>MPH | LDA    | LDT    | MDT    | HDT   | UBUS  | MCY   | ALL   |
|--------------|--------|--------|--------|-------|-------|-------|-------|
| 5            | 29.156 | 29.156 | 19.477 | 4.579 | 4.166 | 0.000 | 7.441 |
| 35           | 29.156 | 29.156 | 19.477 | 6.083 | 4.166 | 0.000 | 8.615 |

Title : South Coast Air Basin Subarea Winter CYr 2030 Default Title  
Version : Emfac2007 V2.3 Nov 1 2006  
Run Date : 2010/04/05 15:57:26  
Scen Year: 2030 -- All model years in the range 1986 to 2030 selected  
Season : Winter  
Area : Orange (SC)

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Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter  
Emfac2007 Emission Factors: V2.3 Nov 1 2006

Orange (SC)

Orange (SC)

Orange (SC)

Table 2: Starting Emissions (grams/trip)

Pollutant Name: Reactive Org Gases Temperature: 70F Relative Humidity:  
ALL

| Time<br>min | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|-------------|-------|-------|-------|-------|-------|-------|-------|
| 5           | 0.006 | 0.010 | 0.035 | 0.055 | 0.167 | 0.655 | 0.020 |
| 10          | 0.011 | 0.019 | 0.069 | 0.107 | 0.326 | 0.806 | 0.035 |
| 20          | 0.021 | 0.038 | 0.134 | 0.202 | 0.617 | 1.097 | 0.065 |
| 30          | 0.031 | 0.055 | 0.195 | 0.287 | 0.875 | 1.372 | 0.093 |
| 40          | 0.040 | 0.072 | 0.252 | 0.360 | 1.099 | 1.631 | 0.118 |
| 50          | 0.048 | 0.087 | 0.306 | 0.422 | 1.289 | 1.875 | 0.142 |
| 60          | 0.056 | 0.101 | 0.356 | 0.474 | 1.444 | 2.052 | 0.163 |
| 120         | 0.086 | 0.163 | 0.568 | 0.532 | 1.624 | 2.317 | 0.241 |
| 180         | 0.084 | 0.159 | 0.567 | 0.565 | 1.723 | 2.346 | 0.241 |
| 240         | 0.089 | 0.169 | 0.602 | 0.596 | 1.819 | 2.494 | 0.255 |
| 300         | 0.094 | 0.179 | 0.638 | 0.627 | 1.912 | 2.639 | 0.270 |
| 360         | 0.099 | 0.189 | 0.673 | 0.656 | 2.002 | 2.782 | 0.285 |
| 420         | 0.105 | 0.199 | 0.707 | 0.685 | 2.089 | 2.921 | 0.299 |
| 480         | 0.109 | 0.208 | 0.742 | 0.712 | 2.172 | 3.057 | 0.313 |
| 540         | 0.114 | 0.218 | 0.776 | 0.738 | 2.252 | 3.190 | 0.327 |
| 600         | 0.119 | 0.227 | 0.810 | 0.764 | 2.329 | 3.320 | 0.341 |
| 660         | 0.124 | 0.237 | 0.844 | 0.788 | 2.403 | 3.447 | 0.355 |
| 720         | 0.129 | 0.246 | 0.877 | 0.811 | 2.474 | 3.571 | 0.368 |

Pollutant Name: Carbon Monoxide Temperature: 70F Relative Humidity:  
ALL

| Time<br>min | LDA   | LDT   | MDT   | HDT    | UBUS   | MCY    | ALL   |
|-------------|-------|-------|-------|--------|--------|--------|-------|
| 5           | 0.086 | 0.156 | 0.445 | 0.816  | 2.266  | 2.991  | 0.234 |
| 10          | 0.169 | 0.307 | 0.879 | 1.599  | 4.441  | 3.597  | 0.446 |
| 20          | 0.330 | 0.600 | 1.715 | 3.065  | 8.513  | 4.758  | 0.851 |
| 30          | 0.482 | 0.877 | 2.506 | 4.398  | 12.217 | 5.852  | 1.232 |
| 40          | 0.626 | 1.139 | 3.253 | 5.599  | 15.553 | 6.878  | 1.589 |
| 50          | 0.761 | 1.386 | 3.956 | 6.667  | 18.520 | 7.836  | 1.922 |
| 60          | 0.887 | 1.618 | 4.615 | 7.603  | 21.119 | 8.727  | 2.230 |
| 120         | 1.397 | 2.561 | 7.153 | 8.879  | 24.664 | 12.356 | 3.321 |
| 180         | 1.316 | 2.423 | 6.884 | 9.138  | 25.385 | 11.986 | 3.202 |
| 240         | 1.424 | 2.628 | 7.457 | 9.406  | 26.129 | 13.008 | 3.443 |
| 300         | 1.520 | 2.809 | 7.964 | 9.683  | 26.898 | 13.951 | 3.659 |
| 360         | 1.604 | 2.966 | 8.405 | 9.968  | 27.690 | 14.816 | 3.849 |
| 420         | 1.675 | 3.099 | 8.779 | 10.262 | 28.506 | 15.604 | 4.014 |
| 480         | 1.733 | 3.208 | 9.087 | 10.564 | 29.346 | 16.313 | 4.153 |
| 540         | 1.780 | 3.293 | 9.329 | 10.875 | 30.209 | 16.944 | 4.266 |
| 600         | 1.813 | 3.355 | 9.505 | 11.195 | 31.097 | 17.497 | 4.354 |
| 660         | 1.835 | 3.392 | 9.615 | 11.523 | 32.008 | 17.972 | 4.417 |
| 720         | 1.844 | 3.406 | 9.658 | 11.859 | 32.943 | 18.369 | 4.453 |

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Pollutant Name: Oxides of Nitrogen      Temperature: 70F      Relative Humidity:  
ALL

| Time<br>min | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|-------------|-------|-------|-------|-------|-------|-------|-------|
| 5           | 0.039 | 0.097 | 0.597 | 0.205 | 0.835 | 0.154 | 0.174 |
| 10          | 0.042 | 0.103 | 0.634 | 0.309 | 1.258 | 0.193 | 0.190 |
| 20          | 0.048 | 0.113 | 0.700 | 0.492 | 2.001 | 0.263 | 0.219 |
| 30          | 0.052 | 0.122 | 0.757 | 0.641 | 2.606 | 0.320 | 0.243 |
| 40          | 0.055 | 0.130 | 0.804 | 0.756 | 3.074 | 0.365 | 0.262 |
| 50          | 0.058 | 0.136 | 0.842 | 0.837 | 3.404 | 0.398 | 0.277 |
| 60          | 0.060 | 0.140 | 0.870 | 0.884 | 3.597 | 0.419 | 0.287 |
| 120         | 0.065 | 0.152 | 0.943 | 0.891 | 3.623 | 0.422 | 0.307 |
| 180         | 0.065 | 0.153 | 0.943 | 0.888 | 3.609 | 0.418 | 0.308 |
| 240         | 0.065 | 0.152 | 0.936 | 0.883 | 3.589 | 0.411 | 0.305 |
| 300         | 0.064 | 0.150 | 0.925 | 0.876 | 3.562 | 0.403 | 0.302 |
| 360         | 0.063 | 0.147 | 0.909 | 0.867 | 3.527 | 0.393 | 0.297 |
| 420         | 0.062 | 0.144 | 0.888 | 0.857 | 3.486 | 0.382 | 0.291 |
| 480         | 0.060 | 0.140 | 0.863 | 0.845 | 3.437 | 0.368 | 0.283 |
| 540         | 0.058 | 0.135 | 0.834 | 0.832 | 3.382 | 0.353 | 0.274 |
| 600         | 0.056 | 0.129 | 0.800 | 0.816 | 3.319 | 0.337 | 0.264 |
| 660         | 0.053 | 0.123 | 0.762 | 0.799 | 3.250 | 0.318 | 0.253 |
| 720         | 0.050 | 0.116 | 0.719 | 0.780 | 3.173 | 0.298 | 0.240 |

Pollutant Name: Carbon Dioxide      Temperature: 70F      Relative Humidity:  
ALL

| Time<br>min | LDA     | LDT     | MDT     | HDT     | UBUS    | MCY    | ALL     |
|-------------|---------|---------|---------|---------|---------|--------|---------|
| 5           | 11.974  | 15.304  | 21.663  | 2.852   | 3.038   | 13.326 | 14.343  |
| 10          | 13.440  | 17.190  | 24.532  | 5.688   | 6.060   | 15.525 | 16.278  |
| 20          | 16.863  | 21.589  | 31.144  | 11.312  | 12.053  | 19.843 | 20.721  |
| 30          | 20.940  | 26.823  | 38.921  | 16.874  | 17.978  | 24.053 | 25.926  |
| 40          | 25.672  | 32.892  | 47.862  | 22.372  | 23.836  | 28.156 | 31.894  |
| 50          | 31.057  | 39.796  | 57.967  | 27.807  | 29.627  | 32.151 | 38.623  |
| 60          | 37.097  | 47.535  | 69.237  | 33.179  | 35.351  | 36.039 | 46.115  |
| 120         | 86.463  | 110.686 | 159.552 | 56.432  | 60.126  | 53.502 | 105.799 |
| 180         | 98.141  | 125.649 | 181.329 | 66.670  | 71.034  | 57.729 | 120.252 |
| 240         | 109.801 | 140.586 | 203.022 | 76.304  | 81.298  | 61.707 | 134.639 |
| 300         | 121.443 | 155.496 | 224.629 | 85.333  | 90.919  | 65.437 | 148.961 |
| 360         | 133.066 | 170.381 | 246.152 | 93.758  | 99.896  | 68.920 | 163.218 |
| 420         | 144.672 | 185.239 | 267.590 | 101.579 | 108.228 | 72.154 | 177.409 |
| 480         | 156.260 | 200.071 | 288.942 | 108.796 | 115.918 | 75.140 | 191.534 |
| 540         | 167.829 | 214.877 | 310.210 | 115.409 | 122.963 | 77.878 | 205.594 |
| 600         | 179.381 | 229.658 | 331.392 | 121.417 | 129.364 | 80.368 | 219.589 |
| 660         | 190.914 | 244.411 | 352.490 | 126.821 | 135.122 | 82.611 | 233.518 |
| 720         | 202.429 | 259.139 | 373.503 | 131.620 | 140.236 | 84.605 | 247.381 |

Pollutant Name: Sulfur Dioxide      Temperature: 70F      Relative Humidity:  
ALL

| Time<br>min | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|-------------|-------|-------|-------|-------|-------|-------|-------|
| 5           | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 10          | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |

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|-----|-----------|-------|-------|-------|-------|-------|-------|
| 20  | 0.000     | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 30  | 0.000     | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 40  | 0.000     | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 |
| 50  | 0.000     | 0.000 | 0.001 | 0.000 | 0.001 | 0.000 | 0.000 |
| 60  | 0.000     | 0.000 | 0.001 | 0.000 | 0.001 | 0.001 | 0.000 |
| 120 | 0.001     | 0.001 | 0.002 | 0.001 | 0.001 | 0.001 | 0.001 |
| 180 | 0.001     | 0.001 | 0.002 | 0.001 | 0.001 | 0.001 | 0.001 |
| 240 | 0.001     | 0.001 | 0.002 | 0.001 | 0.001 | 0.001 | 0.001 |
| 300 | 0.001     | 0.002 | 0.002 | 0.001 | 0.001 | 0.001 | 0.001 |
| 360 | 0.001     | 0.002 | 0.003 | 0.001 | 0.001 | 0.001 | 0.002 |
| 420 | 0.001     | 0.002 | 0.003 | 0.001 | 0.002 | 0.001 | 0.002 |
| 480 | 0.002     | 0.002 | 0.003 | 0.001 | 0.002 | 0.001 | 0.002 |
| 540 | 0.002     | 0.002 | 0.003 | 0.001 | 0.002 | 0.001 | 0.002 |
| 600 | 0.002     | 0.002 | 0.003 | 0.001 | 0.002 | 0.001 | 0.002 |
| 660 | 0.002     | 0.002 | 0.004 | 0.001 | 0.002 | 0.001 | 0.002 |
| 720 | 0.002     | 0.003 | 0.004 | 0.001 | 0.002 | 0.001 | 0.002 |

Pollutant Name: PM2.5                      Temperature: 70F    Relative Humidity:  
ALL

| Time<br>min | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|-------------|-------|-------|-------|-------|-------|-------|-------|
| 5           | 0.000 | 0.001 | 0.001 | 0.000 | 0.000 | 0.005 | 0.001 |
| 10          | 0.001 | 0.002 | 0.002 | 0.001 | 0.001 | 0.005 | 0.002 |
| 20          | 0.002 | 0.004 | 0.004 | 0.001 | 0.002 | 0.004 | 0.003 |
| 30          | 0.003 | 0.006 | 0.006 | 0.002 | 0.003 | 0.003 | 0.004 |
| 40          | 0.004 | 0.008 | 0.007 | 0.002 | 0.003 | 0.003 | 0.006 |
| 50          | 0.005 | 0.010 | 0.009 | 0.003 | 0.004 | 0.002 | 0.007 |
| 60          | 0.005 | 0.012 | 0.010 | 0.003 | 0.004 | 0.002 | 0.008 |
| 120         | 0.009 | 0.019 | 0.017 | 0.005 | 0.006 | 0.005 | 0.013 |
| 180         | 0.010 | 0.022 | 0.019 | 0.005 | 0.006 | 0.007 | 0.015 |
| 240         | 0.011 | 0.024 | 0.020 | 0.005 | 0.006 | 0.008 | 0.016 |
| 300         | 0.011 | 0.026 | 0.022 | 0.005 | 0.006 | 0.010 | 0.017 |
| 360         | 0.012 | 0.027 | 0.023 | 0.005 | 0.007 | 0.011 | 0.018 |
| 420         | 0.013 | 0.028 | 0.024 | 0.005 | 0.007 | 0.012 | 0.019 |
| 480         | 0.013 | 0.029 | 0.025 | 0.005 | 0.007 | 0.013 | 0.020 |
| 540         | 0.014 | 0.030 | 0.026 | 0.006 | 0.007 | 0.014 | 0.020 |
| 600         | 0.014 | 0.031 | 0.026 | 0.006 | 0.007 | 0.014 | 0.021 |
| 660         | 0.014 | 0.031 | 0.027 | 0.006 | 0.008 | 0.015 | 0.021 |
| 720         | 0.014 | 0.031 | 0.027 | 0.006 | 0.008 | 0.015 | 0.021 |

Title : South Coast Air Basin Subarea Winter CYr 2030 Default Title  
Version : Emfac2007 V2.3 Nov 1 2006  
Run Date : 2010/04/05 15:57:26  
Scen Year: 2030 -- All model years in the range 1986 to 2030 selected  
Season : Winter  
Area : Orange (SC)

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Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter  
Emfac2007 Emission Factors: V2.3 Nov 1 2006

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Table 4: Hot Soak Emissions (grams/trip)

Pollutant Name: Reactive Org Gases      Temperature: 70F    Relative Humidity:  
ALL

| Time<br>min | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|-------------|-------|-------|-------|-------|-------|-------|-------|
| 5           | 0.030 | 0.045 | 0.034 | 0.004 | 0.045 | 0.158 | 0.035 |
| 10          | 0.056 | 0.084 | 0.063 | 0.007 | 0.083 | 0.293 | 0.064 |
| 20          | 0.096 | 0.144 | 0.108 | 0.011 | 0.141 | 0.509 | 0.110 |
| 30          | 0.124 | 0.186 | 0.140 | 0.015 | 0.181 | 0.667 | 0.142 |
| 40          | 0.134 | 0.201 | 0.152 | 0.016 | 0.196 | 0.729 | 0.155 |

Hot soak results are scaled to reflect zero emissions for trip lengths of less than 5 minutes (about 25% of in-use trips).

Title : South Coast Air Basin Subarea Winter CYr 2030 Default Title  
Version : Emfac2007 V2.3 Nov 1 2006  
Run Date : 2010/04/05 15:57:26  
Scen Year: 2030 -- All model years in the range 1986 to 2030 selected  
Season : Winter  
Area : Orange (SC)

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Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter  
Emfac2007 Emission Factors: V2.3 Nov 1 2006

Orange (SC)

Orange (SC)

Orange (SC)

Table 5a: Partial Day Diurnal Loss Emissions

(grams/hour)

Pollutant Name: Reactive Org Gases      Temperature: ALL    Relative Humidity:  
ALL

| Temp<br>degF | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 70           | 0.036 | 0.066 | 0.064 | 0.002 | 0.003 | 0.412 | 0.057 |

Title : South Coast Air Basin Subarea Winter CYr 2030 Default Title  
Version : Emfac2007 V2.3 Nov 1 2006  
Run Date : 2010/04/05 15:57:26  
Scen Year: 2030 -- All model years in the range 1986 to 2030 selected  
Season : Winter  
Area : Orange (SC)

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Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter  
Emfac2007 Emission Factors: V2.3 Nov 1 2006

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Table 5b: Multi-Day Diurnal Loss Emissions

(grams/hour)

Pollutant Name: Reactive Org Gases Temperature: ALL Relative Humidity:  
ALL

| Temp<br>degF | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 70           | 0.003 | 0.005 | 0.004 | 0.000 | 0.001 | 0.039 | 0.004 |

Title : South Coast Air Basin Subarea Winter CYr 2030 Default Title  
Version : Emfac2007 V2.3 Nov 1 2006  
Run Date : 2010/04/05 15:57:26  
Scen Year: 2030 -- All model years in the range 1986 to 2030 selected  
Season : Winter  
Area : Orange (SC)

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Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter  
Emfac2007 Emission Factors: V2.3 Nov 1 2006

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Table 6a: Partial Day Resting Loss Emissions

(grams/hour)

Pollutant Name: Reactive Org Gases Temperature: ALL Relative Humidity:  
ALL

| Temp<br>degF | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 70           | 0.019 | 0.043 | 0.043 | 0.001 | 0.001 | 0.133 | 0.032 |

Title : South Coast Air Basin Subarea Winter CYr 2030 Default Title  
Version : Emfac2007 V2.3 Nov 1 2006  
Run Date : 2010/04/05 15:57:26  
Scen Year: 2030 -- All model years in the range 1986 to 2030 selected  
Season : Winter  
Area : Orange (SC)

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 Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter  
 Emfac2007 Emission Factors: V2.3 Nov 1 2006

Orange (SC)

Orange (SC)

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Table 6b: Multi-Day Resting Loss Emissions

(grams/hour)

Pollutant Name: Reactive Org Gases Temperature: ALL Relative Humidity:  
 ALL

| Temp<br>degF | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 70           | 0.001 | 0.003 | 0.003 | 0.000 | 0.000 | 0.013 | 0.002 |

Title : South Coast Air Basin Subarea Winter CYr 2030 Default Title  
 Version : Emfac2007 V2.3 Nov 1 2006  
 Run Date : 2010/04/05 15:57:26  
 Scen Year: 2030 -- All model years in the range 1986 to 2030 selected  
 Season : Winter  
 Area : Orange (SC)

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Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter  
 Emfac2007 Emission Factors: V2.3 Nov 1 2006

Orange (SC)

Orange (SC)

Orange (SC)

Table 7: Estimated Travel Fractions

Pollutant Name: Temperature: ALL Relative Humidity:  
 ALL

|       | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|-------|-------|-------|-------|-------|-------|-------|-------|
| %VMT  | 0.487 | 0.324 | 0.146 | 0.036 | 0.002 | 0.005 | 1.000 |
| %TRIP | 0.463 | 0.283 | 0.195 | 0.052 | 0.000 | 0.007 | 1.000 |
| %VEH  | 0.506 | 0.313 | 0.133 | 0.024 | 0.000 | 0.023 | 1.000 |

Title : South Coast Air Basin Subarea Winter CYr 2030 Default Title  
 Version : Emfac2007 V2.3 Nov 1 2006  
 Run Date : 2010/04/05 15:57:26  
 Scen Year: 2030 -- All model years in the range 1986 to 2030 selected  
 Season : Winter  
 Area : Orange (SC)

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Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter  
Emfac2007 Emission Factors: V2.3 Nov 1 2006

Orange (SC)

Orange (SC)

Orange (SC)

Table 8: Evaporative Running Loss Emissions

(grams/minute)

Pollutant Name: Reactive Org Gases Temperature: 70F Relative Humidity:  
ALL

| Time<br>min | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|-------------|-------|-------|-------|-------|-------|-------|-------|
| 1           | 0.010 | 0.235 | 0.253 | 0.071 | 0.757 | 0.005 | 0.122 |
| 2           | 0.008 | 0.122 | 0.132 | 0.037 | 0.390 | 0.038 | 0.065 |
| 3           | 0.010 | 0.087 | 0.093 | 0.026 | 0.269 | 0.057 | 0.048 |
| 4           | 0.012 | 0.071 | 0.076 | 0.021 | 0.208 | 0.068 | 0.041 |
| 5           | 0.013 | 0.062 | 0.066 | 0.018 | 0.173 | 0.076 | 0.037 |
| 10          | 0.017 | 0.044 | 0.047 | 0.012 | 0.102 | 0.095 | 0.030 |
| 15          | 0.018 | 0.040 | 0.042 | 0.011 | 0.080 | 0.105 | 0.029 |
| 20          | 0.020 | 0.039 | 0.041 | 0.010 | 0.071 | 0.112 | 0.029 |
| 25          | 0.021 | 0.039 | 0.041 | 0.010 | 0.066 | 0.118 | 0.030 |
| 30          | 0.021 | 0.040 | 0.042 | 0.011 | 0.068 | 0.122 | 0.031 |
| 35          | 0.022 | 0.042 | 0.043 | 0.011 | 0.070 | 0.126 | 0.031 |
| 40          | 0.022 | 0.043 | 0.044 | 0.011 | 0.072 | 0.130 | 0.032 |
| 45          | 0.023 | 0.043 | 0.045 | 0.011 | 0.074 | 0.134 | 0.033 |
| 50          | 0.023 | 0.044 | 0.046 | 0.012 | 0.075 | 0.138 | 0.034 |
| 55          | 0.023 | 0.045 | 0.047 | 0.012 | 0.077 | 0.141 | 0.034 |
| 60          | 0.024 | 0.046 | 0.048 | 0.012 | 0.078 | 0.144 | 0.035 |

Title : South Coast Air Basin Subarea Winter CYr 2030 Default Title  
Version : Emfac2007 V2.3 Nov 1 2006  
Run Date : 2010/04/05 15:57:26  
Scen Year: 2030 -- All model years in the range 1986 to 2030 selected  
Season : Winter  
Area : Riverside (SC)

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Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter  
Emfac2007 Emission Factors: V2.3 Nov 1 2006

Riverside (SC)

Riverside (SC)

Riverside

Table 1: Running Exhaust Emissions (grams/mile)

Pollutant Name: Reactive Org Gases Temperature: 70F Relative Humidity:  
0%

| Speed<br>MPH | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 5            | 0.046 | 0.089 | 0.123 | 1.717 | 1.970 | 4.695 | 0.210 |

35 0.007 0.013 0.019 0.188 0.313 1.810 0.038

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Pollutant Name: Carbon Monoxide Temperature: 70F Relative Humidity: 0%

| Speed<br>MPH | LDA   | LDT   | MDT   | HDT   | UBUS   | MCY    | ALL   |
|--------------|-------|-------|-------|-------|--------|--------|-------|
| 5            | 0.930 | 1.620 | 2.064 | 5.261 | 23.021 | 22.184 | 1.798 |
| 35           | 0.553 | 0.955 | 1.138 | 1.113 | 4.424  | 14.362 | 0.946 |

Pollutant Name: Oxides of Nitrogen Temperature: 70F Relative Humidity: 0%

| Speed<br>MPH | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 5            | 0.080 | 0.162 | 0.271 | 5.698 | 6.421 | 1.398 | 0.465 |
| 35           | 0.046 | 0.091 | 0.162 | 2.143 | 4.268 | 1.271 | 0.210 |

Pollutant Name: Carbon Dioxide Temperature: 70F Relative Humidity: 0%

| Speed<br>MPH | LDA     | LDT      | MDT      | HDT      | UBUS     | MCY     | ALL      |
|--------------|---------|----------|----------|----------|----------|---------|----------|
| 5            | 923.311 | 1182.179 | 1686.790 | 3242.541 | 2431.322 | 266.239 | 1252.656 |
| 35           | 300.360 | 384.853  | 522.770  | 1594.852 | 1273.910 | 139.883 | 434.283  |

Pollutant Name: Sulfur Dioxide Temperature: 70F Relative Humidity: 0%

| Speed<br>MPH | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 5            | 0.009 | 0.011 | 0.016 | 0.031 | 0.024 | 0.003 | 0.012 |
| 35           | 0.003 | 0.004 | 0.005 | 0.015 | 0.012 | 0.002 | 0.004 |

Pollutant Name: PM2.5 Temperature: 70F Relative Humidity: 0%

| Speed<br>MPH | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 5            | 0.060 | 0.127 | 0.131 | 0.130 | 0.183 | 0.023 | 0.098 |
| 35           | 0.010 | 0.021 | 0.022 | 0.066 | 0.040 | 0.011 | 0.019 |

Pollutant Name: PM2.5 - Tire Wear Temperature: 70F Relative Humidity: 0%

Speed

| MPH | LDA   | LDT   | MDT   | emfac.rts<br>HDT | UBUS  | MCY   | ALL   |
|-----|-------|-------|-------|------------------|-------|-------|-------|
| 5   | 0.002 | 0.002 | 0.002 | 0.007            | 0.003 | 0.001 | 0.002 |
| 35  | 0.002 | 0.002 | 0.002 | 0.007            | 0.003 | 0.001 | 0.002 |

Pollutant Name: PM2.5 - Brake Wear      Temperature: 70F    Relative Humidity: 0%

| Speed<br>MPH | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 5            | 0.005 | 0.005 | 0.005 | 0.010 | 0.005 | 0.003 | 0.006 |
| 35           | 0.005 | 0.005 | 0.005 | 0.010 | 0.005 | 0.003 | 0.006 |

Pollutant Name: Gasoline - mi/gal      Temperature: 70F    Relative Humidity: 0%

| Speed<br>MPH | LDA    | LDT    | MDT    | HDT    | UBUS   | MCY    | ALL    |
|--------------|--------|--------|--------|--------|--------|--------|--------|
| 5            | 9.580  | 7.471  | 5.203  | 3.506  | 3.437  | 28.027 | 8.267  |
| 35           | 29.414 | 22.931 | 16.889 | 17.718 | 17.386 | 52.624 | 25.242 |

Pollutant Name: Diesel - mi/gal      Temperature: 70F    Relative Humidity: 0%

| Speed<br>MPH | LDA    | LDT    | MDT    | HDT   | UBUS  | MCY   | ALL   |
|--------------|--------|--------|--------|-------|-------|-------|-------|
| 5            | 29.156 | 29.156 | 19.514 | 3.480 | 4.344 | 0.000 | 5.549 |
| 35           | 29.156 | 29.156 | 19.514 | 5.764 | 4.344 | 0.000 | 7.538 |

Title : South Coast Air Basin Subarea Winter CYr 2030 Default Title  
Version : Emfac2007 V2.3 Nov 1 2006  
Run Date : 2010/04/05 15:57:26  
Scen Year: 2030 -- All model years in the range 1986 to 2030 selected  
Season : Winter  
Area : Riverside (SC)

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Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter  
Emfac2007 Emission Factors: V2.3 Nov 1 2006

(SC)      Riverside (SC)      Riverside (SC)      Riverside

Table 2: Starting Emissions (grams/trip)

Pollutant Name: Reactive Org Gases      Temperature: 70F    Relative Humidity: ALL

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| Time<br>min | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|-------------|-------|-------|-------|-------|-------|-------|-------|
| 5           | 0.005 | 0.009 | 0.027 | 0.054 | 0.311 | 0.654 | 0.021 |
| 10          | 0.010 | 0.017 | 0.054 | 0.105 | 0.606 | 0.807 | 0.036 |
| 20          | 0.019 | 0.034 | 0.106 | 0.198 | 1.148 | 1.100 | 0.065 |
| 30          | 0.027 | 0.050 | 0.156 | 0.281 | 1.628 | 1.377 | 0.092 |
| 40          | 0.035 | 0.064 | 0.204 | 0.353 | 2.044 | 1.638 | 0.117 |
| 50          | 0.043 | 0.078 | 0.249 | 0.414 | 2.398 | 1.883 | 0.141 |
| 60          | 0.050 | 0.091 | 0.292 | 0.464 | 2.688 | 2.061 | 0.162 |
| 120         | 0.079 | 0.149 | 0.494 | 0.522 | 3.022 | 2.330 | 0.244 |
| 180         | 0.077 | 0.145 | 0.489 | 0.553 | 3.207 | 2.358 | 0.243 |
| 240         | 0.081 | 0.154 | 0.520 | 0.584 | 3.385 | 2.507 | 0.258 |
| 300         | 0.086 | 0.164 | 0.551 | 0.614 | 3.558 | 2.653 | 0.273 |
| 360         | 0.091 | 0.173 | 0.582 | 0.643 | 3.725 | 2.795 | 0.288 |
| 420         | 0.095 | 0.182 | 0.613 | 0.671 | 3.886 | 2.935 | 0.302 |
| 480         | 0.100 | 0.190 | 0.643 | 0.698 | 4.041 | 3.071 | 0.317 |
| 540         | 0.105 | 0.199 | 0.674 | 0.723 | 4.191 | 3.205 | 0.331 |
| 600         | 0.109 | 0.208 | 0.704 | 0.748 | 4.334 | 3.335 | 0.346 |
| 660         | 0.114 | 0.217 | 0.734 | 0.772 | 4.472 | 3.463 | 0.360 |
| 720         | 0.118 | 0.225 | 0.764 | 0.795 | 4.604 | 3.587 | 0.374 |

ALL Pollutant Name: Carbon Monoxide Temperature: 70F Relative Humidity:

| Time<br>min | LDA   | LDT   | MDT   | HDT    | UBUS   | MCY    | ALL   |
|-------------|-------|-------|-------|--------|--------|--------|-------|
| 5           | 0.085 | 0.150 | 0.398 | 0.907  | 3.377  | 2.993  | 0.250 |
| 10          | 0.167 | 0.297 | 0.786 | 1.777  | 6.616  | 3.611  | 0.465 |
| 20          | 0.326 | 0.580 | 1.537 | 3.407  | 12.684 | 4.795  | 0.878 |
| 30          | 0.477 | 0.849 | 2.252 | 4.889  | 18.202 | 5.910  | 1.268 |
| 40          | 0.619 | 1.104 | 2.932 | 6.223  | 23.172 | 6.954  | 1.634 |
| 50          | 0.754 | 1.344 | 3.575 | 7.411  | 27.593 | 7.928  | 1.977 |
| 60          | 0.880 | 1.570 | 4.184 | 8.451  | 31.465 | 8.833  | 2.297 |
| 120         | 1.401 | 2.498 | 6.686 | 9.869  | 36.746 | 12.501 | 3.478 |
| 180         | 1.322 | 2.366 | 6.402 | 10.158 | 37.820 | 12.107 | 3.349 |
| 240         | 1.434 | 2.569 | 6.971 | 10.456 | 38.930 | 13.129 | 3.614 |
| 300         | 1.534 | 2.748 | 7.471 | 10.763 | 40.075 | 14.073 | 3.850 |
| 360         | 1.620 | 2.903 | 7.903 | 11.080 | 41.255 | 14.940 | 4.057 |
| 420         | 1.693 | 3.034 | 8.266 | 11.407 | 42.471 | 15.730 | 4.235 |
| 480         | 1.752 | 3.142 | 8.560 | 11.743 | 43.722 | 16.441 | 4.384 |
| 540         | 1.799 | 3.225 | 8.786 | 12.088 | 45.009 | 17.075 | 4.504 |
| 600         | 1.832 | 3.284 | 8.943 | 12.443 | 46.331 | 17.632 | 4.595 |
| 660         | 1.852 | 3.320 | 9.032 | 12.808 | 47.688 | 18.111 | 4.657 |
| 720         | 1.859 | 3.331 | 9.052 | 13.182 | 49.081 | 18.513 | 4.690 |

ALL Pollutant Name: Oxides of Nitrogen Temperature: 70F Relative Humidity:

| Time<br>min | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|-------------|-------|-------|-------|-------|-------|-------|-------|
| 5           | 0.040 | 0.091 | 0.562 | 0.213 | 1.485 | 0.155 | 0.185 |
| 10          | 0.042 | 0.096 | 0.584 | 0.320 | 2.238 | 0.194 | 0.199 |
| 20          | 0.046 | 0.105 | 0.625 | 0.509 | 3.559 | 0.264 | 0.222 |
| 30          | 0.050 | 0.113 | 0.662 | 0.664 | 4.636 | 0.322 | 0.242 |
| 40          | 0.053 | 0.119 | 0.693 | 0.783 | 5.468 | 0.368 | 0.259 |



|     |       |       |       |           |       |       |       |
|-----|-------|-------|-------|-----------|-------|-------|-------|
|     |       |       |       | emfac.rts |       |       |       |
| 50  | 0.056 | 0.124 | 0.719 | 0.867     | 6.056 | 0.401 | 0.272 |
| 60  | 0.058 | 0.128 | 0.740 | 0.916     | 6.398 | 0.423 | 0.281 |
| 120 | 0.062 | 0.139 | 0.812 | 0.923     | 6.445 | 0.425 | 0.303 |
| 180 | 0.063 | 0.140 | 0.813 | 0.919     | 6.421 | 0.421 | 0.304 |
| 240 | 0.062 | 0.139 | 0.806 | 0.914     | 6.385 | 0.415 | 0.302 |
| 300 | 0.062 | 0.137 | 0.796 | 0.907     | 6.336 | 0.407 | 0.298 |
| 360 | 0.060 | 0.135 | 0.781 | 0.898     | 6.275 | 0.397 | 0.293 |
| 420 | 0.059 | 0.132 | 0.762 | 0.888     | 6.201 | 0.385 | 0.286 |
| 480 | 0.057 | 0.128 | 0.739 | 0.875     | 6.115 | 0.372 | 0.278 |
| 540 | 0.056 | 0.124 | 0.712 | 0.861     | 6.017 | 0.357 | 0.269 |
| 600 | 0.053 | 0.118 | 0.680 | 0.845     | 5.905 | 0.340 | 0.258 |
| 660 | 0.051 | 0.113 | 0.645 | 0.828     | 5.782 | 0.321 | 0.246 |
| 720 | 0.048 | 0.106 | 0.605 | 0.808     | 5.645 | 0.301 | 0.233 |

Pollutant Name: Carbon Dioxide      Temperature: 70F    Relative Humidity:  
ALL

| Time<br>min | LDA     | LDT     | MDT     | HDT     | UBUS    | MCY    | ALL     |
|-------------|---------|---------|---------|---------|---------|--------|---------|
| 5           | 11.999  | 15.308  | 21.930  | 2.671   | 5.480   | 13.280 | 14.885  |
| 10          | 13.451  | 17.175  | 24.673  | 5.328   | 10.930  | 15.478 | 16.824  |
| 20          | 16.846  | 21.537  | 31.053  | 10.596  | 21.739  | 19.793 | 21.298  |
| 30          | 20.899  | 26.735  | 38.625  | 15.806  | 32.426  | 24.001 | 26.565  |
| 40          | 25.609  | 32.771  | 47.391  | 20.956  | 42.992  | 28.101 | 32.626  |
| 50          | 30.976  | 39.644  | 57.350  | 26.047  | 53.437  | 32.094 | 39.480  |
| 60          | 37.000  | 47.353  | 68.502  | 31.079  | 63.760  | 35.980 | 47.127  |
| 120         | 86.388  | 110.430 | 159.181 | 52.860  | 108.445 | 53.433 | 108.548 |
| 180         | 98.037  | 125.337 | 180.741 | 62.450  | 128.119 | 57.668 | 123.288 |
| 240         | 109.672 | 140.223 | 202.254 | 71.475  | 146.633 | 61.655 | 137.977 |
| 300         | 121.294 | 155.088 | 223.720 | 79.933  | 163.985 | 65.394 | 152.613 |
| 360         | 132.901 | 169.931 | 245.139 | 87.825  | 180.176 | 68.884 | 167.198 |
| 420         | 144.495 | 184.753 | 266.511 | 95.151  | 195.205 | 72.125 | 181.731 |
| 480         | 156.075 | 199.554 | 287.836 | 101.911 | 209.074 | 75.117 | 196.212 |
| 540         | 167.642 | 214.333 | 309.114 | 108.105 | 221.781 | 77.862 | 210.642 |
| 600         | 179.194 | 229.091 | 330.346 | 113.733 | 233.327 | 80.357 | 225.020 |
| 660         | 190.733 | 243.828 | 351.530 | 118.795 | 243.711 | 82.604 | 239.346 |
| 720         | 202.258 | 258.543 | 372.668 | 123.290 | 252.935 | 84.602 | 253.621 |

Pollutant Name: Sulfur Dioxide      Temperature: 70F    Relative Humidity:  
ALL

| Time<br>min | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|-------------|-------|-------|-------|-------|-------|-------|-------|
| 5           | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 10          | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 20          | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 30          | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 |
| 40          | 0.000 | 0.000 | 0.001 | 0.000 | 0.001 | 0.000 | 0.000 |
| 50          | 0.000 | 0.000 | 0.001 | 0.000 | 0.001 | 0.000 | 0.000 |
| 60          | 0.000 | 0.000 | 0.001 | 0.000 | 0.001 | 0.001 | 0.000 |
| 120         | 0.001 | 0.001 | 0.002 | 0.001 | 0.002 | 0.001 | 0.001 |
| 180         | 0.001 | 0.001 | 0.002 | 0.001 | 0.002 | 0.001 | 0.001 |
| 240         | 0.001 | 0.001 | 0.002 | 0.001 | 0.002 | 0.001 | 0.001 |
| 300         | 0.001 | 0.002 | 0.002 | 0.001 | 0.002 | 0.001 | 0.002 |
| 360         | 0.001 | 0.002 | 0.002 | 0.001 | 0.002 | 0.001 | 0.002 |
| 420         | 0.001 | 0.002 | 0.003 | 0.001 | 0.003 | 0.001 | 0.002 |
| 480         | 0.002 | 0.002 | 0.003 | 0.001 | 0.003 | 0.001 | 0.002 |

|     |       |       |       |           |       |       |       |
|-----|-------|-------|-------|-----------|-------|-------|-------|
|     |       |       |       | emfac.rts |       |       |       |
| 540 | 0.002 | 0.002 | 0.003 | 0.001     | 0.003 | 0.001 | 0.002 |
| 600 | 0.002 | 0.002 | 0.003 | 0.001     | 0.003 | 0.001 | 0.002 |
| 660 | 0.002 | 0.002 | 0.004 | 0.001     | 0.003 | 0.001 | 0.002 |
| 720 | 0.002 | 0.003 | 0.004 | 0.001     | 0.003 | 0.001 | 0.003 |

Pollutant Name: PM2.5                      Temperature: 70F   Relative Humidity:  
ALL

| Time<br>min | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|-------------|-------|-------|-------|-------|-------|-------|-------|
| 5           | 0.001 | 0.001 | 0.001 | 0.000 | 0.001 | 0.005 | 0.001 |
| 10          | 0.001 | 0.002 | 0.002 | 0.001 | 0.002 | 0.005 | 0.002 |
| 20          | 0.002 | 0.004 | 0.004 | 0.001 | 0.003 | 0.004 | 0.003 |
| 30          | 0.003 | 0.007 | 0.005 | 0.002 | 0.005 | 0.003 | 0.005 |
| 40          | 0.004 | 0.009 | 0.007 | 0.002 | 0.006 | 0.003 | 0.006 |
| 50          | 0.005 | 0.011 | 0.009 | 0.003 | 0.007 | 0.002 | 0.008 |
| 60          | 0.006 | 0.012 | 0.010 | 0.003 | 0.008 | 0.002 | 0.009 |
| 120         | 0.010 | 0.020 | 0.017 | 0.004 | 0.011 | 0.005 | 0.014 |
| 180         | 0.011 | 0.023 | 0.019 | 0.005 | 0.011 | 0.007 | 0.016 |
| 240         | 0.012 | 0.025 | 0.021 | 0.005 | 0.012 | 0.008 | 0.018 |
| 300         | 0.013 | 0.027 | 0.022 | 0.005 | 0.012 | 0.010 | 0.019 |
| 360         | 0.014 | 0.028 | 0.023 | 0.005 | 0.012 | 0.011 | 0.020 |
| 420         | 0.015 | 0.030 | 0.025 | 0.005 | 0.013 | 0.012 | 0.021 |
| 480         | 0.015 | 0.031 | 0.025 | 0.005 | 0.013 | 0.013 | 0.022 |
| 540         | 0.016 | 0.032 | 0.026 | 0.005 | 0.013 | 0.014 | 0.022 |
| 600         | 0.016 | 0.032 | 0.027 | 0.006 | 0.014 | 0.014 | 0.023 |
| 660         | 0.016 | 0.032 | 0.027 | 0.006 | 0.014 | 0.015 | 0.023 |
| 720         | 0.016 | 0.032 | 0.027 | 0.006 | 0.015 | 0.015 | 0.023 |

Title : South Coast Air Basin Subarea Winter CYr 2030 Default Title  
Version : Emfac2007 V2.3 Nov 1 2006  
Run Date : 2010/04/05 15:57:26  
Scen Year: 2030 -- All model years in the range 1986 to 2030 selected  
Season : Winter  
Area : Riverside (SC)

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Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter  
Emfac2007 Emission Factors: V2.3 Nov 1 2006

(SC)      Riverside (SC)                      Riverside (SC)                      Riverside

Table 4: Hot Soak Emissions (grams/trip)

Pollutant Name: Reactive Org Gases                      Temperature: 70F   Relative Humidity:  
ALL

| Time<br>min | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|-------------|-------|-------|-------|-------|-------|-------|-------|
| 5           | 0.024 | 0.037 | 0.028 | 0.003 | 0.056 | 0.149 | 0.029 |
| 10          | 0.044 | 0.068 | 0.052 | 0.006 | 0.104 | 0.278 | 0.054 |

Hot soak results are scaled to reflect zero emissions for trip lengths of less than 5 minutes (about 25% of in-use trips).

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Riverside (SC) Riverside (SC) Riverside

(grams/hour)

| Temp<br>degF | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 70           | 0.026 | 0.053 | 0.054 | 0.002 | 0.003 | 0.403 | 0.054 |

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(SC) Riverside (SC) Riverside (SC) Riverside

(grams/hour)

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| Temp<br>degF | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 70           | 0.002 | 0.004 | 0.004 | 0.000 | 0.001 | 0.038 | 0.004 |

Title : South Coast Air Basin Subarea Winter CYr 2030 Default Title  
 Version : Emfac2007 V2.3 Nov 1 2006  
 Run Date : 2010/04/05 15:57:26  
 Scen Year: 2030 -- All model years in the range 1986 to 2030 selected  
 Season : Winter  
 Area : Riverside (SC)

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Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter  
 Emfac2007 Emission Factors: V2.3 Nov 1 2006

Riverside (SC) Riverside (SC) Riverside

Table 6a: Partial Day Resting Loss Emissions

(grams/hour)

Pollutant Name: Reactive Org Gases Temperature: ALL Relative Humidity:  
 ALL

| Temp<br>degF | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 70           | 0.015 | 0.035 | 0.038 | 0.001 | 0.002 | 0.130 | 0.029 |

Title : South Coast Air Basin Subarea Winter CYr 2030 Default Title  
 Version : Emfac2007 V2.3 Nov 1 2006  
 Run Date : 2010/04/05 15:57:26  
 Scen Year: 2030 -- All model years in the range 1986 to 2030 selected  
 Season : Winter  
 Area : Riverside (SC)

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Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter  
 Emfac2007 Emission Factors: V2.3 Nov 1 2006

Riverside (SC) Riverside (SC) Riverside

Table 6b: Multi-Day Resting Loss Emissions

(grams/hour)

Pollutant Name: Reactive Org Gases Temperature: ALL Relative Humidity:  
 ALL

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(SC) Riverside (SC) Riverside (SC) Riverside

Pollutant Name: ALL Temperature: ALL Relative Humidity: ALL

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(SC) Riverside (SC) Riverside (SC) Riverside

Pollutant Name: Reactive Org Gases      Temperature: 70F    Relative Humidity:

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| Time<br>min | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|-------------|-------|-------|-------|-------|-------|-------|-------|
| 1           | 0.009 | 0.182 | 0.198 | 0.043 | 0.750 | 0.004 | 0.100 |
| 2           | 0.007 | 0.095 | 0.103 | 0.022 | 0.383 | 0.037 | 0.054 |
| 3           | 0.008 | 0.068 | 0.074 | 0.016 | 0.263 | 0.056 | 0.040 |
| 4           | 0.010 | 0.056 | 0.061 | 0.013 | 0.204 | 0.067 | 0.035 |
| 5           | 0.012 | 0.049 | 0.053 | 0.011 | 0.170 | 0.075 | 0.032 |
| 10          | 0.015 | 0.036 | 0.038 | 0.008 | 0.103 | 0.094 | 0.027 |
| 15          | 0.017 | 0.034 | 0.035 | 0.007 | 0.085 | 0.104 | 0.026 |
| 20          | 0.018 | 0.033 | 0.035 | 0.007 | 0.079 | 0.111 | 0.026 |
| 25          | 0.019 | 0.034 | 0.035 | 0.007 | 0.078 | 0.117 | 0.027 |
| 30          | 0.019 | 0.035 | 0.036 | 0.007 | 0.081 | 0.121 | 0.028 |
| 35          | 0.020 | 0.036 | 0.037 | 0.007 | 0.084 | 0.125 | 0.028 |
| 40          | 0.020 | 0.037 | 0.038 | 0.007 | 0.086 | 0.129 | 0.029 |
| 45          | 0.021 | 0.037 | 0.039 | 0.008 | 0.089 | 0.133 | 0.030 |
| 50          | 0.021 | 0.038 | 0.040 | 0.008 | 0.091 | 0.137 | 0.030 |
| 55          | 0.022 | 0.039 | 0.041 | 0.008 | 0.093 | 0.140 | 0.031 |
| 60          | 0.022 | 0.040 | 0.041 | 0.008 | 0.095 | 0.143 | 0.031 |

Title : South Coast Air Basin Subarea Winter CYr 2030 Default Title  
Version : Emfac2007 V2.3 Nov 1 2006  
Run Date : 2010/04/05 15:57:26  
Scen Year: 2030 -- All model years in the range 1986 to 2030 selected  
Season : Winter  
Area : San Bernardino (SC)

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Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter  
Emfac2007 Emission Factors: V2.3 Nov 1 2006

San Bernardino (SC) San Bernardino (SC) San Bernardino (SC)

Table 1: Running Exhaust Emissions (grams/mile)

Pollutant Name: Reactive Org Gases Temperature: 70F Relative Humidity: 0%

| Speed<br>MPH | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 5            | 0.046 | 0.085 | 0.122 | 1.707 | 1.608 | 4.672 | 0.223 |
| 35           | 0.007 | 0.013 | 0.020 | 0.191 | 0.266 | 1.802 | 0.036 |

Pollutant Name: Carbon Monoxide Temperature: 70F Relative Humidity: 0%

| Speed<br>MPH | LDA   | LDT   | MDT   | HDT   | UBUS   | MCY    | ALL   |
|--------------|-------|-------|-------|-------|--------|--------|-------|
| 5            | 0.893 | 1.528 | 1.943 | 5.273 | 18.624 | 22.030 | 1.733 |
| 35           | 0.530 | 0.899 | 1.006 | 1.119 | 3.538  | 14.266 | 0.856 |

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Pollutant Name: Oxides of Nitrogen      Temperature: 70F    Relative Humidity: 0%

| Speed<br>MPH | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 5            | 0.078 | 0.155 | 0.293 | 5.901 | 7.298 | 1.380 | 0.575 |
| 35           | 0.044 | 0.087 | 0.180 | 2.247 | 4.395 | 1.259 | 0.252 |

Pollutant Name: Carbon Dioxide      Temperature: 70F    Relative Humidity: 0%

| Speed<br>MPH | LDA     | LDT      | MDT      | HDT      | UBUS     | MCY     | ALL      |
|--------------|---------|----------|----------|----------|----------|---------|----------|
| 5            | 923.618 | 1182.914 | 1718.772 | 3128.353 | 2444.053 | 266.251 | 1288.060 |
| 35           | 300.455 | 384.995  | 520.985  | 1595.042 | 1291.942 | 139.892 | 455.903  |

Pollutant Name: Sulfur Dioxide      Temperature: 70F    Relative Humidity: 0%

| Speed<br>MPH | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 5            | 0.009 | 0.011 | 0.017 | 0.030 | 0.024 | 0.003 | 0.012 |
| 35           | 0.003 | 0.004 | 0.005 | 0.015 | 0.012 | 0.002 | 0.004 |

Pollutant Name: PM2.5      Temperature: 70F    Relative Humidity: 0%

| Speed<br>MPH | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 5            | 0.052 | 0.109 | 0.106 | 0.149 | 0.206 | 0.023 | 0.086 |
| 35           | 0.008 | 0.018 | 0.018 | 0.072 | 0.046 | 0.011 | 0.018 |

Pollutant Name: PM2.5 - Tire Wear      Temperature: 70F    Relative Humidity: 0%

| Speed<br>MPH | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 5            | 0.002 | 0.002 | 0.002 | 0.007 | 0.003 | 0.001 | 0.002 |
| 35           | 0.002 | 0.002 | 0.002 | 0.007 | 0.003 | 0.001 | 0.002 |

Pollutant Name: PM2.5 - Brake Wear      Temperature: 70F    Relative Humidity: 0%

| Speed<br>MPH | LDA | LDT | MDT | HDT | UBUS | MCY | ALL |
|--------------|-----|-----|-----|-----|------|-----|-----|
|--------------|-----|-----|-----|-----|------|-----|-----|

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|    |       |       |       |       |       |       |       |
|----|-------|-------|-------|-------|-------|-------|-------|
| 5  | 0.005 | 0.005 | 0.005 | 0.010 | 0.005 | 0.003 | 0.006 |
| 35 | 0.005 | 0.005 | 0.005 | 0.010 | 0.005 | 0.003 | 0.006 |

Pollutant Name: Gasoline - mi/gal      Temperature: 70F    Relative Humidity: 0%

| Speed<br>MPH | LDA    | LDT    | MDT    | HDT    | UBUS   | MCY    | ALL    |
|--------------|--------|--------|--------|--------|--------|--------|--------|
| 5            | 9.577  | 7.470  | 5.081  | 3.508  | 3.458  | 28.054 | 8.210  |
| 35           | 29.408 | 22.929 | 16.958 | 17.727 | 17.484 | 52.675 | 25.260 |

Pollutant Name: Diesel - mi/gal      Temperature: 70F    Relative Humidity: 0%

| Speed<br>MPH | LDA    | LDT    | MDT    | HDT   | UBUS  | MCY   | ALL   |
|--------------|--------|--------|--------|-------|-------|-------|-------|
| 5            | 29.156 | 29.156 | 19.454 | 3.729 | 4.287 | 0.000 | 5.798 |
| 35           | 29.156 | 29.156 | 19.454 | 5.836 | 4.287 | 0.000 | 7.620 |

Title : South Coast Air Basin Subarea Winter CYr 2030 Default Title  
Version : Emfac2007 V2.3 Nov 1 2006  
Run Date : 2010/04/05 15:57:26  
Scen Year: 2030 -- All model years in the range 1986 to 2030 selected  
Season : Winter  
Area : San Bernardino (SC)

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Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter  
Emfac2007 Emission Factors: V2.3 Nov 1 2006

San Bernardino (SC)      San Bernardino (SC)      San Bernardino (SC)

Table 2: Starting Emissions (grams/trip)

Pollutant Name: Reactive Org Gases      Temperature: 70F    Relative Humidity: ALL

| Time<br>min | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|-------------|-------|-------|-------|-------|-------|-------|-------|
| 5           | 0.005 | 0.009 | 0.032 | 0.046 | 0.291 | 0.652 | 0.021 |
| 10          | 0.010 | 0.018 | 0.064 | 0.089 | 0.568 | 0.803 | 0.038 |
| 20          | 0.019 | 0.035 | 0.124 | 0.168 | 1.077 | 1.093 | 0.068 |
| 30          | 0.028 | 0.050 | 0.182 | 0.238 | 1.526 | 1.368 | 0.097 |
| 40          | 0.036 | 0.065 | 0.236 | 0.299 | 1.917 | 1.626 | 0.124 |
| 50          | 0.044 | 0.079 | 0.287 | 0.351 | 2.248 | 1.869 | 0.149 |
| 60          | 0.050 | 0.092 | 0.336 | 0.394 | 2.520 | 2.046 | 0.171 |
| 120         | 0.079 | 0.148 | 0.549 | 0.443 | 2.834 | 2.311 | 0.255 |



|     |       |       |       |           |       |       |       |
|-----|-------|-------|-------|-----------|-------|-------|-------|
|     |       |       |       | emfac.rts |       |       |       |
| 180 | 0.077 | 0.145 | 0.547 | 0.470     | 3.007 | 2.340 | 0.254 |
| 240 | 0.081 | 0.154 | 0.581 | 0.496     | 3.174 | 2.487 | 0.270 |
| 300 | 0.086 | 0.163 | 0.616 | 0.521     | 3.336 | 2.632 | 0.285 |
| 360 | 0.091 | 0.172 | 0.650 | 0.546     | 3.493 | 2.774 | 0.301 |
| 420 | 0.095 | 0.181 | 0.684 | 0.569     | 3.644 | 2.912 | 0.316 |
| 480 | 0.100 | 0.189 | 0.717 | 0.592     | 3.790 | 3.048 | 0.331 |
| 540 | 0.104 | 0.198 | 0.751 | 0.614     | 3.930 | 3.181 | 0.346 |
| 600 | 0.109 | 0.207 | 0.784 | 0.635     | 4.064 | 3.310 | 0.361 |
| 660 | 0.113 | 0.215 | 0.817 | 0.655     | 4.193 | 3.437 | 0.375 |
| 720 | 0.118 | 0.224 | 0.850 | 0.674     | 4.317 | 3.560 | 0.390 |

ALL Pollutant Name: Carbon Monoxide Temperature: 70F Relative Humidity:

| Time<br>min | LDA   | LDT   | MDT   | HDT    | UBUS   | MCY    | ALL   |
|-------------|-------|-------|-------|--------|--------|--------|-------|
| 5           | 0.080 | 0.142 | 0.425 | 0.748  | 2.807  | 2.975  | 0.250 |
| 10          | 0.158 | 0.281 | 0.840 | 1.465  | 5.499  | 3.578  | 0.471 |
| 20          | 0.309 | 0.547 | 1.639 | 2.809  | 10.543 | 4.735  | 0.893 |
| 30          | 0.452 | 0.800 | 2.398 | 4.031  | 15.130 | 5.825  | 1.291 |
| 40          | 0.586 | 1.039 | 3.118 | 5.132  | 19.261 | 6.847  | 1.663 |
| 50          | 0.713 | 1.264 | 3.796 | 6.111  | 22.935 | 7.801  | 2.011 |
| 60          | 0.832 | 1.475 | 4.435 | 6.969  | 26.154 | 8.688  | 2.333 |
| 120         | 1.315 | 2.331 | 6.975 | 8.138  | 30.544 | 12.302 | 3.479 |
| 180         | 1.239 | 2.205 | 6.699 | 8.376  | 31.436 | 11.932 | 3.360 |
| 240         | 1.342 | 2.391 | 7.275 | 8.622  | 32.359 | 12.947 | 3.616 |
| 300         | 1.434 | 2.555 | 7.783 | 8.876  | 33.310 | 13.886 | 3.844 |
| 360         | 1.513 | 2.697 | 8.223 | 9.137  | 34.292 | 14.746 | 4.045 |
| 420         | 1.581 | 2.818 | 8.595 | 9.406  | 35.302 | 15.530 | 4.219 |
| 480         | 1.636 | 2.917 | 8.899 | 9.683  | 36.342 | 16.235 | 4.366 |
| 540         | 1.680 | 2.995 | 9.135 | 9.968  | 37.412 | 16.863 | 4.486 |
| 600         | 1.711 | 3.051 | 9.302 | 10.261 | 38.511 | 17.413 | 4.578 |
| 660         | 1.731 | 3.085 | 9.402 | 10.562 | 39.639 | 17.886 | 4.643 |
| 720         | 1.739 | 3.098 | 9.434 | 10.870 | 40.797 | 18.281 | 4.682 |

ALL Pollutant Name: Oxides of Nitrogen Temperature: 70F Relative Humidity:

| Time<br>min | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|-------------|-------|-------|-------|-------|-------|-------|-------|
| 5           | 0.036 | 0.083 | 0.604 | 0.175 | 1.370 | 0.153 | 0.193 |
| 10          | 0.039 | 0.088 | 0.635 | 0.263 | 2.064 | 0.192 | 0.209 |
| 20          | 0.043 | 0.098 | 0.691 | 0.419 | 3.283 | 0.261 | 0.238 |
| 30          | 0.047 | 0.106 | 0.739 | 0.545 | 4.276 | 0.318 | 0.262 |
| 40          | 0.050 | 0.112 | 0.780 | 0.643 | 5.044 | 0.363 | 0.281 |
| 50          | 0.053 | 0.117 | 0.813 | 0.712 | 5.586 | 0.396 | 0.296 |
| 60          | 0.055 | 0.121 | 0.839 | 0.753 | 5.902 | 0.417 | 0.307 |
| 120         | 0.059 | 0.132 | 0.914 | 0.758 | 5.945 | 0.420 | 0.330 |
| 180         | 0.059 | 0.132 | 0.915 | 0.755 | 5.923 | 0.416 | 0.330 |
| 240         | 0.059 | 0.131 | 0.908 | 0.751 | 5.889 | 0.410 | 0.328 |
| 300         | 0.058 | 0.130 | 0.896 | 0.745 | 5.844 | 0.401 | 0.324 |
| 360         | 0.057 | 0.127 | 0.880 | 0.738 | 5.788 | 0.392 | 0.318 |
| 420         | 0.056 | 0.124 | 0.860 | 0.729 | 5.720 | 0.380 | 0.312 |
| 480         | 0.054 | 0.121 | 0.835 | 0.719 | 5.641 | 0.367 | 0.303 |
| 540         | 0.053 | 0.117 | 0.805 | 0.708 | 5.550 | 0.352 | 0.293 |
| 600         | 0.050 | 0.112 | 0.771 | 0.695 | 5.447 | 0.335 | 0.282 |
| 660         | 0.048 | 0.107 | 0.733 | 0.680 | 5.333 | 0.317 | 0.270 |

720 0.046 0.101 0.690 0.664 5.207 0.297 0.256

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Pollutant Name: Carbon Dioxide Temperature: 70F Relative Humidity:  
ALL

| Time<br>min | LDA     | LDT     | MDT     | HDT     | UBUS    | MCY    | ALL     |
|-------------|---------|---------|---------|---------|---------|--------|---------|
| 5           | 11.988  | 15.299  | 21.879  | 2.696   | 5.455   | 13.265 | 14.659  |
| 10          | 13.445  | 17.176  | 24.688  | 5.377   | 10.880  | 15.462 | 16.638  |
| 20          | 16.851  | 21.556  | 31.196  | 10.695  | 21.639  | 19.776 | 21.178  |
| 30          | 20.913  | 26.772  | 38.887  | 15.953  | 32.277  | 23.983 | 26.495  |
| 40          | 25.631  | 32.823  | 47.762  | 21.152  | 42.795  | 28.082 | 32.590  |
| 50          | 31.005  | 39.710  | 57.821  | 26.290  | 53.192  | 32.075 | 39.461  |
| 60          | 37.034  | 47.432  | 69.064  | 31.369  | 63.468  | 35.960 | 47.110  |
| 120         | 86.409  | 110.524 | 159.870 | 53.354  | 107.948 | 53.409 | 108.006 |
| 180         | 98.069  | 125.455 | 181.600 | 63.033  | 127.532 | 57.647 | 122.752 |
| 240         | 109.712 | 140.363 | 203.266 | 72.142  | 145.961 | 61.636 | 137.431 |
| 300         | 121.341 | 155.246 | 224.867 | 80.679  | 163.234 | 65.377 | 152.042 |
| 360         | 132.954 | 170.106 | 246.403 | 88.645  | 179.350 | 68.869 | 166.586 |
| 420         | 144.551 | 184.941 | 267.875 | 96.039  | 194.311 | 72.112 | 181.063 |
| 480         | 156.133 | 199.753 | 289.282 | 102.862 | 208.116 | 75.107 | 195.472 |
| 540         | 167.699 | 214.541 | 310.625 | 109.114 | 220.765 | 77.853 | 209.814 |
| 600         | 179.250 | 229.304 | 331.903 | 114.794 | 232.258 | 80.350 | 224.089 |
| 660         | 190.786 | 244.044 | 353.116 | 119.903 | 242.595 | 82.598 | 238.296 |
| 720         | 202.306 | 258.760 | 374.265 | 124.441 | 251.776 | 84.597 | 252.436 |

Pollutant Name: Sulfur Dioxide Temperature: 70F Relative Humidity:  
ALL

| Time<br>min | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|-------------|-------|-------|-------|-------|-------|-------|-------|
| 5           | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 10          | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 20          | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 30          | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 |
| 40          | 0.000 | 0.000 | 0.001 | 0.000 | 0.001 | 0.000 | 0.000 |
| 50          | 0.000 | 0.000 | 0.001 | 0.000 | 0.001 | 0.000 | 0.000 |
| 60          | 0.000 | 0.000 | 0.001 | 0.000 | 0.001 | 0.001 | 0.000 |
| 120         | 0.001 | 0.001 | 0.002 | 0.001 | 0.002 | 0.001 | 0.001 |
| 180         | 0.001 | 0.001 | 0.002 | 0.001 | 0.002 | 0.001 | 0.001 |
| 240         | 0.001 | 0.001 | 0.002 | 0.001 | 0.002 | 0.001 | 0.001 |
| 300         | 0.001 | 0.002 | 0.002 | 0.001 | 0.002 | 0.001 | 0.002 |
| 360         | 0.001 | 0.002 | 0.003 | 0.001 | 0.002 | 0.001 | 0.002 |
| 420         | 0.001 | 0.002 | 0.003 | 0.001 | 0.003 | 0.001 | 0.002 |
| 480         | 0.002 | 0.002 | 0.003 | 0.001 | 0.003 | 0.001 | 0.002 |
| 540         | 0.002 | 0.002 | 0.003 | 0.001 | 0.003 | 0.001 | 0.002 |
| 600         | 0.002 | 0.002 | 0.003 | 0.001 | 0.003 | 0.001 | 0.002 |
| 660         | 0.002 | 0.002 | 0.004 | 0.001 | 0.003 | 0.001 | 0.002 |
| 720         | 0.002 | 0.003 | 0.004 | 0.001 | 0.003 | 0.001 | 0.003 |

Pollutant Name: PM2.5 Temperature: 70F Relative Humidity:  
ALL

| Time<br>min | LDA | LDT | MDT | HDT | UBUS | MCY | ALL |
|-------------|-----|-----|-----|-----|------|-----|-----|
|-------------|-----|-----|-----|-----|------|-----|-----|

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|     |       |       |       |       |       |       |       |
|-----|-------|-------|-------|-------|-------|-------|-------|
| 5   | 0.000 | 0.001 | 0.001 | 0.000 | 0.001 | 0.005 | 0.001 |
| 10  | 0.001 | 0.002 | 0.002 | 0.001 | 0.002 | 0.005 | 0.001 |
| 20  | 0.002 | 0.004 | 0.003 | 0.001 | 0.003 | 0.004 | 0.003 |
| 30  | 0.003 | 0.006 | 0.005 | 0.002 | 0.005 | 0.003 | 0.004 |
| 40  | 0.004 | 0.008 | 0.006 | 0.002 | 0.006 | 0.003 | 0.005 |
| 50  | 0.005 | 0.009 | 0.008 | 0.003 | 0.007 | 0.002 | 0.007 |
| 60  | 0.005 | 0.011 | 0.009 | 0.003 | 0.008 | 0.002 | 0.008 |
| 120 | 0.009 | 0.018 | 0.015 | 0.004 | 0.011 | 0.005 | 0.012 |
| 180 | 0.010 | 0.020 | 0.017 | 0.004 | 0.011 | 0.007 | 0.014 |
| 240 | 0.011 | 0.022 | 0.018 | 0.004 | 0.011 | 0.008 | 0.015 |
| 300 | 0.011 | 0.024 | 0.020 | 0.005 | 0.012 | 0.010 | 0.016 |
| 360 | 0.012 | 0.025 | 0.021 | 0.005 | 0.012 | 0.011 | 0.017 |
| 420 | 0.013 | 0.026 | 0.022 | 0.005 | 0.012 | 0.012 | 0.018 |
| 480 | 0.013 | 0.027 | 0.023 | 0.005 | 0.013 | 0.013 | 0.019 |
| 540 | 0.014 | 0.028 | 0.023 | 0.005 | 0.013 | 0.014 | 0.019 |
| 600 | 0.014 | 0.028 | 0.024 | 0.005 | 0.013 | 0.014 | 0.020 |
| 660 | 0.014 | 0.028 | 0.024 | 0.005 | 0.014 | 0.015 | 0.020 |
| 720 | 0.014 | 0.028 | 0.024 | 0.006 | 0.014 | 0.015 | 0.020 |

Title : South Coast Air Basin Subarea Winter CYr 2030 Default Title

Version : Emfac2007 V2.3 Nov 1 2006

Run Date : 2010/04/05 15:57:26

Scen Year: 2030 -- All model years in the range 1986 to 2030 selected

Season : Winter

Area : San Bernardino (SC)

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Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter

Emfac2007 Emission Factors: V2.3 Nov 1 2006

San Bernardino (SC)  
Bernardino (SC)

San Bernardino (SC)

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Table 4: Hot Soak Emissions (grams/trip)

Pollutant Name: Reactive Org Gases Temperature: 70F Relative Humidity:  
ALL

| Time<br>min | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|-------------|-------|-------|-------|-------|-------|-------|-------|
| 5           | 0.027 | 0.040 | 0.029 | 0.003 | 0.070 | 0.144 | 0.031 |
| 10          | 0.049 | 0.075 | 0.054 | 0.005 | 0.129 | 0.268 | 0.057 |
| 20          | 0.084 | 0.128 | 0.092 | 0.008 | 0.220 | 0.466 | 0.097 |
| 30          | 0.108 | 0.165 | 0.119 | 0.011 | 0.283 | 0.612 | 0.125 |
| 40          | 0.117 | 0.179 | 0.130 | 0.012 | 0.306 | 0.670 | 0.136 |

Hot soak results are scaled to reflect zero emissions for trip lengths of less than 5 minutes (about 25% of in-use trips).

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Title : South Coast Air Basin Subarea Winter CYr 2030 Default Title  
 Version : Emfac2007 V2.3 Nov 1 2006  
 Run Date : 2010/04/05 15:57:26  
 Scen Year: 2030 -- All model years in the range 1986 to 2030 selected  
 Season : Winter  
 Area : San Bernardino (SC)

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Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter  
 Emfac2007 Emission Factors: V2.3 Nov 1 2006

San Bernardino (SC) San Bernardino (SC) San Bernardino (SC)

Table 5a: Partial Day Diurnal Loss Emissions

(grams/hour)

Pollutant Name: Reactive Org Gases Temperature: ALL Relative Humidity:  
 ALL

| Temp<br>degF | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 70           | 0.031 | 0.060 | 0.058 | 0.002 | 0.004 | 0.398 | 0.055 |

Title : South Coast Air Basin Subarea Winter CYr 2030 Default Title  
 Version : Emfac2007 V2.3 Nov 1 2006  
 Run Date : 2010/04/05 15:57:26  
 Scen Year: 2030 -- All model years in the range 1986 to 2030 selected  
 Season : Winter  
 Area : San Bernardino (SC)

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Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter  
 Emfac2007 Emission Factors: V2.3 Nov 1 2006

San Bernardino (SC) San Bernardino (SC) San Bernardino (SC)

Table 5b: Multi-Day Diurnal Loss Emissions

(grams/hour)

Pollutant Name: Reactive Org Gases Temperature: ALL Relative Humidity:  
 ALL

| Temp<br>degF | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 70           | 0.002 | 0.004 | 0.004 | 0.000 | 0.001 | 0.038 | 0.004 |

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Title : South Coast Air Basin Subarea Winter CYr 2030 Default Title  
Version : Emfac2007 V2.3 Nov 1 2006  
Run Date : 2010/04/05 15:57:26  
Scen Year: 2030 -- All model years in the range 1986 to 2030 selected  
Season : Winter  
Area : San Bernardino (SC)

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Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter  
Emfac2007 Emission Factors: V2.3 Nov 1 2006

San Bernardino (SC) San Bernardino (SC) San  
Bernardino (SC)

Table 6a: Partial Day Resting Loss Emissions

(grams/hour)

Pollutant Name: Reactive Org Gases Temperature: ALL Relative Humidity:  
ALL

| Temp<br>degF | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 70           | 0.016 | 0.038 | 0.039 | 0.001 | 0.002 | 0.129 | 0.030 |

Title : South Coast Air Basin Subarea Winter CYr 2030 Default Title  
Version : Emfac2007 V2.3 Nov 1 2006  
Run Date : 2010/04/05 15:57:26  
Scen Year: 2030 -- All model years in the range 1986 to 2030 selected  
Season : Winter  
Area : San Bernardino (SC)

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Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter  
Emfac2007 Emission Factors: V2.3 Nov 1 2006

San Bernardino (SC) San Bernardino (SC) San  
Bernardino (SC)

Table 6b: Multi-Day Resting Loss Emissions

(grams/hour)

Pollutant Name: Reactive Org Gases Temperature: ALL Relative Humidity:  
ALL

| Temp<br>degF | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 70           | 0.001 | 0.003 | 0.003 | 0.000 | 0.000 | 0.013 | 0.002 |

Title : South Coast Air Basin Subarea Winter CYr 2030 Default Title

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Version : Emfac2007 V2.3 Nov 1 2006

Run Date : 2010/04/05 15:57:26

Scen Year: 2030 -- All model years in the range 1986 to 2030 selected

Season : Winter

Area : San Bernardino (SC)

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Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter

Emfac2007 Emission Factors: V2.3 Nov 1 2006

San Bernardino (SC)  
Bernardino (SC)

San Bernardino (SC)

San

Table 7: Estimated Travel Fractions

Pollutant Name: Temperature: ALL Relative Humidity:  
ALL

|       | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|-------|-------|-------|-------|-------|-------|-------|-------|
| %VMT  | 0.447 | 0.315 | 0.157 | 0.073 | 0.001 | 0.006 | 1.000 |
| %TRIP | 0.412 | 0.279 | 0.235 | 0.064 | 0.000 | 0.010 | 1.000 |
| %VEH  | 0.458 | 0.315 | 0.158 | 0.036 | 0.000 | 0.034 | 1.000 |

Title : South Coast Air Basin Subarea Winter CYr 2030 Default Title

Version : Emfac2007 V2.3 Nov 1 2006

Run Date : 2010/04/05 15:57:26

Scen Year: 2030 -- All model years in the range 1986 to 2030 selected

Season : Winter

Area : San Bernardino (SC)

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Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter

Emfac2007 Emission Factors: V2.3 Nov 1 2006

San Bernardino (SC)  
Bernardino (SC)

San Bernardino (SC)

San

Table 8: Evaporative Running Loss Emissions

(grams/minute)

Pollutant Name: Reactive Org Gases Temperature: 70F Relative Humidity:  
ALL

| Time<br>min | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|-------------|-------|-------|-------|-------|-------|-------|-------|
| 1           | 0.009 | 0.210 | 0.216 | 0.037 | 1.062 | 0.004 | 0.108 |
| 2           | 0.007 | 0.109 | 0.112 | 0.019 | 0.545 | 0.037 | 0.058 |
| 3           | 0.009 | 0.078 | 0.080 | 0.014 | 0.374 | 0.056 | 0.043 |
| 4           | 0.010 | 0.064 | 0.065 | 0.011 | 0.290 | 0.067 | 0.037 |
| 5           | 0.012 | 0.055 | 0.057 | 0.009 | 0.241 | 0.075 | 0.033 |
| 10          | 0.016 | 0.040 | 0.041 | 0.007 | 0.144 | 0.094 | 0.027 |
| 15          | 0.017 | 0.036 | 0.037 | 0.006 | 0.115 | 0.103 | 0.026 |
| 20          | 0.018 | 0.036 | 0.036 | 0.006 | 0.104 | 0.111 | 0.026 |

|    |       |       |       |           |       |       |       |
|----|-------|-------|-------|-----------|-------|-------|-------|
|    |       |       |       | emfac.rts |       |       |       |
| 25 | 0.019 | 0.036 | 0.036 | 0.006     | 0.100 | 0.117 | 0.027 |
| 30 | 0.020 | 0.037 | 0.037 | 0.006     | 0.104 | 0.121 | 0.028 |
| 35 | 0.020 | 0.038 | 0.038 | 0.006     | 0.107 | 0.125 | 0.029 |
| 40 | 0.021 | 0.039 | 0.039 | 0.006     | 0.110 | 0.129 | 0.029 |
| 45 | 0.021 | 0.040 | 0.040 | 0.006     | 0.113 | 0.133 | 0.030 |
| 50 | 0.022 | 0.041 | 0.041 | 0.007     | 0.115 | 0.136 | 0.030 |
| 55 | 0.022 | 0.042 | 0.042 | 0.007     | 0.118 | 0.140 | 0.031 |
| 60 | 0.022 | 0.042 | 0.043 | 0.007     | 0.120 | 0.143 | 0.032 |

Title : South Coast Air Basin Subarea Winter CYr 2030 Default Title  
 Version : Emfac2007 V2.3 Nov 1 2006  
 Run Date : 2010/04/05 15:57:26  
 Scen Year: 2030 -- All model years in the range 1986 to 2030 selected  
 Season : Winter  
 Area : Riverside (SS)

\*\*\*\*\*  
 Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter  
 Emfac2007 Emission Factors: V2.3 Nov 1 2006

(SS) Riverside (SS) Riverside (SS) Riverside

Table 1: Running Exhaust Emissions (grams/mile)

Pollutant Name: Reactive Org Gases Temperature: 70F Relative Humidity:  
 0%

| Speed<br>MPH | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 5            | 0.040 | 0.079 | 0.116 | 2.242 | 6.622 | 4.688 | 0.427 |
| 35           | 0.006 | 0.012 | 0.018 | 0.233 | 0.965 | 1.807 | 0.055 |

Pollutant Name: Carbon Monoxide Temperature: 70F Relative Humidity:  
 0%

| Speed<br>MPH | LDA   | LDT   | MDT   | HDT   | UBUS   | MCY    | ALL   |
|--------------|-------|-------|-------|-------|--------|--------|-------|
| 5            | 0.818 | 1.445 | 1.941 | 6.150 | 78.767 | 22.137 | 2.121 |
| 35           | 0.487 | 0.852 | 1.079 | 1.301 | 15.525 | 14.333 | 0.876 |

Pollutant Name: Oxides of Nitrogen Temperature: 70F Relative Humidity:  
 0%

| Speed<br>MPH | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 5            | 0.071 | 0.144 | 0.244 | 7.201 | 6.596 | 1.393 | 1.213 |
| 35           | 0.040 | 0.081 | 0.145 | 2.595 | 8.186 | 1.268 | 0.467 |

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Pollutant Name: Carbon Dioxide      Temperature: 70F    Relative Humidity: 0%

| Speed<br>MPH | LDA     | LDT      | MDT      | HDT      | UBUS     | MCY     | ALL      |
|--------------|---------|----------|----------|----------|----------|---------|----------|
| 5            | 923.135 | 1182.679 | 1664.879 | 3664.105 | 2395.598 | 266.246 | 1503.549 |
| 35           | 300.301 | 384.897  | 524.028  | 1754.657 | 1081.986 | 139.888 | 573.400  |

Pollutant Name: Sulfur Dioxide      Temperature: 70F    Relative Humidity: 0%

| Speed<br>MPH | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 5            | 0.009 | 0.011 | 0.016 | 0.035 | 0.024 | 0.003 | 0.014 |
| 35           | 0.003 | 0.004 | 0.005 | 0.017 | 0.011 | 0.002 | 0.006 |

Pollutant Name: PM2.5      Temperature: 70F    Relative Humidity: 0%

| Speed<br>MPH | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 5            | 0.048 | 0.105 | 0.112 | 0.111 | 0.093 | 0.023 | 0.081 |
| 35           | 0.008 | 0.017 | 0.019 | 0.069 | 0.017 | 0.011 | 0.021 |

Pollutant Name: PM2.5 - Tire Wear      Temperature: 70F    Relative Humidity: 0%

| Speed<br>MPH | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 5            | 0.002 | 0.002 | 0.002 | 0.008 | 0.003 | 0.001 | 0.003 |
| 35           | 0.002 | 0.002 | 0.002 | 0.008 | 0.003 | 0.001 | 0.003 |

Pollutant Name: PM2.5 - Brake Wear      Temperature: 70F    Relative Humidity: 0%

| Speed<br>MPH | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 5            | 0.005 | 0.005 | 0.005 | 0.012 | 0.005 | 0.003 | 0.006 |
| 35           | 0.005 | 0.005 | 0.005 | 0.012 | 0.005 | 0.003 | 0.006 |

Pollutant Name: Gasoline - mi/gal      Temperature: 70F    Relative Humidity: 0%

| Speed<br>MPH | LDA | LDT | MDT | HDT | UBUS | MCY | ALL |
|--------------|-----|-----|-----|-----|------|-----|-----|
|--------------|-----|-----|-----|-----|------|-----|-----|



|    |        |        |        |           |        |        |        |
|----|--------|--------|--------|-----------|--------|--------|--------|
|    |        |        |        | emfac.rts |        |        |        |
| 5  | 9.584  | 7.473  | 5.284  | 3.448     | 3.243  | 28.035 | 8.349  |
| 35 | 29.430 | 22.940 | 16.851 | 17.426    | 16.438 | 52.639 | 25.556 |

Pollutant Name: Diesel - mi/gal      Temperature: 70F    Relative Humidity: 0%

| Speed<br>MPH | LDA    | LDT    | MDT    | HDT   | UBUS  | MCY   | ALL   |
|--------------|--------|--------|--------|-------|-------|-------|-------|
| 5            | 29.156 | 29.156 | 19.487 | 2.849 | 4.634 | 0.000 | 3.300 |
| 35           | 29.156 | 29.156 | 19.487 | 5.581 | 4.634 | 0.000 | 5.956 |

Title : South Coast Air Basin Subarea Winter CYr 2030 Default Title  
Version : Emfac2007 V2.3 Nov 1 2006  
Run Date : 2010/04/05 15:57:26  
Scen Year: 2030 -- All model years in the range 1986 to 2030 selected  
Season : Winter  
Area : Riverside (SS)

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Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter  
Emfac2007 Emission Factors: V2.3 Nov 1 2006

(SS)      Riverside (SS)      Riverside (SS)      Riverside

Table 2: Starting Emissions (grams/trip)

Pollutant Name: Reactive Org Gases      Temperature: 70F    Relative Humidity: ALL

| Time<br>min | LDA   | LDT   | MDT   | HDT   | UBUS   | MCY   | ALL   |
|-------------|-------|-------|-------|-------|--------|-------|-------|
| 5           | 0.004 | 0.008 | 0.025 | 0.051 | 0.711  | 0.653 | 0.016 |
| 10          | 0.008 | 0.016 | 0.049 | 0.099 | 1.386  | 0.805 | 0.028 |
| 20          | 0.016 | 0.031 | 0.095 | 0.188 | 2.628  | 1.098 | 0.052 |
| 30          | 0.024 | 0.046 | 0.139 | 0.267 | 3.726  | 1.374 | 0.073 |
| 40          | 0.031 | 0.059 | 0.181 | 0.335 | 4.679  | 1.635 | 0.093 |
| 50          | 0.037 | 0.072 | 0.221 | 0.393 | 5.487  | 1.879 | 0.112 |
| 60          | 0.043 | 0.084 | 0.258 | 0.440 | 6.152  | 2.057 | 0.129 |
| 120         | 0.070 | 0.138 | 0.426 | 0.495 | 6.917  | 2.324 | 0.191 |
| 180         | 0.068 | 0.134 | 0.422 | 0.525 | 7.339  | 2.352 | 0.190 |
| 240         | 0.072 | 0.143 | 0.449 | 0.554 | 7.748  | 2.501 | 0.202 |
| 300         | 0.076 | 0.151 | 0.475 | 0.583 | 8.143  | 2.646 | 0.214 |
| 360         | 0.080 | 0.160 | 0.502 | 0.610 | 8.526  | 2.789 | 0.225 |
| 420         | 0.084 | 0.168 | 0.528 | 0.636 | 8.894  | 2.928 | 0.237 |
| 480         | 0.088 | 0.176 | 0.554 | 0.662 | 9.250  | 3.064 | 0.248 |
| 540         | 0.092 | 0.184 | 0.580 | 0.686 | 9.592  | 3.197 | 0.259 |
| 600         | 0.096 | 0.192 | 0.606 | 0.710 | 9.920  | 3.328 | 0.270 |
| 660         | 0.100 | 0.200 | 0.632 | 0.732 | 10.235 | 3.455 | 0.281 |
| 720         | 0.104 | 0.208 | 0.657 | 0.754 | 10.537 | 3.579 | 0.292 |

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Pollutant Name: Carbon Monoxide Temperature: 70F Relative Humidity:  
ALL

| Time<br>min | LDA   | LDT   | MDT   | HDT    | UBUS    | MCY    | ALL   |
|-------------|-------|-------|-------|--------|---------|--------|-------|
| 5           | 0.071 | 0.132 | 0.336 | 1.242  | 10.621  | 2.986  | 0.217 |
| 10          | 0.141 | 0.260 | 0.664 | 2.434  | 20.810  | 3.601  | 0.411 |
| 20          | 0.275 | 0.507 | 1.296 | 4.667  | 39.894  | 4.777  | 0.781 |
| 30          | 0.403 | 0.742 | 1.897 | 6.697  | 57.251  | 5.884  | 1.127 |
| 40          | 0.524 | 0.965 | 2.467 | 8.526  | 72.883  | 6.922  | 1.451 |
| 50          | 0.638 | 1.175 | 3.005 | 10.153 | 86.788  | 7.891  | 1.751 |
| 60          | 0.745 | 1.373 | 3.511 | 11.577 | 98.968  | 8.790  | 2.029 |
| 120         | 1.189 | 2.185 | 5.547 | 13.520 | 115.577 | 12.442 | 2.961 |
| 180         | 1.123 | 2.069 | 5.314 | 13.916 | 118.956 | 12.055 | 2.872 |
| 240         | 1.220 | 2.247 | 5.773 | 14.324 | 122.446 | 13.075 | 3.079 |
| 300         | 1.305 | 2.404 | 6.178 | 14.745 | 126.047 | 14.017 | 3.265 |
| 360         | 1.378 | 2.539 | 6.528 | 15.180 | 129.760 | 14.882 | 3.430 |
| 420         | 1.441 | 2.654 | 6.824 | 15.627 | 133.584 | 15.669 | 3.574 |
| 480         | 1.492 | 2.748 | 7.066 | 16.087 | 137.520 | 16.379 | 3.697 |
| 540         | 1.531 | 2.821 | 7.253 | 16.561 | 141.566 | 17.011 | 3.799 |
| 600         | 1.559 | 2.873 | 7.386 | 17.047 | 145.725 | 17.566 | 3.880 |
| 660         | 1.576 | 2.904 | 7.464 | 17.547 | 149.994 | 18.043 | 3.939 |
| 720         | 1.581 | 2.914 | 7.488 | 18.059 | 154.375 | 18.442 | 3.978 |

Pollutant Name: Oxides of Nitrogen Temperature: 70F Relative Humidity:  
ALL

| Time<br>min | LDA   | LDT   | MDT   | HDT   | UBUS   | MCY   | ALL   |
|-------------|-------|-------|-------|-------|--------|-------|-------|
| 5           | 0.033 | 0.078 | 0.434 | 0.239 | 3.759  | 0.154 | 0.129 |
| 10          | 0.035 | 0.083 | 0.455 | 0.360 | 5.664  | 0.194 | 0.141 |
| 20          | 0.039 | 0.091 | 0.494 | 0.573 | 9.009  | 0.264 | 0.164 |
| 30          | 0.042 | 0.097 | 0.528 | 0.746 | 11.734 | 0.321 | 0.182 |
| 40          | 0.044 | 0.103 | 0.556 | 0.880 | 13.841 | 0.367 | 0.197 |
| 50          | 0.046 | 0.107 | 0.580 | 0.974 | 15.328 | 0.400 | 0.209 |
| 60          | 0.048 | 0.111 | 0.598 | 1.029 | 16.195 | 0.421 | 0.217 |
| 120         | 0.052 | 0.121 | 0.652 | 1.037 | 16.313 | 0.423 | 0.232 |
| 180         | 0.052 | 0.121 | 0.653 | 1.033 | 16.253 | 0.420 | 0.232 |
| 240         | 0.052 | 0.120 | 0.648 | 1.027 | 16.161 | 0.413 | 0.230 |
| 300         | 0.051 | 0.119 | 0.640 | 1.019 | 16.038 | 0.405 | 0.227 |
| 360         | 0.050 | 0.117 | 0.628 | 1.009 | 15.883 | 0.395 | 0.224 |
| 420         | 0.049 | 0.114 | 0.613 | 0.998 | 15.697 | 0.384 | 0.219 |
| 480         | 0.048 | 0.111 | 0.595 | 0.984 | 15.478 | 0.370 | 0.214 |
| 540         | 0.046 | 0.107 | 0.574 | 0.968 | 15.229 | 0.355 | 0.207 |
| 600         | 0.044 | 0.102 | 0.550 | 0.950 | 14.947 | 0.339 | 0.199 |
| 660         | 0.042 | 0.097 | 0.522 | 0.930 | 14.634 | 0.320 | 0.191 |
| 720         | 0.040 | 0.092 | 0.491 | 0.908 | 14.289 | 0.300 | 0.181 |

Pollutant Name: Carbon Dioxide Temperature: 70F Relative Humidity:  
ALL

| Time<br>min | LDA    | LDT    | MDT    | HDT   | UBUS   | MCY    | ALL    |
|-------------|--------|--------|--------|-------|--------|--------|--------|
| 5           | 12.015 | 15.333 | 21.516 | 2.117 | 6.220  | 13.273 | 14.165 |
| 10          | 13.459 | 17.196 | 24.231 | 4.223 | 12.405 | 15.471 | 15.993 |

|     |         |         |         |           |         |        |         |
|-----|---------|---------|---------|-----------|---------|--------|---------|
|     |         |         |         | emfac.rts |         |        |         |
| 20  | 16.840  | 21.550  | 30.537  | 8.399     | 24.672  | 19.785 | 20.220  |
| 30  | 20.880  | 26.744  | 38.011  | 12.528    | 36.802  | 23.993 | 25.207  |
| 40  | 25.579  | 32.777  | 46.653  | 16.611    | 48.794  | 28.093 | 30.953  |
| 50  | 30.937  | 39.648  | 56.464  | 20.646    | 60.648  | 32.086 | 37.459  |
| 60  | 36.954  | 47.359  | 67.444  | 24.635    | 72.365  | 35.971 | 44.725  |
| 120 | 86.363  | 110.505 | 156.522 | 41.900    | 123.080 | 53.423 | 103.260 |
| 180 | 97.999  | 125.415 | 177.746 | 49.501    | 145.410 | 57.660 | 117.279 |
| 240 | 109.623 | 140.305 | 198.919 | 56.654    | 166.422 | 61.649 | 131.253 |
| 300 | 121.235 | 155.176 | 220.040 | 63.359    | 186.115 | 65.389 | 145.182 |
| 360 | 132.836 | 170.026 | 241.109 | 69.614    | 204.491 | 68.880 | 159.067 |
| 420 | 144.426 | 184.858 | 262.127 | 75.421    | 221.549 | 72.122 | 172.907 |
| 480 | 156.004 | 199.670 | 283.092 | 80.780    | 237.289 | 75.116 | 186.702 |
| 540 | 167.571 | 214.462 | 304.006 | 85.689    | 251.711 | 77.861 | 200.452 |
| 600 | 179.126 | 229.234 | 324.868 | 90.150    | 264.815 | 80.358 | 214.157 |
| 660 | 190.670 | 243.987 | 345.678 | 94.163    | 276.601 | 82.605 | 227.818 |
| 720 | 202.202 | 258.721 | 366.437 | 97.726    | 287.070 | 84.604 | 241.434 |

Pollutant Name: Sulfur Dioxide      Temperature: 70F    Relative Humidity:  
ALL

| Time<br>min | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|-------------|-------|-------|-------|-------|-------|-------|-------|
| 5           | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 10          | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 20          | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 |
| 30          | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 |
| 40          | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 | 0.000 | 0.000 |
| 50          | 0.000 | 0.000 | 0.001 | 0.000 | 0.002 | 0.000 | 0.000 |
| 60          | 0.000 | 0.000 | 0.001 | 0.000 | 0.002 | 0.001 | 0.000 |
| 120         | 0.001 | 0.001 | 0.002 | 0.001 | 0.003 | 0.001 | 0.001 |
| 180         | 0.001 | 0.001 | 0.002 | 0.001 | 0.003 | 0.001 | 0.001 |
| 240         | 0.001 | 0.001 | 0.002 | 0.001 | 0.004 | 0.001 | 0.001 |
| 300         | 0.001 | 0.002 | 0.002 | 0.001 | 0.004 | 0.001 | 0.001 |
| 360         | 0.001 | 0.002 | 0.002 | 0.001 | 0.004 | 0.001 | 0.002 |
| 420         | 0.001 | 0.002 | 0.003 | 0.001 | 0.004 | 0.001 | 0.002 |
| 480         | 0.002 | 0.002 | 0.003 | 0.001 | 0.005 | 0.001 | 0.002 |
| 540         | 0.002 | 0.002 | 0.003 | 0.001 | 0.005 | 0.001 | 0.002 |
| 600         | 0.002 | 0.002 | 0.003 | 0.001 | 0.005 | 0.001 | 0.002 |
| 660         | 0.002 | 0.002 | 0.003 | 0.001 | 0.005 | 0.001 | 0.002 |
| 720         | 0.002 | 0.003 | 0.004 | 0.001 | 0.005 | 0.001 | 0.002 |

Pollutant Name: PM2.5      Temperature: 70F    Relative Humidity:  
ALL

| Time<br>min | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|-------------|-------|-------|-------|-------|-------|-------|-------|
| 5           | 0.000 | 0.001 | 0.001 | 0.000 | 0.001 | 0.005 | 0.001 |
| 10          | 0.001 | 0.002 | 0.002 | 0.001 | 0.002 | 0.005 | 0.001 |
| 20          | 0.002 | 0.004 | 0.004 | 0.001 | 0.004 | 0.004 | 0.003 |
| 30          | 0.003 | 0.006 | 0.005 | 0.002 | 0.005 | 0.003 | 0.004 |
| 40          | 0.003 | 0.007 | 0.007 | 0.002 | 0.007 | 0.003 | 0.005 |
| 50          | 0.004 | 0.009 | 0.009 | 0.003 | 0.008 | 0.002 | 0.006 |
| 60          | 0.005 | 0.010 | 0.010 | 0.003 | 0.009 | 0.002 | 0.007 |
| 120         | 0.008 | 0.017 | 0.017 | 0.004 | 0.013 | 0.005 | 0.012 |
| 180         | 0.009 | 0.019 | 0.019 | 0.004 | 0.013 | 0.007 | 0.013 |
| 240         | 0.010 | 0.021 | 0.020 | 0.004 | 0.014 | 0.008 | 0.015 |
| 300         | 0.011 | 0.023 | 0.022 | 0.004 | 0.014 | 0.010 | 0.016 |

|     | emfac.rts |       |       |       |       |       |       |
|-----|-----------|-------|-------|-------|-------|-------|-------|
| 360 | 0.011     | 0.024 | 0.023 | 0.004 | 0.015 | 0.011 | 0.017 |
| 420 | 0.012     | 0.025 | 0.024 | 0.005 | 0.015 | 0.012 | 0.017 |
| 480 | 0.012     | 0.026 | 0.025 | 0.005 | 0.015 | 0.013 | 0.018 |
| 540 | 0.013     | 0.027 | 0.026 | 0.005 | 0.016 | 0.014 | 0.019 |
| 600 | 0.013     | 0.027 | 0.026 | 0.005 | 0.016 | 0.014 | 0.019 |
| 660 | 0.013     | 0.027 | 0.026 | 0.005 | 0.017 | 0.015 | 0.019 |
| 720 | 0.013     | 0.027 | 0.026 | 0.005 | 0.017 | 0.015 | 0.019 |

Title : South Coast Air Basin Subarea Winter CYr 2030 Default Title  
 Version : Emfac2007 V2.3 Nov 1 2006  
 Run Date : 2010/04/05 15:57:26  
 Scen Year: 2030 -- All model years in the range 1986 to 2030 selected  
 Season : Winter  
 Area : Riverside (SS)

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Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter  
 Emfac2007 Emission Factors: V2.3 Nov 1 2006

(SS) Riverside (SS) Riverside (SS) Riverside

Table 4: Hot Soak Emissions (grams/trip)

Pollutant Name: Reactive Org Gases Temperature: 70F Relative Humidity:  
 ALL

| Time<br>min | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|-------------|-------|-------|-------|-------|-------|-------|-------|
| 5           | 0.024 | 0.038 | 0.034 | 0.002 | 0.118 | 0.159 | 0.030 |
| 10          | 0.045 | 0.070 | 0.062 | 0.005 | 0.218 | 0.296 | 0.055 |
| 20          | 0.077 | 0.121 | 0.107 | 0.008 | 0.371 | 0.514 | 0.095 |
| 30          | 0.099 | 0.156 | 0.139 | 0.010 | 0.476 | 0.676 | 0.122 |
| 40          | 0.107 | 0.170 | 0.151 | 0.011 | 0.515 | 0.740 | 0.133 |

Hot soak results are scaled to reflect zero emissions for trip lengths of less than 5 minutes (about 25% of in-use trips).

Title : South Coast Air Basin Subarea Winter CYr 2030 Default Title  
 Version : Emfac2007 V2.3 Nov 1 2006  
 Run Date : 2010/04/05 15:57:26  
 Scen Year: 2030 -- All model years in the range 1986 to 2030 selected  
 Season : Winter  
 Area : Riverside (SS)

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Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter  
 Emfac2007 Emission Factors: V2.3 Nov 1 2006





Table 7: Estimated Travel Fractions

| Pollutant Name: | Temperature: ALL |       |       |       |       |       | Relative Humidity: |
|-----------------|------------------|-------|-------|-------|-------|-------|--------------------|
| ALL             |                  |       |       |       |       |       |                    |
|                 | LDA              | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL                |
| %VMT            | 0.434            | 0.284 | 0.123 | 0.153 | 0.001 | 0.006 | 1.000              |
| %TRIP           | 0.477            | 0.289 | 0.177 | 0.050 | 0.000 | 0.007 | 1.000              |
| %VEH            | 0.494            | 0.302 | 0.136 | 0.044 | 0.000 | 0.024 | 1.000              |

Title : South Coast Air Basin Subarea Winter CYr 2030 Default Title  
 Version : Emfac2007 V2.3 Nov 1 2006  
 Run Date : 2010/04/05 15:57:26  
 Scen Year: 2030 -- All model years in the range 1986 to 2030 selected  
 Season : Winter  
 Area : Riverside (SS)

\*\*\*\*\*

Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter  
 Emfac2007 Emission Factors: V2.3 Nov 1 2006

(SS) Riverside (SS) Riverside (SS) Riverside

Table 8: Evaporative Running Loss Emissions  
(grams/minute)

| Pollutant Name: | Temperature: 70F |       |       |       |       |       | Relative Humidity: |
|-----------------|------------------|-------|-------|-------|-------|-------|--------------------|
| ALL             |                  |       |       |       |       |       |                    |
| Time min        | LDA              | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL                |
| 1               | 0.008            | 0.188 | 0.208 | 0.012 | 1.365 | 0.004 | 0.085              |
| 2               | 0.007            | 0.098 | 0.109 | 0.006 | 0.699 | 0.038 | 0.046              |
| 3               | 0.008            | 0.071 | 0.078 | 0.004 | 0.479 | 0.056 | 0.034              |
| 4               | 0.010            | 0.058 | 0.064 | 0.004 | 0.372 | 0.068 | 0.030              |
| 5               | 0.011            | 0.051 | 0.056 | 0.003 | 0.308 | 0.076 | 0.027              |
| 10              | 0.015            | 0.038 | 0.040 | 0.002 | 0.184 | 0.096 | 0.023              |
| 15              | 0.017            | 0.035 | 0.037 | 0.002 | 0.149 | 0.107 | 0.023              |
| 20              | 0.018            | 0.034 | 0.037 | 0.002 | 0.136 | 0.115 | 0.023              |
| 25              | 0.019            | 0.035 | 0.037 | 0.002 | 0.133 | 0.122 | 0.024              |
| 30              | 0.020            | 0.036 | 0.039 | 0.002 | 0.138 | 0.127 | 0.025              |
| 35              | 0.020            | 0.037 | 0.040 | 0.002 | 0.143 | 0.132 | 0.026              |
| 40              | 0.021            | 0.038 | 0.041 | 0.002 | 0.148 | 0.136 | 0.026              |
| 45              | 0.021            | 0.039 | 0.042 | 0.002 | 0.152 | 0.141 | 0.027              |
| 50              | 0.022            | 0.040 | 0.043 | 0.002 | 0.157 | 0.145 | 0.028              |
| 55              | 0.022            | 0.041 | 0.044 | 0.002 | 0.161 | 0.149 | 0.028              |
| 60              | 0.023            | 0.042 | 0.045 | 0.003 | 0.165 | 0.153 | 0.029              |

Title : South Coast Air Basin Subarea Winter CYr 2030 Default Title  
 Version : Emfac2007 V2.3 Nov 1 2006  
 Run Date : 2010/04/05 15:57:26  
 Scen Year: 2030 -- All model years in the range 1986 to 2030 selected  
 Season : Winter  
 Area : Riverside (MD/SCAQMD)

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 \*\*\*\*\*

Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter  
 Emfac2007 Emission Factors: V2.3 Nov 1 2006

Riverside (MD/SCAQMD)                      Riverside (MD/SCAQMD)                      Riverside  
 (MD/SCAQMD)

Table 1: Running Exhaust Emissions (grams/mile)

Pollutant Name: Reactive Org Gases                      Temperature: 70F    Relative Humidity:  
 0%

| Speed<br>MPH | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 5            | 0.055 | 0.151 | 0.163 | 2.329 | 0.000 | 4.677 | 2.201 |
| 35           | 0.008 | 0.024 | 0.029 | 0.237 | 0.000 | 1.803 | 0.226 |

Pollutant Name: Carbon Monoxide                      Temperature: 70F    Relative Humidity:  
 0%

| Speed<br>MPH | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY    | ALL   |
|--------------|-------|-------|-------|-------|-------|--------|-------|
| 5            | 0.956 | 2.071 | 2.134 | 5.812 | 0.000 | 22.049 | 5.587 |
| 35           | 0.567 | 1.181 | 1.020 | 1.233 | 0.000 | 14.278 | 1.231 |

Pollutant Name: Oxides of Nitrogen                      Temperature: 70F    Relative Humidity:  
 0%

| Speed<br>MPH | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 5            | 0.095 | 0.268 | 0.478 | 7.323 | 0.000 | 1.385 | 6.895 |
| 35           | 0.054 | 0.147 | 0.292 | 2.590 | 0.000 | 1.261 | 2.442 |

Pollutant Name: Carbon Dioxide                      Temperature: 70F    Relative Humidity:  
 0%

| Speed<br>MPH | LDA     | LDT      | MDT      | HDT      | UBUS  | MCY     | ALL      |
|--------------|---------|----------|----------|----------|-------|---------|----------|
| 5            | 922.817 | 1172.609 | 1742.818 | 3826.311 | 0.000 | 266.284 | 3664.866 |
| 35           | 300.238 | 382.928  | 518.269  | 1812.238 | 0.000 | 139.916 | 1724.922 |



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Pollutant Name: Sulfur Dioxide Temperature: 70F Relative Humidity: 0%

| Speed<br>MPH | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 5            | 0.009 | 0.011 | 0.017 | 0.037 | 0.000 | 0.003 | 0.035 |
| 35           | 0.003 | 0.004 | 0.005 | 0.017 | 0.000 | 0.002 | 0.016 |

Pollutant Name: PM2.5 Temperature: 70F Relative Humidity: 0%

| Speed<br>MPH | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 5            | 0.049 | 0.094 | 0.094 | 0.091 | 0.000 | 0.023 | 0.090 |
| 35           | 0.008 | 0.015 | 0.016 | 0.064 | 0.000 | 0.011 | 0.061 |

Pollutant Name: PM2.5 - Tire Wear Temperature: 70F Relative Humidity: 0%

| Speed<br>MPH | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 5            | 0.002 | 0.002 | 0.002 | 0.009 | 0.000 | 0.001 | 0.009 |
| 35           | 0.002 | 0.002 | 0.002 | 0.009 | 0.000 | 0.001 | 0.009 |

Pollutant Name: PM2.5 - Brake Wear Temperature: 70F Relative Humidity: 0%

| Speed<br>MPH | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 5            | 0.005 | 0.005 | 0.005 | 0.012 | 0.000 | 0.003 | 0.012 |
| 35           | 0.005 | 0.005 | 0.005 | 0.012 | 0.000 | 0.003 | 0.012 |

Pollutant Name: Gasoline - mi/gal Temperature: 70F Relative Humidity: 0%

| Speed<br>MPH | LDA    | LDT    | MDT    | HDT    | UBUS  | MCY    | ALL    |
|--------------|--------|--------|--------|--------|-------|--------|--------|
| 5            | 9.583  | 7.499  | 4.873  | 3.284  | 0.000 | 28.047 | 7.467  |
| 35           | 29.424 | 23.011 | 17.058 | 16.607 | 0.000 | 52.661 | 23.615 |

Pollutant Name: Diesel - mi/gal Temperature: 70F Relative Humidity: 0%

| Speed<br>MPH | LDA    | LDT    | MDT    | HDT   | UBUS  | MCY   | ALL   |
|--------------|--------|--------|--------|-------|-------|-------|-------|
| 5            | 29.156 | 29.156 | 19.405 | 2.628 | 4.634 | 0.000 | 2.653 |

35      29.156    29.156    19.405      emfac.rts    5.517    4.634    0.000    5.537

Title : South Coast Air Basin Subarea Winter CYr 2030 Default Title  
 Version : Emfac2007 V2.3 Nov 1 2006  
 Run Date : 2010/04/05 15:57:26  
 Scen Year: 2030 -- All model years in the range 1986 to 2030 selected  
 Season : Winter  
 Area : Riverside (MD/SCAQMD)

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Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter  
 Emfac2007 Emission Factors: V2.3 Nov 1 2006

Riverside (MD/SCAQMD)      Riverside (MD/SCAQMD)      Riverside  
 (MD/SCAQMD)

Table 2: Starting Emissions (grams/trip)

Pollutant Name: Reactive Org Gases      Temperature: 70F    Relative Humidity:  
 ALL

| Time<br>min | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|-------------|-------|-------|-------|-------|-------|-------|-------|
| 5           | 0.005 | 0.016 | 0.043 | 0.030 | 0.000 | 0.650 | 0.032 |
| 10          | 0.011 | 0.031 | 0.085 | 0.059 | 0.000 | 0.802 | 0.059 |
| 20          | 0.020 | 0.059 | 0.166 | 0.112 | 0.000 | 1.094 | 0.110 |
| 30          | 0.030 | 0.086 | 0.242 | 0.159 | 0.000 | 1.369 | 0.155 |
| 40          | 0.038 | 0.110 | 0.315 | 0.200 | 0.000 | 1.629 | 0.195 |
| 50          | 0.046 | 0.131 | 0.383 | 0.234 | 0.000 | 1.872 | 0.231 |
| 60          | 0.053 | 0.151 | 0.447 | 0.262 | 0.000 | 2.049 | 0.260 |
| 120         | 0.083 | 0.219 | 0.732 | 0.295 | 0.000 | 2.316 | 0.320 |
| 180         | 0.081 | 0.215 | 0.730 | 0.313 | 0.000 | 2.344 | 0.332 |
| 240         | 0.086 | 0.228 | 0.776 | 0.330 | 0.000 | 2.492 | 0.351 |
| 300         | 0.091 | 0.241 | 0.822 | 0.347 | 0.000 | 2.637 | 0.370 |
| 360         | 0.096 | 0.254 | 0.867 | 0.364 | 0.000 | 2.779 | 0.388 |
| 420         | 0.101 | 0.266 | 0.912 | 0.379 | 0.000 | 2.917 | 0.406 |
| 480         | 0.106 | 0.279 | 0.957 | 0.394 | 0.000 | 3.053 | 0.424 |
| 540         | 0.110 | 0.291 | 1.002 | 0.409 | 0.000 | 3.186 | 0.441 |
| 600         | 0.115 | 0.303 | 1.047 | 0.423 | 0.000 | 3.316 | 0.457 |
| 660         | 0.120 | 0.314 | 1.091 | 0.437 | 0.000 | 3.442 | 0.473 |
| 720         | 0.125 | 0.326 | 1.134 | 0.449 | 0.000 | 3.566 | 0.488 |

Pollutant Name: Carbon Monoxide      Temperature: 70F    Relative Humidity:  
 ALL

| Time<br>min | LDA   | LDT   | MDT   | HDT    | UBUS  | MCY   | ALL   |
|-------------|-------|-------|-------|--------|-------|-------|-------|
| 5           | 0.094 | 0.236 | 0.569 | 1.576  | 0.000 | 2.971 | 1.224 |
| 10          | 0.186 | 0.466 | 1.124 | 3.088  | 0.000 | 3.580 | 2.384 |
| 20          | 0.362 | 0.905 | 2.195 | 5.920  | 0.000 | 4.748 | 4.562 |
| 30          | 0.529 | 1.317 | 3.213 | 8.496  | 0.000 | 5.847 | 6.548 |
| 40          | 0.687 | 1.703 | 4.177 | 10.815 | 0.000 | 6.878 | 8.344 |

|     | emfac.rts |       |        |        |       |        |        |
|-----|-----------|-------|--------|--------|-------|--------|--------|
| 50  | 0.836     | 2.061 | 5.088  | 12.879 | 0.000 | 7.839  | 9.949  |
| 60  | 0.976     | 2.394 | 5.946  | 14.686 | 0.000 | 8.733  | 11.362 |
| 120 | 1.547     | 3.618 | 9.362  | 17.151 | 0.000 | 12.361 | 13.619 |
| 180 | 1.461     | 3.420 | 9.006  | 17.652 | 0.000 | 11.979 | 13.913 |
| 240 | 1.585     | 3.673 | 9.785  | 18.170 | 0.000 | 12.993 | 14.394 |
| 300 | 1.694     | 3.899 | 10.472 | 18.704 | 0.000 | 13.930 | 14.874 |
| 360 | 1.788     | 4.098 | 11.066 | 19.255 | 0.000 | 14.790 | 15.353 |
| 420 | 1.869     | 4.271 | 11.568 | 19.823 | 0.000 | 15.573 | 15.831 |
| 480 | 1.934     | 4.417 | 11.977 | 20.407 | 0.000 | 16.279 | 16.308 |
| 540 | 1.986     | 4.537 | 12.294 | 21.007 | 0.000 | 16.908 | 16.784 |
| 600 | 2.023     | 4.630 | 12.519 | 21.624 | 0.000 | 17.459 | 17.260 |
| 660 | 2.045     | 4.696 | 12.652 | 22.258 | 0.000 | 17.933 | 17.734 |
| 720 | 2.054     | 4.736 | 12.692 | 22.908 | 0.000 | 18.330 | 18.207 |

Pollutant Name: Oxides of Nitrogen      Temperature: 70F      Relative Humidity:  
ALL

| Time<br>min | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|-------------|-------|-------|-------|-------|-------|-------|-------|
| 5           | 0.050 | 0.132 | 0.854 | 0.213 | 0.000 | 0.153 | 0.245 |
| 10          | 0.053 | 0.143 | 0.895 | 0.321 | 0.000 | 0.193 | 0.327 |
| 20          | 0.058 | 0.162 | 0.969 | 0.511 | 0.000 | 0.262 | 0.471 |
| 30          | 0.063 | 0.179 | 1.033 | 0.665 | 0.000 | 0.319 | 0.589 |
| 40          | 0.067 | 0.192 | 1.088 | 0.784 | 0.000 | 0.364 | 0.681 |
| 50          | 0.070 | 0.202 | 1.132 | 0.869 | 0.000 | 0.397 | 0.746 |
| 60          | 0.072 | 0.210 | 1.167 | 0.918 | 0.000 | 0.418 | 0.786 |
| 120         | 0.078 | 0.225 | 1.275 | 0.924 | 0.000 | 0.421 | 0.802 |
| 180         | 0.079 | 0.226 | 1.276 | 0.921 | 0.000 | 0.417 | 0.800 |
| 240         | 0.078 | 0.225 | 1.266 | 0.916 | 0.000 | 0.411 | 0.795 |
| 300         | 0.077 | 0.222 | 1.249 | 0.909 | 0.000 | 0.403 | 0.788 |
| 360         | 0.076 | 0.218 | 1.227 | 0.900 | 0.000 | 0.393 | 0.779 |
| 420         | 0.074 | 0.214 | 1.198 | 0.890 | 0.000 | 0.381 | 0.768 |
| 480         | 0.072 | 0.208 | 1.163 | 0.877 | 0.000 | 0.368 | 0.756 |
| 540         | 0.070 | 0.201 | 1.121 | 0.863 | 0.000 | 0.353 | 0.741 |
| 600         | 0.067 | 0.194 | 1.073 | 0.847 | 0.000 | 0.336 | 0.724 |
| 660         | 0.063 | 0.185 | 1.019 | 0.829 | 0.000 | 0.318 | 0.706 |
| 720         | 0.060 | 0.175 | 0.958 | 0.810 | 0.000 | 0.298 | 0.685 |

Pollutant Name: Carbon Dioxide      Temperature: 70F      Relative Humidity:  
ALL

| Time<br>min | LDA     | LDT     | MDT     | HDT    | UBUS  | MCY    | ALL    |
|-------------|---------|---------|---------|--------|-------|--------|--------|
| 5           | 12.000  | 14.899  | 21.793  | 1.149  | 0.000 | 13.220 | 5.469  |
| 10          | 13.446  | 16.841  | 24.595  | 2.291  | 0.000 | 15.415 | 6.877  |
| 20          | 16.831  | 21.328  | 31.082  | 4.556  | 0.000 | 19.726 | 9.866  |
| 30          | 20.874  | 26.618  | 38.748  | 6.796  | 0.000 | 23.930 | 13.082 |
| 40          | 25.575  | 32.712  | 47.593  | 9.010  | 0.000 | 28.027 | 16.528 |
| 50          | 30.933  | 39.610  | 57.617  | 11.200 | 0.000 | 32.017 | 20.202 |
| 60          | 36.949  | 47.311  | 68.820  | 13.363 | 0.000 | 35.900 | 24.104 |
| 120         | 86.316  | 109.282 | 159.283 | 22.729 | 0.000 | 53.337 | 49.802 |
| 180         | 97.949  | 124.166 | 180.937 | 26.852 | 0.000 | 57.584 | 57.282 |
| 240         | 109.570 | 138.998 | 202.525 | 30.732 | 0.000 | 61.582 | 64.575 |
| 300         | 121.179 | 153.780 | 224.048 | 34.369 | 0.000 | 65.330 | 71.681 |
| 360         | 132.775 | 168.512 | 245.507 | 37.762 | 0.000 | 68.829 | 78.599 |
| 420         | 144.358 | 183.192 | 266.900 | 40.912 | 0.000 | 72.079 | 85.331 |
| 480         | 155.929 | 197.821 | 288.228 | 43.819 | 0.000 | 75.080 | 91.875 |

|     |         |         |         |           |       |        |         |
|-----|---------|---------|---------|-----------|-------|--------|---------|
|     |         |         |         | emfac.rts |       |        |         |
| 540 | 167.488 | 212.400 | 309.492 | 46.482    | 0.000 | 77.831 | 98.233  |
| 600 | 179.034 | 226.927 | 330.690 | 48.902    | 0.000 | 80.333 | 104.403 |
| 660 | 190.568 | 241.404 | 351.823 | 51.079    | 0.000 | 82.586 | 110.386 |
| 720 | 202.090 | 255.830 | 372.892 | 53.012    | 0.000 | 84.589 | 116.182 |

Pollutant Name: Sulfur Dioxide      Temperature: 70F    Relative Humidity:  
ALL

| Time<br>min | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|-------------|-------|-------|-------|-------|-------|-------|-------|
| 5           | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 10          | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 20          | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 30          | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 40          | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 |
| 50          | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 |
| 60          | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.001 | 0.000 |
| 120         | 0.001 | 0.001 | 0.002 | 0.000 | 0.000 | 0.001 | 0.001 |
| 180         | 0.001 | 0.001 | 0.002 | 0.001 | 0.000 | 0.001 | 0.001 |
| 240         | 0.001 | 0.001 | 0.002 | 0.001 | 0.000 | 0.001 | 0.001 |
| 300         | 0.001 | 0.002 | 0.002 | 0.001 | 0.000 | 0.001 | 0.001 |
| 360         | 0.001 | 0.002 | 0.003 | 0.001 | 0.000 | 0.001 | 0.001 |
| 420         | 0.001 | 0.002 | 0.003 | 0.001 | 0.000 | 0.001 | 0.001 |
| 480         | 0.002 | 0.002 | 0.003 | 0.001 | 0.000 | 0.001 | 0.001 |
| 540         | 0.002 | 0.002 | 0.003 | 0.001 | 0.000 | 0.001 | 0.001 |
| 600         | 0.002 | 0.002 | 0.003 | 0.001 | 0.000 | 0.001 | 0.001 |
| 660         | 0.002 | 0.002 | 0.004 | 0.001 | 0.000 | 0.001 | 0.001 |
| 720         | 0.002 | 0.003 | 0.004 | 0.001 | 0.000 | 0.001 | 0.001 |

Pollutant Name: PM2.5      Temperature: 70F    Relative Humidity:  
ALL

| Time<br>min | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|-------------|-------|-------|-------|-------|-------|-------|-------|
| 5           | 0.000 | 0.001 | 0.001 | 0.000 | 0.000 | 0.005 | 0.000 |
| 10          | 0.001 | 0.002 | 0.001 | 0.000 | 0.000 | 0.005 | 0.001 |
| 20          | 0.002 | 0.003 | 0.003 | 0.001 | 0.000 | 0.004 | 0.001 |
| 30          | 0.003 | 0.005 | 0.004 | 0.001 | 0.000 | 0.003 | 0.002 |
| 40          | 0.003 | 0.007 | 0.005 | 0.001 | 0.000 | 0.003 | 0.002 |
| 50          | 0.004 | 0.008 | 0.006 | 0.001 | 0.000 | 0.002 | 0.003 |
| 60          | 0.005 | 0.009 | 0.007 | 0.002 | 0.000 | 0.002 | 0.003 |
| 120         | 0.008 | 0.015 | 0.012 | 0.002 | 0.000 | 0.005 | 0.005 |
| 180         | 0.009 | 0.017 | 0.013 | 0.002 | 0.000 | 0.007 | 0.006 |
| 240         | 0.010 | 0.019 | 0.014 | 0.002 | 0.000 | 0.008 | 0.006 |
| 300         | 0.011 | 0.020 | 0.015 | 0.002 | 0.000 | 0.010 | 0.006 |
| 360         | 0.012 | 0.021 | 0.016 | 0.003 | 0.000 | 0.011 | 0.007 |
| 420         | 0.012 | 0.022 | 0.017 | 0.003 | 0.000 | 0.012 | 0.007 |
| 480         | 0.013 | 0.023 | 0.018 | 0.003 | 0.000 | 0.013 | 0.007 |
| 540         | 0.013 | 0.023 | 0.018 | 0.003 | 0.000 | 0.014 | 0.007 |
| 600         | 0.013 | 0.024 | 0.018 | 0.003 | 0.000 | 0.014 | 0.008 |
| 660         | 0.013 | 0.024 | 0.019 | 0.003 | 0.000 | 0.015 | 0.008 |
| 720         | 0.013 | 0.024 | 0.019 | 0.003 | 0.000 | 0.015 | 0.008 |

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Title : South Coast Air Basin Subarea Winter CYr 2030 Default Title  
 Version : Emfac2007 V2.3 Nov 1 2006  
 Run Date : 2010/04/05 15:57:26  
 Scen Year: 2030 -- All model years in the range 1986 to 2030 selected  
 Season : Winter  
 Area : Riverside (MD/SCAQMD)

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Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter  
 Emfac2007 Emission Factors: V2.3 Nov 1 2006

Riverside (MD/SCAQMD)                      Riverside (MD/SCAQMD)                      Riverside  
 (MD/SCAQMD)

Table 4: Hot Soak Emissions (grams/trip)

Pollutant Name: Reactive Org Gases                      Temperature: 70F    Relative Humidity:  
 ALL

| Time<br>min | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|-------------|-------|-------|-------|-------|-------|-------|-------|
| 5           | 0.028 | 0.064 | 0.029 | 0.001 | 0.000 | 0.142 | 0.014 |
| 10          | 0.052 | 0.118 | 0.053 | 0.002 | 0.000 | 0.265 | 0.025 |
| 20          | 0.088 | 0.201 | 0.092 | 0.003 | 0.000 | 0.463 | 0.043 |
| 30          | 0.114 | 0.259 | 0.118 | 0.004 | 0.000 | 0.610 | 0.056 |
| 40          | 0.123 | 0.281 | 0.129 | 0.004 | 0.000 | 0.670 | 0.060 |

Hot soak results are scaled to reflect zero emissions for trip lengths of less than 5 minutes (about 25% of in-use trips).

Title : South Coast Air Basin Subarea Winter CYr 2030 Default Title  
 Version : Emfac2007 V2.3 Nov 1 2006  
 Run Date : 2010/04/05 15:57:26  
 Scen Year: 2030 -- All model years in the range 1986 to 2030 selected  
 Season : Winter  
 Area : Riverside (MD/SCAQMD)

\*\*\*\*\*  
 \*\*\*\*\*

Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter  
 Emfac2007 Emission Factors: V2.3 Nov 1 2006

Riverside (MD/SCAQMD)                      Riverside (MD/SCAQMD)                      Riverside  
 (MD/SCAQMD)

Table 5a: Partial Day Diurnal Loss Emissions

(grams/hour)

Pollutant Name: Reactive Org Gases                      Temperature: ALL    Relative Humidity:  
 ALL

| Temp<br>degF | LDA | LDT | MDT | HDT | UBUS | MCY | ALL |
|--------------|-----|-----|-----|-----|------|-----|-----|
|--------------|-----|-----|-----|-----|------|-----|-----|

70      0.029      0.095      0.055      emfac.rts      0.000      0.000      0.403      0.023

Title : South Coast Air Basin Subarea Winter CYr 2030 Default Title  
 Version : Emfac2007 V2.3 Nov 1 2006  
 Run Date : 2010/04/05 15:57:26  
 Scen Year: 2030 -- All model years in the range 1986 to 2030 selected  
 Season : Winter  
 Area : Riverside (MD/SCAQMD)

\*\*\*\*\*  
 \*\*\*\*\*

Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter  
 Emfac2007 Emission Factors: V2.3 Nov 1 2006

Riverside (MD/SCAQMD)      Riverside (MD/SCAQMD)      Riverside  
 (MD/SCAQMD)

Table 5b: Multi-Day Diurnal Loss Emissions

(grams/hour)

Pollutant Name: Reactive Org Gases      Temperature: ALL      Relative Humidity:  
 ALL

| Temp<br>degF | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 70           | 0.002 | 0.007 | 0.004 | 0.000 | 0.000 | 0.038 | 0.002 |

Title : South Coast Air Basin Subarea Winter CYr 2030 Default Title  
 Version : Emfac2007 V2.3 Nov 1 2006  
 Run Date : 2010/04/05 15:57:26  
 Scen Year: 2030 -- All model years in the range 1986 to 2030 selected  
 Season : Winter  
 Area : Riverside (MD/SCAQMD)

\*\*\*\*\*  
 \*\*\*\*\*

Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter  
 Emfac2007 Emission Factors: V2.3 Nov 1 2006

Riverside (MD/SCAQMD)      Riverside (MD/SCAQMD)      Riverside  
 (MD/SCAQMD)

Table 6a: Partial Day Resting Loss Emissions

(grams/hour)

Pollutant Name: Reactive Org Gases      Temperature: ALL      Relative Humidity:  
 ALL

| Temp<br>degF | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 70           | 0.016 | 0.051 | 0.035 | 0.000 | 0.000 | 0.129 | 0.011 |

Title : South Coast Air Basin Subarea Winter CYr 2030 Default Title  
 Version : Emfac2007 V2.3 Nov 1 2006  
 Run Date : 2010/04/05 15:57:26  
 Scen Year: 2030 -- All model years in the range 1986 to 2030 selected  
 Season : Winter  
 Area : Riverside (MD/SCAQMD)

\*\*\*\*\*  
 \*\*\*\*\*

Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter  
 Emfac2007 Emission Factors: V2.3 Nov 1 2006

Riverside (MD/SCAQMD)                      Riverside (MD/SCAQMD)                      Riverside  
 (MD/SCAQMD)

Table 6b: Multi-Day Resting Loss Emissions

(grams/hour)

Pollutant Name: Reactive Org Gases                      Temperature: ALL                      Relative Humidity:  
 ALL

| Temp<br>degF | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|--------------|-------|-------|-------|-------|-------|-------|-------|
| 70           | 0.001 | 0.004 | 0.002 | 0.000 | 0.000 | 0.013 | 0.001 |

Title : South Coast Air Basin Subarea Winter CYr 2030 Default Title  
 Version : Emfac2007 V2.3 Nov 1 2006  
 Run Date : 2010/04/05 15:57:26  
 Scen Year: 2030 -- All model years in the range 1986 to 2030 selected  
 Season : Winter  
 Area : Riverside (MD/SCAQMD)

\*\*\*\*\*  
 \*\*\*\*\*

Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter  
 Emfac2007 Emission Factors: V2.3 Nov 1 2006

Riverside (MD/SCAQMD)                      Riverside (MD/SCAQMD)                      Riverside  
 (MD/SCAQMD)

Table 7: Estimated Travel Fractions

Pollutant Name:                      Temperature: ALL                      Relative Humidity:  
 ALL

|       | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|-------|-------|-------|-------|-------|-------|-------|-------|
| %VMT  | 0.020 | 0.030 | 0.010 | 0.939 | 0.000 | 0.001 | 1.000 |
| %TRIP | 0.082 | 0.114 | 0.086 | 0.711 | 0.000 | 0.007 | 1.000 |

|      |       |       |       |           |       |       |       |
|------|-------|-------|-------|-----------|-------|-------|-------|
|      |       |       |       | emfac.rts |       |       |       |
| %VEH | 0.079 | 0.114 | 0.038 | 0.749     | 0.000 | 0.020 | 1.000 |

Title : South Coast Air Basin Subarea Winter CYr 2030 Default Title  
 Version : Emfac2007 V2.3 Nov 1 2006  
 Run Date : 2010/04/05 15:57:26  
 Scen Year: 2030 -- All model years in the range 1986 to 2030 selected  
 Season : Winter  
 Area : Riverside (MD/SCAQMD)

\*\*\*\*\*  
 \*\*\*\*\*

Year: 2030 -- Model Years 1986 to 2030 Inclusive -- Winter  
 Emfac2007 Emission Factors: V2.3 Nov 1 2006

|                       |                       |           |
|-----------------------|-----------------------|-----------|
| Riverside (MD/SCAQMD) | Riverside (MD/SCAQMD) | Riverside |
| (MD/SCAQMD)           |                       |           |

(grams/minute)

Table 8: Evaporative Running Loss Emissions

Pollutant Name: Reactive Org Gases

Temperature: 70F Relative Humidity:

ALL

| Time<br>min | LDA   | LDT   | MDT   | HDT   | UBUS  | MCY   | ALL   |
|-------------|-------|-------|-------|-------|-------|-------|-------|
| 1           | 0.006 | 0.454 | 0.366 | 0.003 | 0.000 | 0.003 | 0.020 |
| 2           | 0.007 | 0.234 | 0.189 | 0.001 | 0.000 | 0.037 | 0.010 |
| 3           | 0.009 | 0.163 | 0.132 | 0.001 | 0.000 | 0.056 | 0.007 |
| 4           | 0.011 | 0.130 | 0.106 | 0.001 | 0.000 | 0.067 | 0.006 |
| 5           | 0.013 | 0.111 | 0.090 | 0.001 | 0.000 | 0.075 | 0.005 |
| 10          | 0.017 | 0.074 | 0.061 | 0.001 | 0.000 | 0.095 | 0.004 |
| 15          | 0.019 | 0.065 | 0.055 | 0.000 | 0.000 | 0.105 | 0.003 |
| 20          | 0.021 | 0.062 | 0.054 | 0.000 | 0.000 | 0.114 | 0.003 |
| 25          | 0.022 | 0.063 | 0.055 | 0.001 | 0.000 | 0.121 | 0.003 |
| 30          | 0.023 | 0.066 | 0.057 | 0.001 | 0.000 | 0.126 | 0.004 |
| 35          | 0.023 | 0.068 | 0.059 | 0.001 | 0.000 | 0.131 | 0.004 |
| 40          | 0.024 | 0.070 | 0.061 | 0.001 | 0.000 | 0.135 | 0.004 |
| 45          | 0.025 | 0.072 | 0.063 | 0.001 | 0.000 | 0.140 | 0.004 |
| 50          | 0.025 | 0.074 | 0.065 | 0.001 | 0.000 | 0.144 | 0.004 |
| 55          | 0.026 | 0.076 | 0.066 | 0.001 | 0.000 | 0.148 | 0.004 |
| 60          | 0.026 | 0.077 | 0.068 | 0.001 | 0.000 | 0.152 | 0.004 |



1

Citrus-Santa Ana.lst  
CALINE4 - (DATED CALINE4x)

3.0.0 PC (32 BIT) VERSION  
(C) COPYRIGHT 2000, TRINITY CONSULTANTS

Run Began on 4/06/2010 at 8:49:04

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL  
JUNE 1989 VERSION  
PAGE 1

JOB: Citrus-Santa Ana  
RUN: Hour 1 (WORST CASE ANGLE)  
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

|                    |                       |             |
|--------------------|-----------------------|-------------|
| U= 0.5 M/S         | Z0= 100. CM           | ALT= 0. (M) |
| BRG= WORST CASE    | VD= 0.0 CM/S          |             |
| CLAS= 6 (F)        | VS= 0.0 CM/S          |             |
| MIXH= 1000. M      | AMB= 2.1 PPM          |             |
| SIGTH= 20. DEGREES | TEMP= 15.0 DEGREE (C) |             |

II. LINK VARIABLES

| LINK<br>DESCRIPTION | * | LINK COORDINATES (M) |      |     |      | * | TYPE | VPH  | EF<br>(G/MI) | H<br>(M) | W<br>(M) |
|---------------------|---|----------------------|------|-----|------|---|------|------|--------------|----------|----------|
|                     | * | X1                   | Y1   | X2  | Y2   | * |      |      |              |          |          |
| 1. Y SB1            | * | 684                  | 1256 | 711 | 1201 | * | AG   | 839  | 0.9          | 0.0      | 20.5     |
| 2. Y SB2            | * | 711                  | 1201 | 745 | 1133 | * | AG   | 788  | 1.7          | 0.0      | 20.5     |
| 3. Y SB3            | * | 745                  | 1133 | 800 | 1025 | * | AG   | 850  | 0.9          | 0.0      | 20.5     |
| 4. Y SB4            | * | 800                  | 1025 | 858 | 906  | * | AG   | 850  | 0.9          | 0.0      | 20.5     |
| 5. Y NB1            | * | 868                  | 911  | 813 | 1024 | * | AG   | 1170 | 0.9          | 0.0      | 20.5     |
| 6. Y NB2            | * | 814                  | 1024 | 761 | 1138 | * | AG   | 1152 | 1.7          | 0.0      | 20.5     |
| 7. Y NB3            | * | 761                  | 1138 | 728 | 1205 | * | AG   | 1723 | 0.9          | 0.0      | 20.5     |
| 8. Y NB4            | * | 728                  | 1205 | 700 | 1263 | * | AG   | 1723 | 0.9          | 0.0      | 20.5     |
| 9. Y LT1            | * | 720                  | 1198 | 753 | 1134 | * | AG   | 51   | 1.7          | 0.0      | 20.5     |
| 10. Y LT2           | * | 753                  | 1134 | 802 | 1038 | * | AG   | 18   | 1.7          | 0.0      | 20.5     |
| 11. X EB1           | * | 596                  | 1103 | 682 | 1125 | * | AG   | 1103 | 0.9          | 0.0      | 18.9     |
| 12. X EB2           | * | 682                  | 1125 | 750 | 1141 | * | AG   | 532  | 1.7          | 0.0      | 18.9     |
| 13. X EB3           | * | 750                  | 1141 | 826 | 1158 | * | AG   | 583  | 0.9          | 0.0      | 18.9     |
| 14. X EB4           | * | 826                  | 1158 | 923 | 1182 | * | AG   | 583  | 0.9          | 0.0      | 18.9     |
| 15. X WB1           | * | 924                  | 1170 | 832 | 1147 | * | AG   | 267  | 0.9          | 0.0      | 18.9     |
| 16. X WB2           | * | 832                  | 1147 | 757 | 1128 | * | AG   | 205  | 1.7          | 0.0      | 18.9     |
| 17. X WB3           | * | 757                  | 1128 | 687 | 1111 | * | AG   | 223  | 0.9          | 0.0      | 18.9     |
| 18. X WB4           | * | 687                  | 1111 | 599 | 1090 | * | AG   | 223  | 0.9          | 0.0      | 18.9     |
| 19. X LT1           | * | 674                  | 1115 | 753 | 1134 | * | AG   | 571  | 1.7          | 0.0      | 18.9     |
| 20. X LT2           | * | 753                  | 1134 | 841 | 1157 | * | AG   | 62   | 1.7          | 0.0      | 18.9     |

III. RECEPTOR LOCATIONS

| RECEPTOR   | * | COORDINATES (M) |      |     |
|------------|---|-----------------|------|-----|
|            | * | X               | Y    | Z   |
| 1. Recpt 1 | * | 805             | 1099 | 1.8 |
| 2. Recpt 2 | * | 691             | 1157 | 1.8 |
| 3. Recpt 3 | * | 729             | 1093 | 1.8 |
| 4. Recpt 4 | * | 778             | 1179 | 1.8 |

# Citrus-Santa Ana.lst

## IV. MODEL RESULTS (WORST CASE WIND ANGLE )

|          |         | * |       | * | PRED  | * | CONC/LINK |     |     |     |     |     |     |     |
|----------|---------|---|-------|---|-------|---|-----------|-----|-----|-----|-----|-----|-----|-----|
|          |         | * | BRG   | * | CONC  | * | (PPM)     |     |     |     |     |     |     |     |
| RECEPTOR |         | * | (DEG) | * | (PPM) | * | 1         | 2   | 3   | 4   | 5   | 6   | 7   | 8   |
|          |         | * |       | * |       | * |           |     |     |     |     |     |     |     |
| 1.       | Recpt 1 | * | 295.  | * | 2.3   | * | 0.0       | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |
| 2.       | Recpt 2 | * | 120.  | * | 2.3   | * | 0.0       | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3.       | Recpt 3 | * | 4.    | * | 2.3   | * | 0.0       | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4.       | Recpt 4 | * | 230.  | * | 2.3   | * | 0.0       | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

| RECEPTOR   | * |     |     |     | CONC/LINK |     |     |     |     |     |
|------------|---|-----|-----|-----|-----------|-----|-----|-----|-----|-----|
|            | * | 9   | 10  | 11  | (PPM)     | 12  | 13  | 14  | 15  | 16  |
| 1. Recpt 1 | * | 0.0 | 0.0 | 0.0 | 0.0       | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2. Recpt 2 | * | 0.0 | 0.0 | 0.0 | 0.0       | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3. Recpt 3 | * | 0.0 | 0.0 | 0.0 | 0.0       | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4. Recpt 4 | * | 0.0 | 0.0 | 0.0 | 0.0       | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

| RECEPTOR   | * | *CONC/LINK |     |     |     |     |
|------------|---|------------|-----|-----|-----|-----|
|            | * | (PPM)      | 17  | 18  | 19  | 20  |
| 1. Recpt 1 | * | 0.0        | 0.0 | 0.0 | 0.0 | 0.0 |
| 2. Recpt 2 | * | 0.0        | 0.0 | 0.0 | 0.0 | 0.0 |
| 3. Recpt 3 | * | 0.0        | 0.0 | 0.0 | 0.0 | 0.0 |
| 4. Recpt 4 | * | 0.0        | 0.0 | 0.0 | 0.0 | 0.0 |

1

Run Ended on 4/06/2010 at 8:49:05

1

Citrus-Slover.lst  
CALINE4 - (DATED CALINE4x)

3.0.0 PC (32 BIT) VERSION  
(C) COPYRIGHT 2000, TRINITY CONSULTANTS

Run Began on 4/06/2010 at 8:46:06

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL  
JUNE 1989 VERSION  
PAGE 1

JOB: Citrus-Slover  
RUN: Hour 1 (WORST CASE ANGLE)  
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

|                    |                       |             |
|--------------------|-----------------------|-------------|
| U= 0.5 M/S         | Z0= 100. CM           | ALT= 0. (M) |
| BRG= WORST CASE    | VD= 0.0 CM/S          |             |
| CLAS= 6 (F)        | VS= 0.0 CM/S          |             |
| MIXH= 1000. M      | AMB= 2.1 PPM          |             |
| SIGTH= 20. DEGREES | TEMP= 15.0 DEGREE (C) |             |

II. LINK VARIABLES

| LINK<br>DESCRIPTION | * | LINK COORDINATES (M) |      |     |      | * | TYPE | VPH  | EF<br>(G/MI) | H<br>(M) | W<br>(M) |
|---------------------|---|----------------------|------|-----|------|---|------|------|--------------|----------|----------|
|                     | * | X1                   | Y1   | X2  | Y2   | * |      |      |              |          |          |
| 1. Y SB1            | * | 684                  | 1256 | 711 | 1201 | * | AG   | 1639 | 0.9          | 0.0      | 29.4     |
| 2. Y SB2            | * | 711                  | 1201 | 745 | 1133 | * | AG   | 1448 | 1.7          | 0.0      | 29.4     |
| 3. Y SB3            | * | 745                  | 1133 | 800 | 1025 | * | AG   | 1569 | 0.9          | 0.0      | 29.4     |
| 4. Y SB4            | * | 800                  | 1025 | 858 | 906  | * | AG   | 1569 | 0.9          | 0.0      | 29.4     |
| 5. Y NB1            | * | 868                  | 911  | 813 | 1024 | * | AG   | 1981 | 0.9          | 0.0      | 29.4     |
| 6. Y NB2            | * | 814                  | 1024 | 761 | 1138 | * | AG   | 1885 | 1.7          | 0.0      | 29.4     |
| 7. Y NB3            | * | 761                  | 1138 | 728 | 1205 | * | AG   | 3431 | 0.9          | 0.0      | 29.4     |
| 8. Y NB4            | * | 728                  | 1205 | 700 | 1263 | * | AG   | 3431 | 0.9          | 0.0      | 29.4     |
| 9. Y LT1            | * | 720                  | 1198 | 753 | 1134 | * | AG   | 191  | 1.7          | 0.0      | 29.4     |
| 10. Y LT2           | * | 753                  | 1134 | 802 | 1038 | * | AG   | 96   | 1.7          | 0.0      | 29.4     |
| 11. X EB1           | * | 596                  | 1103 | 682 | 1125 | * | AG   | 4082 | 0.9          | 0.0      | 30.2     |
| 12. X EB2           | * | 682                  | 1125 | 750 | 1141 | * | AG   | 2536 | 1.7          | 0.0      | 30.2     |
| 13. X EB3           | * | 750                  | 1141 | 826 | 1158 | * | AG   | 2727 | 0.9          | 0.0      | 30.2     |
| 14. X EB4           | * | 826                  | 1158 | 923 | 1182 | * | AG   | 2727 | 0.9          | 0.0      | 30.2     |
| 15. X WB1           | * | 924                  | 1170 | 832 | 1147 | * | AG   | 1074 | 0.9          | 0.0      | 30.2     |
| 16. X WB2           | * | 832                  | 1147 | 757 | 1128 | * | AG   | 953  | 1.7          | 0.0      | 30.2     |
| 17. X WB3           | * | 757                  | 1128 | 687 | 1111 | * | AG   | 1049 | 0.9          | 0.0      | 30.2     |
| 18. X WB4           | * | 687                  | 1111 | 599 | 1090 | * | AG   | 1049 | 0.9          | 0.0      | 30.2     |
| 19. X LT1           | * | 674                  | 1115 | 753 | 1134 | * | AG   | 1546 | 1.7          | 0.0      | 30.2     |
| 20. X LT2           | * | 753                  | 1134 | 841 | 1157 | * | AG   | 121  | 1.7          | 0.0      | 30.2     |

III. RECEPTOR LOCATIONS

| RECEPTOR   | * | COORDINATES (M) |      |     |
|------------|---|-----------------|------|-----|
|            | * | X               | Y    | Z   |
| 1. Recpt 1 | * | 805             | 1099 | 1.8 |
| 2. Recpt 2 | * | 691             | 1157 | 1.8 |
| 3. Recpt 3 | * | 729             | 1093 | 1.8 |
| 4. Recpt 4 | * | 778             | 1179 | 1.8 |

Citrus-Slover.lst

IV. MODEL RESULTS (WORST CASE WIND ANGLE )

|          |         | * |       | * | PRED  | * | CONC/LINK |     |     |     |     |     |     |     |
|----------|---------|---|-------|---|-------|---|-----------|-----|-----|-----|-----|-----|-----|-----|
|          |         | * | BRG   | * | CONC  | * | (PPM)     |     |     |     |     |     |     |     |
| RECEPTOR |         | * | (DEG) | * | (PPM) | * | 1         | 2   | 3   | 4   | 5   | 6   | 7   | 8   |
|          |         | * |       | * |       | * |           |     |     |     |     |     |     |     |
| 1.       | Recpt 1 | * | 295.  | * | 2.5   | * | 0.0       | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |
| 2.       | Recpt 2 | * | 121.  | * | 2.5   | * | 0.0       | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |
| 3.       | Recpt 3 | * | 3.    | * | 2.5   | * | 0.0       | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 |
| 4.       | Recpt 4 | * | 230.  | * | 2.5   | * | 0.0       | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 |

| RECEPTOR   | * |     |     |     | CONC/LINK |     |     |     |     |     |
|------------|---|-----|-----|-----|-----------|-----|-----|-----|-----|-----|
|            | * | 9   | 10  | 11  | (PPM)     | 12  | 13  | 14  | 15  | 16  |
| 1. Recpt 1 | * | 0.0 | 0.0 | 0.0 | 0.1       | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2. Recpt 2 | * | 0.0 | 0.0 | 0.0 | 0.1       | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3. Recpt 3 | * | 0.0 | 0.0 | 0.0 | 0.1       | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4. Recpt 4 | * | 0.0 | 0.0 | 0.0 | 0.1       | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

| RECEPTOR   | * | *CONC/LINK |     |     |     |    |
|------------|---|------------|-----|-----|-----|----|
|            | * | (PPM)      | 17  | 18  | 19  | 20 |
| 1. Recpt 1 | * | 0.0        | 0.0 | 0.1 | 0.0 |    |
| 2. Recpt 2 | * | 0.0        | 0.0 | 0.1 | 0.0 |    |
| 3. Recpt 3 | * | 0.0        | 0.0 | 0.1 | 0.0 |    |
| 4. Recpt 4 | * | 0.0        | 0.0 | 0.1 | 0.0 |    |

1

Run Ended on 4/06/2010 at 8:46:07

1

Citrus-Valley.lst  
CALINE4 - (DATED CALINE4x)

3.0.0 PC (32 BIT) VERSION  
(C) COPYRIGHT 2000, TRINITY CONSULTANTS

Run Began on 4/06/2010 at 9:33:55

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL  
JUNE 1989 VERSION  
PAGE 1

JOB: Citrus-Valley  
RUN: Hour 1 (WORST CASE ANGLE)  
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

|                    |                       |             |
|--------------------|-----------------------|-------------|
| U= 0.5 M/S         | Z0= 100. CM           | ALT= 0. (M) |
| BRG= WORST CASE    | VD= 0.0 CM/S          |             |
| CLAS= 6 (F)        | VS= 0.0 CM/S          |             |
| MIXH= 1000. M      | AMB= 2.1 PPM          |             |
| SIGTH= 20. DEGREES | TEMP= 15.0 DEGREE (C) |             |

II. LINK VARIABLES

| LINK<br>DESCRIPTION | * | LINK COORDINATES (M) |      |     |      | * | TYPE | VPH  | EF<br>(G/MI) | H<br>(M) | W<br>(M) |
|---------------------|---|----------------------|------|-----|------|---|------|------|--------------|----------|----------|
|                     | * | X1                   | Y1   | X2  | Y2   | * |      |      |              |          |          |
| 1. Y SB1            | * | 684                  | 1256 | 711 | 1201 | * | AG   | 1637 | 0.9          | 0.0      | 25.3     |
| 2. Y SB2            | * | 711                  | 1201 | 745 | 1133 | * | AG   | 1487 | 1.7          | 0.0      | 25.3     |
| 3. Y SB3            | * | 745                  | 1133 | 800 | 1025 | * | AG   | 1913 | 0.9          | 0.0      | 25.3     |
| 4. Y SB4            | * | 800                  | 1025 | 858 | 906  | * | AG   | 1913 | 0.9          | 0.0      | 25.3     |
| 5. Y NB1            | * | 868                  | 911  | 813 | 1024 | * | AG   | 3758 | 0.9          | 0.0      | 25.3     |
| 6. Y NB2            | * | 814                  | 1024 | 761 | 1138 | * | AG   | 3336 | 1.7          | 0.0      | 25.3     |
| 7. Y NB3            | * | 761                  | 1138 | 728 | 1205 | * | AG   | 3469 | 0.9          | 0.0      | 25.3     |
| 8. Y NB4            | * | 728                  | 1205 | 700 | 1263 | * | AG   | 3469 | 0.9          | 0.0      | 25.3     |
| 9. Y LT1            | * | 720                  | 1198 | 753 | 1134 | * | AG   | 150  | 1.7          | 0.0      | 25.3     |
| 10. Y LT2           | * | 753                  | 1134 | 802 | 1038 | * | AG   | 422  | 1.7          | 0.0      | 25.3     |
| 11. X EB1           | * | 596                  | 1103 | 682 | 1125 | * | AG   | 1536 | 0.9          | 0.0      | 30.5     |
| 12. X EB2           | * | 682                  | 1125 | 750 | 1141 | * | AG   | 1403 | 1.7          | 0.0      | 30.5     |
| 13. X EB3           | * | 750                  | 1141 | 826 | 1158 | * | AG   | 1553 | 0.9          | 0.0      | 30.5     |
| 14. X EB4           | * | 826                  | 1158 | 923 | 1182 | * | AG   | 1553 | 0.9          | 0.0      | 30.5     |
| 15. X WB1           | * | 924                  | 1170 | 832 | 1147 | * | AG   | 1201 | 0.9          | 0.0      | 30.5     |
| 16. X WB2           | * | 832                  | 1147 | 757 | 1128 | * | AG   | 775  | 1.7          | 0.0      | 30.5     |
| 17. X WB3           | * | 757                  | 1128 | 687 | 1111 | * | AG   | 1197 | 0.9          | 0.0      | 30.5     |
| 18. X WB4           | * | 687                  | 1111 | 599 | 1090 | * | AG   | 1197 | 0.9          | 0.0      | 30.5     |
| 19. X LT1           | * | 674                  | 1115 | 753 | 1134 | * | AG   | 133  | 1.7          | 0.0      | 30.5     |
| 20. X LT2           | * | 753                  | 1134 | 841 | 1157 | * | AG   | 426  | 1.7          | 0.0      | 30.5     |

III. RECEPTOR LOCATIONS

| RECEPTOR   | * | COORDINATES (M) |      |     |
|------------|---|-----------------|------|-----|
|            | * | X               | Y    | Z   |
| 1. Recpt 1 | * | 805             | 1099 | 1.8 |
| 2. Recpt 2 | * | 691             | 1157 | 1.8 |
| 3. Recpt 3 | * | 729             | 1093 | 1.8 |
| 4. Recpt 4 | * | 778             | 1179 | 1.8 |

## Citrus-Valley.lst

#### IV. MODEL RESULTS (WORST CASE WIND ANGLE )

|          |         | * |       | * | PRED  | * | CONC/LINK<br>(PPM) |     |     |     |     |     |     |     |
|----------|---------|---|-------|---|-------|---|--------------------|-----|-----|-----|-----|-----|-----|-----|
|          |         | * | BRG   | * | CONC  | * |                    |     |     |     |     |     |     |     |
| RECEPTOR |         | * | (DEG) | * | (PPM) | * | 1                  | 2   | 3   | 4   | 5   | 6   | 7   | 8   |
| 1.       | Recpt 1 | * | 296.  | * | 2.5   | * | 0.0                | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 |
| 2.       | Recpt 2 | * | 120.  | * | 2.4   | * | 0.0                | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |
| 3.       | Recpt 3 | * | 53.   | * | 2.4   | * | 0.0                | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |
| 4.       | Recpt 4 | * | 179.  | * | 2.5   | * | 0.0                | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 |

[illegible]

| RECEPTOR   | *CONC/LINK<br>*(PPM) | *17 | 18  | 19  | 20  |
|------------|----------------------|-----|-----|-----|-----|
| 1. Recpt 1 | *                    | 0.0 | 0.0 | 0.0 | 0.0 |
| 2. Recpt 2 | *                    | 0.0 | 0.0 | 0.0 | 0.0 |
| 3. Recpt 3 | *                    | 0.0 | 0.0 | 0.0 | 0.0 |
| 4. Recpt 4 | *                    | 0.0 | 0.0 | 0.0 | 0.0 |

1

Run Ended on 4/06/2010 at 9:33:55

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Etiwanda-Jurupa.lst  
CALINE4 - (DATED CALINE4x)

3.0.0 PC (32 BIT) VERSION  
(C) COPYRIGHT 2000, TRINITY CONSULTANTS

Run Began on 4/05/2010 at 17:29:21

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL  
JUNE 1989 VERSION  
PAGE 1

JOB: Etiwanda-Jurupa  
RUN: Hour 1 (WORST CASE ANGLE)  
POLLUTANT: Carbon Monoxide

#### I. SITE VARIABLES

|                    |                       |             |
|--------------------|-----------------------|-------------|
| U= 0.5 M/S         | Z0= 100. CM           | ALT= 0. (M) |
| BRG= WORST CASE    | VD= 0.0 CM/S          |             |
| CLAS= 6 (F)        | VS= 0.0 CM/S          |             |
| MIXH= 1000. M      | AMB= 2.1 PPM          |             |
| SIGTH= 20. DEGREES | TEMP= 15.0 DEGREE (C) |             |

#### II. LINK VARIABLES

| LINK<br>DESCRIPTION | * | LINK COORDINATES (M) | * | TYPE | VPH  | EF<br>(G/MI) | H<br>(M) | W<br>(M) |
|---------------------|---|----------------------|---|------|------|--------------|----------|----------|
|                     | * | X1 Y1 X2 Y2          | * |      |      |              |          |          |
| 1. Y SB1            | * | 684 1256 711 1201    | * | AG   | 1914 | 0.9          | 0.0      | 35.7     |
| 2. Y SB2            | * | 711 1201 745 1133    | * | AG   | 1248 | 1.7          | 0.0      | 35.7     |
| 3. Y SB3            | * | 745 1133 800 1025    | * | AG   | 1388 | 0.9          | 0.0      | 35.7     |
| 4. Y SB4            | * | 800 1025 858 906     | * | AG   | 1388 | 0.9          | 0.0      | 35.7     |
| 5. Y NB1            | * | 868 911 813 1024     | * | AG   | 1408 | 0.9          | 0.0      | 35.7     |
| 6. Y NB2            | * | 814 1024 761 1138    | * | AG   | 986  | 1.7          | 0.0      | 35.7     |
| 7. Y NB3            | * | 761 1138 728 1205    | * | AG   | 1194 | 0.9          | 0.0      | 35.7     |
| 8. Y NB4            | * | 728 1205 700 1263    | * | AG   | 1194 | 0.9          | 0.0      | 35.7     |
| 9. Y LT1            | * | 720 1198 753 1134    | * | AG   | 666  | 1.7          | 0.0      | 35.7     |
| 10. Y LT2           | * | 753 1134 802 1038    | * | AG   | 422  | 1.7          | 0.0      | 35.7     |
| 11. X EB1           | * | 596 1103 682 1125    | * | AG   | 2107 | 0.9          | 0.0      | 33.7     |
| 12. X EB2           | * | 682 1125 750 1141    | * | AG   | 1899 | 1.7          | 0.0      | 33.7     |
| 13. X EB3           | * | 750 1141 826 1158    | * | AG   | 2565 | 0.9          | 0.0      | 33.7     |
| 14. X EB4           | * | 826 1158 923 1182    | * | AG   | 2565 | 0.9          | 0.0      | 33.7     |
| 15. X WB1           | * | 924 1170 832 1147    | * | AG   | 2945 | 0.9          | 0.0      | 33.7     |
| 16. X WB2           | * | 832 1147 757 1128    | * | AG   | 2805 | 1.7          | 0.0      | 33.7     |
| 17. X WB3           | * | 757 1128 687 1111    | * | AG   | 3227 | 0.9          | 0.0      | 33.7     |
| 18. X WB4           | * | 687 1111 599 1090    | * | AG   | 3227 | 0.9          | 0.0      | 33.7     |
| 19. X LT1           | * | 674 1115 753 1134    | * | AG   | 208  | 1.7          | 0.0      | 33.7     |
| 20. X LT2           | * | 753 1134 841 1157    | * | AG   | 140  | 1.7          | 0.0      | 33.7     |

#### III. RECEPTOR LOCATIONS

| RECEPTOR   | * | COORDINATES (M) |
|------------|---|-----------------|
|            | * | X Y Z           |
| 1. Recpt 1 | * | 805 1099 1.8    |
| 2. Recpt 2 | * | 691 1157 1.8    |
| 3. Recpt 3 | * | 729 1093 1.8    |
| 4. Recpt 4 | * | 778 1179 1.8    |

Etiwanda-Jurupa.lst

IV. MODEL RESULTS (WORST CASE WIND ANGLE )

| RECEPTOR   | *<br>*<br>*<br>* | BRG<br>(DEG) | *<br>*<br>*<br>* | PRED<br>CONC<br>(PPM) | *<br>*<br>*<br>* | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   |
|------------|------------------|--------------|------------------|-----------------------|------------------|-----|-----|-----|-----|-----|-----|-----|-----|
| 1. Recpt 1 | *                | 307.         | *                | 2.5                   | *                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |
| 2. Recpt 2 | *                | 105.         | *                | 2.5                   | *                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3. Recpt 3 | *                | 52.          | *                | 2.4                   | *                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4. Recpt 4 | *                | 178.         | *                | 2.4                   | *                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |

| RECEPTOR   | *<br>*<br>*<br>* | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  |
|------------|------------------|-----|-----|-----|-----|-----|-----|-----|-----|
| 1. Recpt 1 | *                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 2. Recpt 2 | *                | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 |
| 3. Recpt 3 | *                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 4. Recpt 4 | *                | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 |

| RECEPTOR   | *<br>*<br>*<br>* | 17  | 18  | 19  | 20  |
|------------|------------------|-----|-----|-----|-----|
| 1. Recpt 1 | *                | 0.0 | 0.0 | 0.0 | 0.0 |
| 2. Recpt 2 | *                | 0.0 | 0.0 | 0.0 | 0.0 |
| 3. Recpt 3 | *                | 0.0 | 0.0 | 0.0 | 0.0 |
| 4. Recpt 4 | *                | 0.0 | 0.0 | 0.0 | 0.0 |

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Run Ended on 4/05/2010 at 17:29:21



1

Hemlock-Valley.lst  
CALINE4 - (DATED CALINE4x)

3.0.0 PC (32 BIT) VERSION  
(C) COPYRIGHT 2000, TRINITY CONSULTANTS

Run Began on 4/06/2010 at 8:38:08

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL  
JUNE 1989 VERSION  
PAGE 1

JOB: Hemlock-Valley  
RUN: Hour 1 (WORST CASE ANGLE)  
POLLUTANT: Carbon Monoxide

#### I. SITE VARIABLES

|                    |                       |             |
|--------------------|-----------------------|-------------|
| U= 0.5 M/S         | Z0= 100. CM           | ALT= 0. (M) |
| BRG= WORST CASE    | VD= 0.0 CM/S          |             |
| CLAS= 6 (F)        | VS= 0.0 CM/S          |             |
| MIXH= 1000. M      | AMB= 2.1 PPM          |             |
| SIGTH= 20. DEGREES | TEMP= 15.0 DEGREE (C) |             |

#### II. LINK VARIABLES

| LINK<br>DESCRIPTION | * | LINK COORDINATES (M) | * | TYPE | VPH | EF<br>(G/MI) | H<br>(M) | W<br>(M) |
|---------------------|---|----------------------|---|------|-----|--------------|----------|----------|
|                     | * | X1 Y1 X2 Y2          | * |      |     |              |          |          |
| 1. Y SB1            | * | 684 1256 711 1201    | * | AG   | 89  | 0.9          | 0.0      | 17.5     |
| 2. Y SB2            | * | 711 1201 745 1133    | * | AG   | 41  | 1.7          | 0.0      | 17.5     |
| 3. Y SB3            | * | 745 1133 800 1025    | * | AG   | 81  | 0.9          | 0.0      | 17.5     |
| 4. Y SB4            | * | 800 1025 858 906     | * | AG   | 81  | 0.9          | 0.0      | 17.5     |
| 5. Y NB1            | * | 868 911 813 1024     | * | AG   | 25  | 0.9          | 0.0      | 17.5     |
| 6. Y NB2            | * | 814 1024 761 1138    | * | AG   | 20  | 1.7          | 0.0      | 17.5     |
| 7. Y NB3            | * | 761 1138 728 1205    | * | AG   | 343 | 0.9          | 0.0      | 17.5     |
| 8. Y NB4            | * | 728 1205 700 1263    | * | AG   | 343 | 0.9          | 0.0      | 17.5     |
| 9. Y LT1            | * | 720 1198 753 1134    | * | AG   | 48  | 1.7          | 0.0      | 17.5     |
| 10. Y LT2           | * | 753 1134 802 1038    | * | AG   | 5   | 1.7          | 0.0      | 17.5     |
| 11. X EB1           | * | 596 1103 682 1125    | * | AG   | 944 | 0.9          | 0.0      | 30.3     |
| 12. X EB2           | * | 682 1125 750 1141    | * | AG   | 621 | 1.7          | 0.0      | 30.3     |
| 13. X EB3           | * | 750 1141 826 1158    | * | AG   | 669 | 0.9          | 0.0      | 30.3     |
| 14. X EB4           | * | 826 1158 923 1182    | * | AG   | 669 | 0.9          | 0.0      | 30.3     |
| 15. X WB1           | * | 924 1170 832 1147    | * | AG   | 822 | 0.9          | 0.0      | 30.3     |
| 16. X WB2           | * | 832 1147 757 1128    | * | AG   | 782 | 1.7          | 0.0      | 30.3     |
| 17. X WB3           | * | 757 1128 687 1111    | * | AG   | 787 | 0.9          | 0.0      | 30.3     |
| 18. X WB4           | * | 687 1111 599 1090    | * | AG   | 787 | 0.9          | 0.0      | 30.3     |
| 19. X LT1           | * | 674 1115 753 1134    | * | AG   | 323 | 1.7          | 0.0      | 30.3     |
| 20. X LT2           | * | 753 1134 841 1157    | * | AG   | 40  | 1.7          | 0.0      | 30.3     |

#### III. RECEPTOR LOCATIONS

| RECEPTOR   | * | COORDINATES (M) |
|------------|---|-----------------|
|            | * | X Y Z           |
| 1. Recpt 1 | * | 805 1099 1.8    |
| 2. Recpt 2 | * | 691 1157 1.8    |
| 3. Recpt 3 | * | 729 1093 1.8    |
| 4. Recpt 4 | * | 778 1179 1.8    |

# Hemlock-Valley.lst

## IV. MODEL RESULTS (WORST CASE WIND ANGLE )

| RECEPTOR   | *<br>*<br>*<br>* | BRG<br>(DEG) | *<br>*<br>*<br>* | PRED<br>CONC<br>(PPM) | *<br>*<br>*<br>* | 1   | 2   | 3   | CONC/LINK<br>(PPM) | 4   | 5   | 6   | 7   | 8   |
|------------|------------------|--------------|------------------|-----------------------|------------------|-----|-----|-----|--------------------|-----|-----|-----|-----|-----|
| 1. Recpt 1 | *                | 301.         | *                | 2.2                   | *                | 0.0 | 0.0 | 0.0 | 0.0                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2. Recpt 2 | *                | 106.         | *                | 2.2                   | *                | 0.0 | 0.0 | 0.0 | 0.0                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3. Recpt 3 | *                | 4.           | *                | 2.2                   | *                | 0.0 | 0.0 | 0.0 | 0.0                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4. Recpt 4 | *                | 230.         | *                | 2.2                   | *                | 0.0 | 0.0 | 0.0 | 0.0                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

| RECEPTOR   | *<br>*<br>*<br>* | 9   | 10  | 11  | CONC/LINK<br>(PPM) | 12  | 13  | 14  | 15  | 16  |
|------------|------------------|-----|-----|-----|--------------------|-----|-----|-----|-----|-----|
| 1. Recpt 1 | *                | 0.0 | 0.0 | 0.0 | 0.0                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2. Recpt 2 | *                | 0.0 | 0.0 | 0.0 | 0.0                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3. Recpt 3 | *                | 0.0 | 0.0 | 0.0 | 0.0                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4. Recpt 4 | *                | 0.0 | 0.0 | 0.0 | 0.0                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

| RECEPTOR   | *<br>*<br>*<br>* | CONC/LINK<br>(PPM) | 17  | 18  | 19  | 20  |
|------------|------------------|--------------------|-----|-----|-----|-----|
| 1. Recpt 1 | *                | 0.0                | 0.0 | 0.0 | 0.0 | 0.0 |
| 2. Recpt 2 | *                | 0.0                | 0.0 | 0.0 | 0.0 | 0.0 |
| 3. Recpt 3 | *                | 0.0                | 0.0 | 0.0 | 0.0 | 0.0 |
| 4. Recpt 4 | *                | 0.0                | 0.0 | 0.0 | 0.0 | 0.0 |

1

Run Ended on 4/06/2010 at 8:38:08

1

Mberry-60 EB ramps.lst  
CALINE4 - (DATED CALINE4x)

3.0.0 PC (32 BIT) VERSION  
(C) COPYRIGHT 2000, TRINITY CONSULTANTS

Run Began on 4/06/2010 at 9:07:30

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL  
JUNE 1989 VERSION  
PAGE 1

JOB: Mberry-60 EB Ramps  
RUN: Hour 1 (WORST CASE ANGLE)  
POLLUTANT: Carbon Monoxide

#### I. SITE VARIABLES

|                    |                       |             |
|--------------------|-----------------------|-------------|
| U= 0.5 M/S         | Z0= 100. CM           | ALT= 0. (M) |
| BRG= WORST CASE    | VD= 0.0 CM/S          |             |
| CLAS= 6 (F)        | VS= 0.0 CM/S          |             |
| MIXH= 1000. M      | AMB= 2.1 PPM          |             |
| SIGTH= 20. DEGREES | TEMP= 15.0 DEGREE (C) |             |

#### II. LINK VARIABLES

| LINK DESCRIPTION | * | LINK COORDINATES (M) | * | TYPE | VPH  | EF (G/MI) | H (M) | W (M) |
|------------------|---|----------------------|---|------|------|-----------|-------|-------|
|                  | * | X1 Y1 X2 Y2          | * |      |      |           |       |       |
| 1. Link A        | * | 6284 -181 6284 -246  | * | AG   | 0    | 2.9       | 0.0   | 28.6  |
| 2. Link B        | * | 6284 -246 6284 -300  | * | AG   | 0    | 6.8       | 0.0   | 28.6  |
| 3. Link C        | * | 6284 -300 6279 -453  | * | AG   | 0    | 2.9       | 0.0   | 28.6  |
| 4. Link D        | * | 6297 -460 6298 -378  | * | AG   | 1309 | 2.9       | 0.0   | 28.6  |
| 5. Link E        | * | 6298 -378 6298 -319  | * | AG   | 1309 | 2.9       | 0.0   | 28.6  |
| 6. Link F        | * | 6298 -319 6297 -176  | * | AG   | 1309 | 2.9       | 0.0   | 28.6  |
| 7. Link G        | * | 6284 -265 6300 -314  | * | AG   | 0    | 6.8       | 0.0   | 28.6  |
| 8. Link H        | * | 6300 -314 6462 -325  | * | AG   | 0    | 2.9       | 0.0   | 15.9  |
| 9. Link I        | * | 6523 -313 6380 -311  | * | AG   | 1107 | 2.9       | 0.0   | 15.9  |
| 10. Link J       | * | 6380 -311 6298 -301  | * | AG   | 1107 | 6.8       | 0.0   | 15.9  |
| 11. Link K       | * | 6370 -310 6284 -326  | * | AG   | 0    | 6.8       | 0.0   | 15.9  |

#### III. RECEPTOR LOCATIONS

| RECEPTOR   | * | COORDINATES (M) |
|------------|---|-----------------|
|            | * | X Y Z           |
| 1. Recpt 1 | * | 6325 -280 1.7   |
| 2. Recpt 2 | * | 6315 -339 1.7   |
| 3. Recpt 3 | * | 6243 -327 1.7   |
| 4. Recpt 4 | * | 6246 -277 1.7   |

#### IV. MODEL RESULTS (WORST CASE WIND ANGLE )

| RECEPTOR   | * | BRG (DEG) | * | PRED CONC (PPM) | * | CONC/LINK (PPM) | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   |
|------------|---|-----------|---|-----------------|---|-----------------|-----|-----|-----|-----|-----|-----|-----|-----|
| 1. Recpt 1 | * | 202.      | * | 2.5             | * | 0.0             | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 |

Mberry-60 EB ramps.lst

|          |   |   |      |   |     |   |     |     |     |     |     |     |     |     |
|----------|---|---|------|---|-----|---|-----|-----|-----|-----|-----|-----|-----|-----|
| 2. Recpt | 2 | * | 350. | * | 2.5 | * | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 |
| 3. Recpt | 3 | * | 78.  | * | 2.4 | * | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |
| 4. Recpt | 4 | * | 107. | * | 2.4 | * | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |

|          |   | *CONC/LINK |     |     |     |
|----------|---|------------|-----|-----|-----|
|          |   | *(PPM)     |     |     |     |
| RECEPTOR |   | *          | 9   | 10  | 11  |
| -----    |   |            |     |     |     |
| 1. Recpt | 1 | *          | 0.0 | 0.3 | 0.0 |
| 2. Recpt | 2 | *          | 0.0 | 0.2 | 0.0 |
| 3. Recpt | 3 | *          | 0.0 | 0.2 | 0.0 |
| 4. Recpt | 4 | *          | 0.0 | 0.2 | 0.0 |

1

Run Ended on 4/06/2010 at 9:07:31

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Mberry-60 WB ramps.lst  
CALINE4 - (DATED CALINE4x)

3.0.0 PC (32 BIT) VERSION  
(C) COPYRIGHT 2000, TRINITY CONSULTANTS

Run Began on 4/06/2010 at 9:02:48

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL  
JUNE 1989 VERSION  
PAGE 1

JOB: Mberry-60 WB Ramps  
RUN: Hour 1 (WORST CASE ANGLE)  
POLLUTANT: Carbon Monoxide

#### I. SITE VARIABLES

|                    |                       |             |
|--------------------|-----------------------|-------------|
| U= 0.5 M/S         | Z0= 100. CM           | ALT= 0. (M) |
| BRG= WORST CASE    | VD= 0.0 CM/S          |             |
| CLAS= 6 (F)        | VS= 0.0 CM/S          |             |
| MIXH= 1000. M      | AMB= 2.1 PPM          |             |
| SIGTH= 20. DEGREES | TEMP= 15.0 DEGREE (C) |             |

#### II. LINK VARIABLES

| LINK DESCRIPTION | * | LINK COORDINATES (M) | * | TYPE | VPH  | EF (G/MI) | H (M) | W (M) |
|------------------|---|----------------------|---|------|------|-----------|-------|-------|
|                  | * | X1 Y1 X2 Y2          | * |      |      |           |       |       |
| 1. Link A        | * | 6284 -181 6284 -246  | * | AG   | 153  | 2.9       | 0.0   | 27.5  |
| 2. Link B        | * | 6284 -246 6284 -300  | * | AG   | 1    | 6.8       | 0.0   | 27.5  |
| 3. Link C        | * | 6284 -300 6279 -453  | * | AG   | 421  | 2.9       | 0.0   | 27.5  |
| 4. Link D        | * | 6297 -460 6298 -378  | * | AG   | 0    | 2.9       | 0.0   | 27.5  |
| 5. Link E        | * | 6298 -378 6298 -319  | * | AG   | 0    | 2.9       | 0.0   | 27.5  |
| 6. Link F        | * | 6298 -319 6297 -176  | * | AG   | 0    | 2.9       | 0.0   | 27.5  |
| 7. Link G        | * | 6284 -265 6300 -314  | * | AG   | 152  | 6.8       | 0.0   | 27.5  |
| 8. Link H        | * | 6300 -314 6462 -325  | * | AG   | 12   | 2.9       | 0.0   | 19.8  |
| 9. Link I        | * | 6523 -313 6380 -311  | * | AG   | 1842 | 2.9       | 0.0   | 19.8  |
| 10. Link J       | * | 6380 -311 6298 -301  | * | AG   | 1422 | 6.8       | 0.0   | 19.8  |
| 11. Link K       | * | 6370 -310 6284 -326  | * | AG   | 420  | 6.8       | 0.0   | 19.8  |

#### III. RECEPTOR LOCATIONS

| RECEPTOR   | * | COORDINATES (M) |
|------------|---|-----------------|
|            | * | X Y Z           |
| 1. Recpt 1 | * | 6325 -280 1.7   |
| 2. Recpt 2 | * | 6315 -339 1.7   |
| 3. Recpt 3 | * | 6243 -327 1.7   |
| 4. Recpt 4 | * | 6246 -277 1.7   |

#### IV. MODEL RESULTS (WORST CASE WIND ANGLE )

| RECEPTOR   | * | BRG (DEG) | * | PRED CONC (PPM) | * | CONC/LINK (PPM) | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   |
|------------|---|-----------|---|-----------------|---|-----------------|-----|-----|-----|-----|-----|-----|-----|-----|
| 1. Recpt 1 | * | 142.      | * | 2.6             | * | 0.0             | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

Mberry-60 WB ramps.lst

|          |   |   |      |   |     |   |     |     |     |     |     |     |     |
|----------|---|---|------|---|-----|---|-----|-----|-----|-----|-----|-----|-----|
| 2. Recpt | 2 | * | 47.  | * | 2.5 | * | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3. Recpt | 3 | * | 79.  | * | 2.5 | * | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4. Recpt | 4 | * | 108. | * | 2.5 | * | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

|          |   | *CONC/LINK |     |     |     |
|----------|---|------------|-----|-----|-----|
|          |   | *(PPM)     |     |     |     |
| RECEPTOR | * | 9          | 10  | 11  |     |
| -----    |   |            |     |     |     |
| 1. Recpt | 1 | *          | 0.0 | 0.4 | 0.1 |
| 2. Recpt | 2 | *          | 0.0 | 0.3 | 0.1 |
| 3. Recpt | 3 | *          | 0.1 | 0.2 | 0.1 |
| 4. Recpt | 4 | *          | 0.1 | 0.2 | 0.1 |

1

Run Ended on 4/06/2010 at 9:02:48

1

Mulberry-Jurupa.lst  
CALINE4 - (DATED CALINE4x)

3.0.0 PC (32 BIT) VERSION  
(C) COPYRIGHT 2000, TRINITY CONSULTANTS

Run Began on 4/05/2010 at 17:31:50

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL  
JUNE 1989 VERSION  
PAGE 1

JOB: Mulberry-Jurupa  
RUN: Hour 1 (WORST CASE ANGLE)  
POLLUTANT: Carbon Monoxide

#### I. SITE VARIABLES

|                    |                       |             |
|--------------------|-----------------------|-------------|
| U= 0.5 M/S         | Z0= 100. CM           | ALT= 0. (M) |
| BRG= WORST CASE    | VD= 0.0 CM/S          |             |
| CLAS= 6 (F)        | VS= 0.0 CM/S          |             |
| MIXH= 1000. M      | AMB= 2.1 PPM          |             |
| SIGTH= 20. DEGREES | TEMP= 15.0 DEGREE (C) |             |

#### II. LINK VARIABLES

| LINK<br>DESCRIPTION | * | LINK COORDINATES (M) | * | TYPE | VPH  | EF<br>(G/MI) | H<br>(M) | W<br>(M) |
|---------------------|---|----------------------|---|------|------|--------------|----------|----------|
|                     | * | X1 Y1 X2 Y2          | * |      |      |              |          |          |
| 1. Y SB1            | * | 684 1256 711 1201    | * | AG   | 1305 | 0.9          | 0.0      | 38.8     |
| 2. Y SB2            | * | 711 1201 745 1133    | * | AG   | 1237 | 1.7          | 0.0      | 38.8     |
| 3. Y SB3            | * | 745 1133 800 1025    | * | AG   | 1979 | 0.9          | 0.0      | 38.8     |
| 4. Y SB4            | * | 800 1025 858 906     | * | AG   | 1979 | 0.9          | 0.0      | 38.8     |
| 5. Y NB1            | * | 868 911 813 1024     | * | AG   | 1144 | 0.9          | 0.0      | 38.8     |
| 6. Y NB2            | * | 814 1024 761 1138    | * | AG   | 963  | 1.7          | 0.0      | 38.8     |
| 7. Y NB3            | * | 761 1138 728 1205    | * | AG   | 1363 | 0.9          | 0.0      | 38.8     |
| 8. Y NB4            | * | 728 1205 700 1263    | * | AG   | 1363 | 0.9          | 0.0      | 38.8     |
| 9. Y LT1            | * | 720 1198 753 1134    | * | AG   | 68   | 1.7          | 0.0      | 38.8     |
| 10. Y LT2           | * | 753 1134 802 1038    | * | AG   | 181  | 1.7          | 0.0      | 38.8     |
| 11. X EB1           | * | 596 1103 682 1125    | * | AG   | 2773 | 0.9          | 0.0      | 35.7     |
| 12. X EB2           | * | 682 1125 750 1141    | * | AG   | 2373 | 1.7          | 0.0      | 35.7     |
| 13. X EB3           | * | 750 1141 826 1158    | * | AG   | 2441 | 0.9          | 0.0      | 35.7     |
| 14. X EB4           | * | 826 1158 923 1182    | * | AG   | 2441 | 0.9          | 0.0      | 35.7     |
| 15. X WB1           | * | 924 1170 832 1147    | * | AG   | 3430 | 0.9          | 0.0      | 35.7     |
| 16. X WB2           | * | 832 1147 757 1128    | * | AG   | 2688 | 1.7          | 0.0      | 35.7     |
| 17. X WB3           | * | 757 1128 687 1111    | * | AG   | 2869 | 0.9          | 0.0      | 35.7     |
| 18. X WB4           | * | 687 1111 599 1090    | * | AG   | 2869 | 0.9          | 0.0      | 35.7     |
| 19. X LT1           | * | 674 1115 753 1134    | * | AG   | 400  | 1.7          | 0.0      | 35.7     |
| 20. X LT2           | * | 753 1134 841 1157    | * | AG   | 742  | 1.7          | 0.0      | 35.7     |

#### III. RECEPTOR LOCATIONS

| RECEPTOR   | * | COORDINATES (M) |
|------------|---|-----------------|
|            | * | X Y Z           |
| 1. Recpt 1 | * | 805 1099 1.8    |
| 2. Recpt 2 | * | 691 1157 1.8    |
| 3. Recpt 3 | * | 729 1093 1.8    |
| 4. Recpt 4 | * | 778 1179 1.8    |

# Mulberry-Jurupa.lst

## IV. MODEL RESULTS (WORST CASE WIND ANGLE )

| RECEPTOR   | *<br>*<br>*<br>* | BRG<br>(DEG) | *<br>*<br>*<br>* | PRED<br>CONC<br>(PPM) | *<br>*<br>*<br>* | 1   | 2   | 3   | CONC/LINK<br>(PPM) | 4   | 5   | 6   | 7   | 8   |
|------------|------------------|--------------|------------------|-----------------------|------------------|-----|-----|-----|--------------------|-----|-----|-----|-----|-----|
| 1. Recpt 1 | *                | 306.         | *                | 2.5                   | *                | 0.0 | 0.0 | 0.0 | 0.0                | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |
| 2. Recpt 2 | *                | 106.         | *                | 2.5                   | *                | 0.0 | 0.0 | 0.0 | 0.0                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3. Recpt 3 | *                | 52.          | *                | 2.5                   | *                | 0.0 | 0.0 | 0.1 | 0.0                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4. Recpt 4 | *                | 177.         | *                | 2.4                   | *                | 0.0 | 0.0 | 0.0 | 0.0                | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |

| RECEPTOR   | *<br>*<br>*<br>* | 9   | 10  | 11  | CONC/LINK<br>(PPM) | 12  | 13  | 14  | 15  | 16  |
|------------|------------------|-----|-----|-----|--------------------|-----|-----|-----|-----|-----|
| 1. Recpt 1 | *                | 0.0 | 0.0 | 0.0 | 0.0                | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 2. Recpt 2 | *                | 0.0 | 0.0 | 0.0 | 0.1                | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 3. Recpt 3 | *                | 0.0 | 0.0 | 0.0 | 0.0                | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 4. Recpt 4 | *                | 0.0 | 0.0 | 0.0 | 0.0                | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 |

| RECEPTOR   | *<br>*<br>*<br>* | CONC/LINK<br>(PPM) | 17  | 18  | 19  | 20  |
|------------|------------------|--------------------|-----|-----|-----|-----|
| 1. Recpt 1 | *                | 0.0                | 0.0 | 0.0 | 0.0 | 0.0 |
| 2. Recpt 2 | *                | 0.0                | 0.0 | 0.0 | 0.0 | 0.0 |
| 3. Recpt 3 | *                | 0.0                | 0.0 | 0.0 | 0.0 | 0.0 |
| 4. Recpt 4 | *                | 0.0                | 0.0 | 0.0 | 0.0 | 0.0 |

1

Run Ended on 4/05/2010 at 17:31:50



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Mulberry-Slover.lst  
CALINE4 - (DATED CALINE4x)

3.0.0 PC (32 BIT) VERSION  
(C) COPYRIGHT 2000, TRINITY CONSULTANTS

Run Began on 4/06/2010 at 9:39:00

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL  
JUNE 1989 VERSION  
PAGE 1

JOB: Mulberry-Slover  
RUN: Hour 1 (WORST CASE ANGLE)  
POLLUTANT: Carbon Monoxide

#### I. SITE VARIABLES

|                    |                       |             |
|--------------------|-----------------------|-------------|
| U= 0.5 M/S         | Z0= 100. CM           | ALT= 0. (M) |
| BRG= WORST CASE    | VD= 0.0 CM/S          |             |
| CLAS= 6 (F)        | VS= 0.0 CM/S          |             |
| MIXH= 1000. M      | AMB= 2.1 PPM          |             |
| SIGTH= 20. DEGREES | TEMP= 15.0 DEGREE (C) |             |

#### II. LINK VARIABLES

| LINK DESCRIPTION | * | LINK COORDINATES (M) | * | TYPE | VPH  | EF (G/MI) | H (M) | W (M) |
|------------------|---|----------------------|---|------|------|-----------|-------|-------|
|                  | * | X1 Y1 X2 Y2          | * |      |      |           |       |       |
| 1. Link A        | * | 6284 -181 6284 -246  | * | AG   | 1982 | 2.9       | 0.0   | 25.0  |
| 2. Link B        | * | 6284 -246 6284 -300  | * | AG   | 1849 | 6.8       | 0.0   | 25.0  |
| 3. Link C        | * | 6284 -300 6279 -453  | * | AG   | 2208 | 2.9       | 0.0   | 25.0  |
| 4. Link D        | * | 6297 -460 6298 -378  | * | AG   | 876  | 2.9       | 0.0   | 25.0  |
| 5. Link E        | * | 6298 -378 6298 -319  | * | AG   | 876  | 2.9       | 0.0   | 25.0  |
| 6. Link F        | * | 6298 -319 6297 -176  | * | AG   | 876  | 2.9       | 0.0   | 25.0  |
| 7. Link G        | * | 6284 -265 6300 -314  | * | AG   | 133  | 6.8       | 0.0   | 25.0  |
| 8. Link H        | * | 6300 -314 6462 -325  | * | AG   | 133  | 2.9       | 0.0   | 26.0  |
| 9. Link I        | * | 6523 -313 6380 -311  | * | AG   | 558  | 2.9       | 0.0   | 26.0  |
| 10. Link J       | * | 6380 -311 6298 -301  | * | AG   | 199  | 6.8       | 0.0   | 26.0  |
| 11. Link K       | * | 6370 -310 6284 -326  | * | AG   | 359  | 6.8       | 0.0   | 26.0  |

#### III. RECEPTOR LOCATIONS

| RECEPTOR   | * | COORDINATES (M) |
|------------|---|-----------------|
|            | * | X Y Z           |
| 1. Recpt 1 | * | 6325 -280 1.7   |
| 2. Recpt 2 | * | 6315 -339 1.7   |
| 3. Recpt 3 | * | 6243 -327 1.7   |
| 4. Recpt 4 | * | 6246 -277 1.7   |

#### IV. MODEL RESULTS (WORST CASE WIND ANGLE )

| RECEPTOR   | * | BRG (DEG) | * | PRED CONC (PPM) | * | CONC/LINK (PPM) | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   |
|------------|---|-----------|---|-----------------|---|-----------------|-----|-----|-----|-----|-----|-----|-----|-----|
| 1. Recpt 1 | * | 208.      | * | 2.5             | * | 0.0             | 0.0 | 0.2 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |

Page 1

Mulberry-Slover.lst

|          |   |   |      |   |     |   |     |     |     |     |     |     |     |     |
|----------|---|---|------|---|-----|---|-----|-----|-----|-----|-----|-----|-----|-----|
| 2. Recpt | 2 | * | 336. | * | 2.8 | * | 0.1 | 0.3 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |
| 3. Recpt | 3 | * | 42.  | * | 2.5 | * | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |
| 4. Recpt | 4 | * | 106. | * | 2.6 | * | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |

|          |   | *CONC/LINK<br>*(PPM) |     |     |     |
|----------|---|----------------------|-----|-----|-----|
| RECEPTOR | * | 9                    | 10  | 11  |     |
| 1. Recpt | 1 | *                    | 0.0 | 0.1 | 0.1 |
| 2. Recpt | 2 | *                    | 0.0 | 0.0 | 0.1 |
| 3. Recpt | 3 | *                    | 0.0 | 0.0 | 0.0 |
| 4. Recpt | 4 | *                    | 0.0 | 0.0 | 0.0 |

1

Run Ended on 4/06/2010 at 9:39:00

1

Sierra-Jurupa.lst  
CALINE4 - (DATED CALINE4x)

3.0.0 PC (32 BIT) VERSION  
(C) COPYRIGHT 2000, TRINITY CONSULTANTS

Run Began on 4/06/2010 at 8:54:35

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL  
JUNE 1989 VERSION  
PAGE 1

JOB: Sierra-Jurupa  
RUN: Hour 1 (WORST CASE ANGLE)  
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

|                    |                       |             |
|--------------------|-----------------------|-------------|
| U= 0.5 M/S         | Z0= 100. CM           | ALT= 0. (M) |
| BRG= WORST CASE    | VD= 0.0 CM/S          |             |
| CLAS= 6 (F)        | VS= 0.0 CM/S          |             |
| MIXH= 1000. M      | AMB= 2.1 PPM          |             |
| SIGTH= 20. DEGREES | TEMP= 15.0 DEGREE (C) |             |

II. LINK VARIABLES

| LINK<br>DESCRIPTION | * | LINK COORDINATES (M) |      |     |      | * | TYPE | VPH  | EF<br>(G/MI) | H<br>(M) | W<br>(M) |
|---------------------|---|----------------------|------|-----|------|---|------|------|--------------|----------|----------|
|                     | * | X1                   | Y1   | X2  | Y2   | * |      |      |              |          |          |
| 1. Y SB1            | * | 684                  | 1256 | 711 | 1201 | * | AG   | 1071 | 0.9          | 0.0      | 37.2     |
| 2. Y SB2            | * | 711                  | 1201 | 745 | 1133 | * | AG   | 937  | 1.7          | 0.0      | 37.2     |
| 3. Y SB3            | * | 745                  | 1133 | 800 | 1025 | * | AG   | 1039 | 0.9          | 0.0      | 37.2     |
| 4. Y SB4            | * | 800                  | 1025 | 858 | 906  | * | AG   | 1039 | 0.9          | 0.0      | 37.2     |
| 5. Y NB1            | * | 868                  | 911  | 813 | 1024 | * | AG   | 853  | 0.9          | 0.0      | 37.2     |
| 6. Y NB2            | * | 814                  | 1024 | 761 | 1138 | * | AG   | 710  | 1.7          | 0.0      | 37.2     |
| 7. Y NB3            | * | 761                  | 1138 | 728 | 1205 | * | AG   | 1232 | 0.9          | 0.0      | 37.2     |
| 8. Y NB4            | * | 728                  | 1205 | 700 | 1263 | * | AG   | 1232 | 0.9          | 0.0      | 37.2     |
| 9. Y LT1            | * | 720                  | 1198 | 753 | 1134 | * | AG   | 134  | 1.7          | 0.0      | 37.2     |
| 10. Y LT2           | * | 753                  | 1134 | 802 | 1038 | * | AG   | 143  | 1.7          | 0.0      | 37.2     |
| 11. X EB1           | * | 596                  | 1103 | 682 | 1125 | * | AG   | 2879 | 0.9          | 0.0      | 35.4     |
| 12. X EB2           | * | 682                  | 1125 | 750 | 1141 | * | AG   | 2357 | 1.7          | 0.0      | 35.4     |
| 13. X EB3           | * | 750                  | 1141 | 826 | 1158 | * | AG   | 2491 | 0.9          | 0.0      | 35.4     |
| 14. X EB4           | * | 826                  | 1158 | 923 | 1182 | * | AG   | 2491 | 0.9          | 0.0      | 35.4     |
| 15. X WB1           | * | 924                  | 1170 | 832 | 1147 | * | AG   | 709  | 0.9          | 0.0      | 35.4     |
| 16. X WB2           | * | 832                  | 1147 | 757 | 1128 | * | AG   | 607  | 1.7          | 0.0      | 35.4     |
| 17. X WB3           | * | 757                  | 1128 | 687 | 1111 | * | AG   | 750  | 0.9          | 0.0      | 35.4     |
| 18. X WB4           | * | 687                  | 1111 | 599 | 1090 | * | AG   | 750  | 0.9          | 0.0      | 35.4     |
| 19. X LT1           | * | 674                  | 1115 | 753 | 1134 | * | AG   | 522  | 1.7          | 0.0      | 35.4     |
| 20. X LT2           | * | 753                  | 1134 | 841 | 1157 | * | AG   | 102  | 1.7          | 0.0      | 35.4     |

III. RECEPTOR LOCATIONS

| RECEPTOR   | * | COORDINATES (M) |      |     |
|------------|---|-----------------|------|-----|
|            | * | X               | Y    | Z   |
| 1. Recpt 1 | * | 805             | 1099 | 1.8 |
| 2. Recpt 2 | * | 691             | 1157 | 1.8 |
| 3. Recpt 3 | * | 729             | 1093 | 1.8 |
| 4. Recpt 4 | * | 778             | 1179 | 1.8 |

# Sierra-Jurupa.lst

## IV. MODEL RESULTS (WORST CASE WIND ANGLE )

| RECEPTOR   | *<br>*<br>*<br>* | BRG<br>(DEG) | *<br>*<br>*<br>* | PRED<br>CONC<br>(PPM) | *<br>*<br>*<br>* | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   |
|------------|------------------|--------------|------------------|-----------------------|------------------|-----|-----|-----|-----|-----|-----|-----|-----|
| 1. Recpt 1 | *                | 298.         | *                | 2.3                   | *                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2. Recpt 2 | *                | 127.         | *                | 2.4                   | *                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3. Recpt 3 | *                | 3.           | *                | 2.3                   | *                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4. Recpt 4 | *                | 231.         | *                | 2.3                   | *                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

| RECEPTOR   | *<br>*<br>*<br>* | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  |
|------------|------------------|-----|-----|-----|-----|-----|-----|-----|-----|
| 1. Recpt 1 | *                | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2. Recpt 2 | *                | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3. Recpt 3 | *                | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4. Recpt 4 | *                | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |

| RECEPTOR   | *<br>*<br>*<br>* | 17  | 18  | 19  | 20  |
|------------|------------------|-----|-----|-----|-----|
| 1. Recpt 1 | *                | 0.0 | 0.0 | 0.0 | 0.0 |
| 2. Recpt 2 | *                | 0.0 | 0.0 | 0.0 | 0.0 |
| 3. Recpt 3 | *                | 0.0 | 0.0 | 0.0 | 0.0 |
| 4. Recpt 4 | *                | 0.0 | 0.0 | 0.0 | 0.0 |

1

Run Ended on 4/06/2010 at 8:54:35

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Sierra-Slover.lst  
CALINE4 - (DATED CALINE4x)

3.0.0 PC (32 BIT) VERSION  
(C) COPYRIGHT 2000, TRINITY CONSULTANTS

Run Began on 4/06/2010 at 8:51:54

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL  
JUNE 1989 VERSION  
PAGE 1

JOB: Sierra-Slover  
RUN: Hour 1 (WORST CASE ANGLE)  
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

|                    |                       |             |
|--------------------|-----------------------|-------------|
| U= 0.5 M/S         | Z0= 100. CM           | ALT= 0. (M) |
| BRG= WORST CASE    | VD= 0.0 CM/S          |             |
| CLAS= 6 (F)        | VS= 0.0 CM/S          |             |
| MIXH= 1000. M      | AMB= 2.1 PPM          |             |
| SIGTH= 20. DEGREES | TEMP= 15.0 DEGREE (C) |             |

II. LINK VARIABLES

| LINK<br>DESCRIPTION | * | LINK COORDINATES (M) |      |     |      | * | TYPE | VPH  | EF<br>(G/MI) | H<br>(M) | W<br>(M) |
|---------------------|---|----------------------|------|-----|------|---|------|------|--------------|----------|----------|
|                     | * | X1                   | Y1   | X2  | Y2   | * |      |      |              |          |          |
| 1. Y SB1            | * | 684                  | 1256 | 711 | 1201 | * | AG   | 1778 | 0.9          | 0.0      | 40.3     |
| 2. Y SB2            | * | 711                  | 1201 | 745 | 1133 | * | AG   | 1162 | 1.7          | 0.0      | 40.3     |
| 3. Y SB3            | * | 745                  | 1133 | 800 | 1025 | * | AG   | 1224 | 0.9          | 0.0      | 40.3     |
| 4. Y SB4            | * | 800                  | 1025 | 858 | 906  | * | AG   | 1224 | 0.9          | 0.0      | 40.3     |
| 5. Y NB1            | * | 868                  | 911  | 813 | 1024 | * | AG   | 1347 | 0.9          | 0.0      | 40.3     |
| 6. Y NB2            | * | 814                  | 1024 | 761 | 1138 | * | AG   | 1284 | 1.7          | 0.0      | 40.3     |
| 7. Y NB3            | * | 761                  | 1138 | 728 | 1205 | * | AG   | 2006 | 0.9          | 0.0      | 40.3     |
| 8. Y NB4            | * | 728                  | 1205 | 700 | 1263 | * | AG   | 2006 | 0.9          | 0.0      | 40.3     |
| 9. Y LT1            | * | 720                  | 1198 | 753 | 1134 | * | AG   | 616  | 1.7          | 0.0      | 40.3     |
| 10. Y LT2           | * | 753                  | 1134 | 802 | 1038 | * | AG   | 63   | 1.7          | 0.0      | 40.3     |
| 11. X EB1           | * | 596                  | 1103 | 682 | 1125 | * | AG   | 2857 | 0.9          | 0.0      | 36.3     |
| 12. X EB2           | * | 682                  | 1125 | 750 | 1141 | * | AG   | 2135 | 1.7          | 0.0      | 36.3     |
| 13. X EB3           | * | 750                  | 1141 | 826 | 1158 | * | AG   | 2751 | 0.9          | 0.0      | 36.3     |
| 14. X EB4           | * | 826                  | 1158 | 923 | 1182 | * | AG   | 2751 | 0.9          | 0.0      | 36.3     |
| 15. X WB1           | * | 924                  | 1170 | 832 | 1147 | * | AG   | 1645 | 0.9          | 0.0      | 36.3     |
| 16. X WB2           | * | 832                  | 1147 | 757 | 1128 | * | AG   | 1583 | 1.7          | 0.0      | 36.3     |
| 17. X WB3           | * | 757                  | 1128 | 687 | 1111 | * | AG   | 1646 | 0.9          | 0.0      | 36.3     |
| 18. X WB4           | * | 687                  | 1111 | 599 | 1090 | * | AG   | 1646 | 0.9          | 0.0      | 36.3     |
| 19. X LT1           | * | 674                  | 1115 | 753 | 1134 | * | AG   | 722  | 1.7          | 0.0      | 36.3     |
| 20. X LT2           | * | 753                  | 1134 | 841 | 1157 | * | AG   | 62   | 1.7          | 0.0      | 36.3     |

III. RECEPTOR LOCATIONS

| RECEPTOR   | * | COORDINATES (M) |      |     |
|------------|---|-----------------|------|-----|
|            | * | X               | Y    | Z   |
| 1. Recpt 1 | * | 805             | 1099 | 1.8 |
| 2. Recpt 2 | * | 691             | 1157 | 1.8 |
| 3. Recpt 3 | * | 729             | 1093 | 1.8 |
| 4. Recpt 4 | * | 778             | 1179 | 1.8 |

# Sierra-Slover.lst

## IV. MODEL RESULTS (WORST CASE WIND ANGLE )

| RECEPTOR   | *<br>*<br>*<br>* | BRG<br>(DEG) | *<br>*<br>*<br>* | PRED<br>CONC<br>(PPM) | *<br>*<br>*<br>* | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   |
|------------|------------------|--------------|------------------|-----------------------|------------------|-----|-----|-----|-----|-----|-----|-----|-----|
| 1. Recpt 1 | *                | 307.         | *                | 2.4                   | *                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |
| 2. Recpt 2 | *                | 106.         | *                | 2.4                   | *                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3. Recpt 3 | *                | 4.           | *                | 2.4                   | *                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4. Recpt 4 | *                | 230.         | *                | 2.4                   | *                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 |

| RECEPTOR   | *<br>*<br>*<br>* | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  |
|------------|------------------|-----|-----|-----|-----|-----|-----|-----|-----|
| 1. Recpt 1 | *                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 2. Recpt 2 | *                | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3. Recpt 3 | *                | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4. Recpt 4 | *                | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |

| RECEPTOR   | *<br>*<br>*<br>* | 17  | 18  | 19  | 20  |
|------------|------------------|-----|-----|-----|-----|
| 1. Recpt 1 | *                | 0.0 | 0.0 | 0.0 | 0.0 |
| 2. Recpt 2 | *                | 0.0 | 0.0 | 0.0 | 0.0 |
| 3. Recpt 3 | *                | 0.0 | 0.0 | 0.0 | 0.0 |
| 4. Recpt 4 | *                | 0.0 | 0.0 | 0.0 | 0.0 |

1

Run Ended on 4/06/2010 at 8:51:55

1

Beech-Slover.lst  
CALINE4 - (DATED CALINE4x)

3.0.0 PC (32 BIT) VERSION  
(C) COPYRIGHT 2000, TRINITY CONSULTANTS

Run Began on 4/06/2010 at 8:41:40

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL  
JUNE 1989 VERSION  
PAGE 1

JOB: Beech-Slover  
RUN: Hour 1 (WORST CASE ANGLE)  
POLLUTANT: Carbon Monoxide

#### I. SITE VARIABLES

|                    |                       |             |
|--------------------|-----------------------|-------------|
| U= 0.5 M/S         | Z0= 100. CM           | ALT= 0. (M) |
| BRG= WORST CASE    | VD= 0.0 CM/S          |             |
| CLAS= 6 (F)        | VS= 0.0 CM/S          |             |
| MIXH= 1000. M      | AMB= 2.1 PPM          |             |
| SIGTH= 20. DEGREES | TEMP= 15.0 DEGREE (C) |             |

#### II. LINK VARIABLES

| LINK<br>DESCRIPTION | * | LINK COORDINATES (M) | * | TYPE | VPH  | EF<br>(G/MI) | H<br>(M) | W<br>(M) |
|---------------------|---|----------------------|---|------|------|--------------|----------|----------|
|                     | * | X1 Y1 X2 Y2          | * |      |      |              |          |          |
| 1. Y SB1            | * | 684 1256 711 1201    | * | AG   | 86   | 0.9          | 0.0      | 14.5     |
| 2. Y SB2            | * | 711 1201 745 1133    | * | AG   | 27   | 1.7          | 0.0      | 14.5     |
| 3. Y SB3            | * | 745 1133 800 1025    | * | AG   | 306  | 0.9          | 0.0      | 14.5     |
| 4. Y SB4            | * | 800 1025 858 906     | * | AG   | 306  | 0.9          | 0.0      | 14.5     |
| 5. Y NB1            | * | 868 911 813 1024     | * | AG   | 585  | 0.9          | 0.0      | 14.5     |
| 6. Y NB2            | * | 814 1024 761 1138    | * | AG   | 408  | 1.7          | 0.0      | 14.5     |
| 7. Y NB3            | * | 761 1138 728 1205    | * | AG   | 418  | 0.9          | 0.0      | 14.5     |
| 8. Y NB4            | * | 728 1205 700 1263    | * | AG   | 418  | 0.9          | 0.0      | 14.5     |
| 9. Y LT1            | * | 720 1198 753 1134    | * | AG   | 59   | 1.7          | 0.0      | 14.5     |
| 10. Y LT2           | * | 753 1134 802 1038    | * | AG   | 177  | 1.7          | 0.0      | 14.5     |
| 11. X EB1           | * | 596 1103 682 1125    | * | AG   | 2029 | 0.9          | 0.0      | 26.8     |
| 12. X EB2           | * | 682 1125 750 1141    | * | AG   | 2019 | 1.7          | 0.0      | 26.8     |
| 13. X EB3           | * | 750 1141 826 1158    | * | AG   | 2078 | 0.9          | 0.0      | 26.8     |
| 14. X EB4           | * | 826 1158 923 1182    | * | AG   | 2078 | 0.9          | 0.0      | 26.8     |
| 15. X WB1           | * | 924 1170 832 1147    | * | AG   | 1781 | 0.9          | 0.0      | 26.8     |
| 16. X WB2           | * | 832 1147 757 1128    | * | AG   | 1502 | 1.7          | 0.0      | 26.8     |
| 17. X WB3           | * | 757 1128 687 1111    | * | AG   | 1679 | 0.9          | 0.0      | 26.8     |
| 18. X WB4           | * | 687 1111 599 1090    | * | AG   | 1679 | 0.9          | 0.0      | 26.8     |
| 19. X LT1           | * | 674 1115 753 1134    | * | AG   | 10   | 1.7          | 0.0      | 26.8     |
| 20. X LT2           | * | 753 1134 841 1157    | * | AG   | 279  | 1.7          | 0.0      | 26.8     |

#### III. RECEPTOR LOCATIONS

| RECEPTOR   | * | COORDINATES (M) |
|------------|---|-----------------|
|            | * | X Y Z           |
| 1. Recpt 1 | * | 805 1099 1.8    |
| 2. Recpt 2 | * | 691 1157 1.8    |
| 3. Recpt 3 | * | 729 1093 1.8    |
| 4. Recpt 4 | * | 778 1179 1.8    |

# Beech-Slover.lst

## IV. MODEL RESULTS (WORST CASE WIND ANGLE )

| RECEPTOR   | *<br>*<br>*<br>* | BRG<br>(DEG) | *<br>*<br>*<br>* | PRED<br>CONC<br>(PPM) | *<br>*<br>*<br>* | 1   | 2   | 3   | CONC/LINK<br>(PPM) | 4   | 5   | 6   | 7   | 8   |
|------------|------------------|--------------|------------------|-----------------------|------------------|-----|-----|-----|--------------------|-----|-----|-----|-----|-----|
| 1. Recpt 1 | *                | 296.         | *                | 2.3                   | *                | 0.0 | 0.0 | 0.0 | 0.0                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2. Recpt 2 | *                | 115.         | *                | 2.3                   | *                | 0.0 | 0.0 | 0.0 | 0.0                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3. Recpt 3 | *                | 52.          | *                | 2.3                   | *                | 0.0 | 0.0 | 0.0 | 0.0                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4. Recpt 4 | *                | 179.         | *                | 2.3                   | *                | 0.0 | 0.0 | 0.0 | 0.0                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

| RECEPTOR   | *<br>*<br>*<br>* | 9   | 10  | 11  | CONC/LINK<br>(PPM) | 12  | 13  | 14  | 15  | 16  |
|------------|------------------|-----|-----|-----|--------------------|-----|-----|-----|-----|-----|
| 1. Recpt 1 | *                | 0.0 | 0.0 | 0.0 | 0.1                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2. Recpt 2 | *                | 0.0 | 0.0 | 0.0 | 0.1                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3. Recpt 3 | *                | 0.0 | 0.0 | 0.0 | 0.0                | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 4. Recpt 4 | *                | 0.0 | 0.0 | 0.0 | 0.0                | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 |

| RECEPTOR   | *<br>*<br>*<br>* | CONC/LINK<br>(PPM) | 17  | 18  | 19  | 20  |
|------------|------------------|--------------------|-----|-----|-----|-----|
| 1. Recpt 1 | *                | 0.0                | 0.0 | 0.0 | 0.0 | 0.0 |
| 2. Recpt 2 | *                | 0.0                | 0.0 | 0.0 | 0.0 | 0.0 |
| 3. Recpt 3 | *                | 0.0                | 0.0 | 0.0 | 0.0 | 0.0 |
| 4. Recpt 4 | *                | 0.0                | 0.0 | 0.0 | 0.0 | 0.0 |

1

Run Ended on 4/06/2010 at 8:41:40



1

Cherry-10 EB ramps.lst  
CALINE4 - (DATED CALINE4x)

3.0.0 PC (32 BIT) VERSION  
(C) COPYRIGHT 2000, TRINITY CONSULTANTS

Run Began on 4/06/2010 at 9:09:57

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL  
JUNE 1989 VERSION  
PAGE 1

JOB: Cherry-10 EB ramps  
RUN: Hour 1 (WORST CASE ANGLE)  
POLLUTANT: Carbon Monoxide

#### I. SITE VARIABLES

|                    |                       |             |
|--------------------|-----------------------|-------------|
| U= 0.5 M/S         | Z0= 100. CM           | ALT= 0. (M) |
| BRG= WORST CASE    | VD= 0.0 CM/S          |             |
| CLAS= 6 (F)        | VS= 0.0 CM/S          |             |
| MIXH= 1000. M      | AMB= 2.1 PPM          |             |
| SIGTH= 20. DEGREES | TEMP= 15.0 DEGREE (C) |             |

#### II. LINK VARIABLES

| LINK<br>DESCRIPTION | * | LINK COORDINATES (M) | * |      | EF     | H   | W    |
|---------------------|---|----------------------|---|------|--------|-----|------|
|                     | * | X1 Y1 X2 Y2          | * | TYPE | (G/MI) | (M) | (M)  |
| 1. Link A           | * | 6284 -181 6284 -246  | * | AG   | 0      | 0.0 | 23.7 |
| 2. Link B           | * | 6284 -246 6284 -300  | * | AG   | 0      | 0.0 | 23.7 |
| 3. Link C           | * | 6284 -300 6279 -453  | * | AG   | 0      | 0.0 | 23.7 |
| 4. Link D           | * | 6297 -460 6298 -378  | * | AG   | 1298   | 0.0 | 23.7 |
| 5. Link E           | * | 6298 -378 6298 -319  | * | AG   | 1298   | 0.0 | 23.7 |
| 6. Link F           | * | 6298 -319 6297 -176  | * | AG   | 1298   | 0.0 | 23.7 |
| 7. Link G           | * | 6284 -265 6300 -314  | * | AG   | 0      | 0.0 | 23.7 |
| 8. Link H           | * | 6300 -314 6462 -325  | * | AG   | 0      | 0.0 | 17.5 |
| 9. Link I           | * | 6523 -313 6380 -311  | * | AG   | 6199   | 0.0 | 17.5 |
| 10. Link J          | * | 6380 -311 6298 -301  | * | AG   | 6199   | 0.0 | 17.5 |
| 11. Link K          | * | 6370 -310 6284 -326  | * | AG   | 0      | 0.0 | 17.5 |

#### III. RECEPTOR LOCATIONS

| RECEPTOR   | * | COORDINATES (M) |
|------------|---|-----------------|
|            | * | X Y Z           |
| 1. Recpt 1 | * | 6325 -280 1.7   |
| 2. Recpt 2 | * | 6315 -339 1.7   |
| 3. Recpt 3 | * | 6243 -327 1.7   |
| 4. Recpt 4 | * | 6246 -277 1.7   |

#### IV. MODEL RESULTS (WORST CASE WIND ANGLE )

| RECEPTOR   | * | BRG (DEG) | * | PRED CONC (PPM) | * | CONC/LINK (PPM) | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   |
|------------|---|-----------|---|-----------------|---|-----------------|-----|-----|-----|-----|-----|-----|-----|-----|
| 1. Recpt 1 | * | 142.      | * | 3.6             | * | 0.0             | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

Cherry-10 EB ramps.lst

|          |   |   |      |   |     |   |     |     |     |     |     |     |     |     |
|----------|---|---|------|---|-----|---|-----|-----|-----|-----|-----|-----|-----|-----|
| 2. Recpt | 2 | * | 357. | * | 3.2 | * | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |
| 3. Recpt | 3 | * | 77.  | * | 3.1 | * | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |
| 4. Recpt | 4 | * | 107. | * | 3.1 | * | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |

|          |   | *CONC/LINK<br>*(PPM) |     |     |     |
|----------|---|----------------------|-----|-----|-----|
| RECEPTOR | * | 9                    | 10  | 11  |     |
| 1. Recpt | 1 | *                    | 0.0 | 1.5 | 0.0 |
| 2. Recpt | 2 | *                    | 0.0 | 0.9 | 0.0 |
| 3. Recpt | 3 | *                    | 0.1 | 0.7 | 0.0 |
| 4. Recpt | 4 | *                    | 0.2 | 0.7 | 0.0 |

1

Run Ended on 4/06/2010 at 9:09:57

1

Cherry-Jurupa.lst  
CALINE4 - (DATED CALINE4x)

3.0.0 PC (32 BIT) VERSION  
(C) COPYRIGHT 2000, TRINITY CONSULTANTS

Run Began on 4/06/2010 at 8:33:57

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL  
JUNE 1989 VERSION  
PAGE 1

JOB: Cherry-Jurupa  
RUN: Hour 1 (WORST CASE ANGLE)  
POLLUTANT: Carbon Monoxide

#### I. SITE VARIABLES

U= 0.5 M/S                      Z0= 100. CM                      ALT= 0. (M)  
BRG= WORST CASE              VD= 0.0 CM/S  
CLAS= 6 (F)                    VS= 0.0 CM/S  
MIXH= 1000. M                AMB= 2.1 PPM  
SIGTH= 20. DEGREES           TEMP= 15.0 DEGREE (C)

#### II. LINK VARIABLES

| LINK<br>DESCRIPTION | * | LINK COORDINATES (M) | * | TYPE | VPH  | EF<br>(G/MI) | H<br>(M) | W<br>(M) |
|---------------------|---|----------------------|---|------|------|--------------|----------|----------|
|                     | * | X1 Y1 X2 Y2          | * |      |      |              |          |          |
| 1. Y SB1            | * | 684 1256 711 1201    | * | AG   | 2406 | 0.9          | 0.0      | 35.5     |
| 2. Y SB2            | * | 711 1201 745 1133    | * | AG   | 1841 | 1.7          | 0.0      | 35.5     |
| 3. Y SB3            | * | 745 1133 800 1025    | * | AG   | 2083 | 0.9          | 0.0      | 35.5     |
| 4. Y SB4            | * | 800 1025 858 906     | * | AG   | 2083 | 0.9          | 0.0      | 35.5     |
| 5. Y NB1            | * | 868 911 813 1024     | * | AG   | 835  | 0.9          | 0.0      | 35.5     |
| 6. Y NB2            | * | 814 1024 761 1138    | * | AG   | 596  | 1.7          | 0.0      | 35.5     |
| 7. Y NB3            | * | 761 1138 728 1205    | * | AG   | 1334 | 0.9          | 0.0      | 35.5     |
| 8. Y NB4            | * | 728 1205 700 1263    | * | AG   | 1334 | 0.9          | 0.0      | 35.5     |
| 9. Y LT1            | * | 720 1198 753 1134    | * | AG   | 565  | 1.7          | 0.0      | 35.5     |
| 10. Y LT2           | * | 753 1134 802 1038    | * | AG   | 239  | 1.7          | 0.0      | 35.5     |
| 11. X EB1           | * | 596 1103 682 1125    | * | AG   | 2497 | 0.9          | 0.0      | 37.8     |
| 12. X EB2           | * | 682 1125 750 1141    | * | AG   | 1759 | 1.7          | 0.0      | 37.8     |
| 13. X EB3           | * | 750 1141 826 1158    | * | AG   | 2324 | 0.9          | 0.0      | 37.8     |
| 14. X EB4           | * | 826 1158 923 1182    | * | AG   | 2324 | 0.9          | 0.0      | 37.8     |
| 15. X WB1           | * | 924 1170 832 1147    | * | AG   | 2724 | 0.9          | 0.0      | 37.8     |
| 16. X WB2           | * | 832 1147 757 1128    | * | AG   | 2482 | 1.7          | 0.0      | 37.8     |
| 17. X WB3           | * | 757 1128 687 1111    | * | AG   | 2721 | 0.9          | 0.0      | 37.8     |
| 18. X WB4           | * | 687 1111 599 1090    | * | AG   | 2721 | 0.9          | 0.0      | 37.8     |
| 19. X LT1           | * | 674 1115 753 1134    | * | AG   | 738  | 1.7          | 0.0      | 37.8     |
| 20. X LT2           | * | 753 1134 841 1157    | * | AG   | 242  | 1.7          | 0.0      | 37.8     |

#### III. RECEPTOR LOCATIONS

| RECEPTOR   | * | COORDINATES (M) |
|------------|---|-----------------|
|            | * | X Y Z           |
| 1. Recpt 1 | * | 805 1099 1.8    |
| 2. Recpt 2 | * | 691 1157 1.8    |
| 3. Recpt 3 | * | 729 1093 1.8    |
| 4. Recpt 4 | * | 778 1179 1.8    |

Cherry-Jurupa.lst

IV. MODEL RESULTS (WORST CASE WIND ANGLE )

| RECEPTOR   | *<br>*<br>*<br>* | BRG<br>(DEG) | *<br>*<br>*<br>* | PRED<br>CONC<br>(PPM) | *<br>*<br>*<br>* | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   |
|------------|------------------|--------------|------------------|-----------------------|------------------|-----|-----|-----|-----|-----|-----|-----|-----|
| 1. Recpt 1 | *                | 308.         | *                | 2.4                   | *                | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2. Recpt 2 | *                | 104.         | *                | 2.5                   | *                | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3. Recpt 3 | *                | 6.           | *                | 2.5                   | *                | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4. Recpt 4 | *                | 230.         | *                | 2.4                   | *                | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

| RECEPTOR   | *<br>*<br>*<br>* | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  |
|------------|------------------|-----|-----|-----|-----|-----|-----|-----|-----|
| 1. Recpt 1 | *                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 2. Recpt 2 | *                | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 |
| 3. Recpt 3 | *                | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4. Recpt 4 | *                | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |

| RECEPTOR   | *<br>*<br>*<br>* | 17  | 18  | 19  | 20  |
|------------|------------------|-----|-----|-----|-----|
| 1. Recpt 1 | *                | 0.0 | 0.0 | 0.0 | 0.0 |
| 2. Recpt 2 | *                | 0.0 | 0.0 | 0.0 | 0.0 |
| 3. Recpt 3 | *                | 0.1 | 0.0 | 0.0 | 0.0 |
| 4. Recpt 4 | *                | 0.0 | 0.0 | 0.0 | 0.0 |

1

Run Ended on 4/06/2010 at 8:33:57

1

Cherry-Slover.lst  
CALINE4 - (DATED CALINE4x)

3.0.0 PC (32 BIT) VERSION  
(C) COPYRIGHT 2000, TRINITY CONSULTANTS

Run Began on 4/05/2010 at 17:38:56

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL  
JUNE 1989 VERSION  
PAGE 1

JOB: Cherry-Slover  
RUN: Hour 1 (WORST CASE ANGLE)  
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 0. (M)  
BRG= WORST CASE VD= 0.0 CM/S  
CLAS= 6 (F) VS= 0.0 CM/S  
MIXH= 1000. M AMB= 2.1 PPM  
SIGTH= 20. DEGREES TEMP= 15.0 DEGREE (C)

II. LINK VARIABLES

| LINK<br>DESCRIPTION | * | LINK COORDINATES (M) | * | TYPE | VPH  | EF<br>(G/MI) | H<br>(M) | W<br>(M) |
|---------------------|---|----------------------|---|------|------|--------------|----------|----------|
|                     | * | X1 Y1 X2 Y2          | * |      |      |              |          |          |
| 1. Y SB1            | * | 684 1256 711 1201    | * | AG   | 2894 | 0.9          | 0.0      | 36.2     |
| 2. Y SB2            | * | 711 1201 745 1133    | * | AG   | 2052 | 1.7          | 0.0      | 36.2     |
| 3. Y SB3            | * | 745 1133 800 1025    | * | AG   | 2262 | 0.9          | 0.0      | 36.2     |
| 4. Y SB4            | * | 800 1025 858 906     | * | AG   | 2262 | 0.9          | 0.0      | 36.2     |
| 5. Y NB1            | * | 868 911 813 1024     | * | AG   | 4598 | 0.9          | 0.0      | 36.2     |
| 6. Y NB2            | * | 814 1024 761 1138    | * | AG   | 4174 | 1.7          | 0.0      | 36.2     |
| 7. Y NB3            | * | 761 1138 728 1205    | * | AG   | 5246 | 0.9          | 0.0      | 36.2     |
| 8. Y NB4            | * | 728 1205 700 1263    | * | AG   | 5246 | 0.9          | 0.0      | 36.2     |
| 9. Y LT1            | * | 720 1198 753 1134    | * | AG   | 842  | 1.7          | 0.0      | 36.2     |
| 10. Y LT2           | * | 753 1134 802 1038    | * | AG   | 424  | 1.7          | 0.0      | 36.2     |
| 11. X EB1           | * | 596 1103 682 1125    | * | AG   | 2905 | 0.9          | 0.0      | 30.9     |
| 12. X EB2           | * | 682 1125 750 1141    | * | AG   | 1833 | 1.7          | 0.0      | 30.9     |
| 13. X EB3           | * | 750 1141 826 1158    | * | AG   | 2675 | 0.9          | 0.0      | 30.9     |
| 14. X EB4           | * | 826 1158 923 1182    | * | AG   | 2675 | 0.9          | 0.0      | 30.9     |
| 15. X WB1           | * | 924 1170 832 1147    | * | AG   | 2684 | 0.9          | 0.0      | 30.9     |
| 16. X WB2           | * | 832 1147 757 1128    | * | AG   | 2474 | 1.7          | 0.0      | 30.9     |
| 17. X WB3           | * | 757 1128 687 1111    | * | AG   | 2898 | 0.9          | 0.0      | 30.9     |
| 18. X WB4           | * | 687 1111 599 1090    | * | AG   | 2898 | 0.9          | 0.0      | 30.9     |
| 19. X LT1           | * | 674 1115 753 1134    | * | AG   | 1072 | 1.7          | 0.0      | 30.9     |
| 20. X LT2           | * | 753 1134 841 1157    | * | AG   | 210  | 1.7          | 0.0      | 30.9     |

III. RECEPTOR LOCATIONS

| RECEPTOR   | * | COORDINATES (M) |
|------------|---|-----------------|
|            | * | X Y Z           |
| 1. Recpt 1 | * | 805 1099 1.8    |
| 2. Recpt 2 | * | 691 1157 1.8    |
| 3. Recpt 3 | * | 729 1093 1.8    |
| 4. Recpt 4 | * | 778 1179 1.8    |

Cherry-Slover.lst

IV. MODEL RESULTS (WORST CASE WIND ANGLE )

|          |         | * |       | * | PRED  | * | CONC/LINK |     |     |     |     |     |     |     |
|----------|---------|---|-------|---|-------|---|-----------|-----|-----|-----|-----|-----|-----|-----|
|          |         | * | BRG   | * | CONC  | * | (PPM)     |     |     |     |     |     |     |     |
| RECEPTOR |         | * | (DEG) | * | (PPM) | * | 1         | 2   | 3   | 4   | 5   | 6   | 7   | 8   |
|          |         | * |       | * |       | * |           |     |     |     |     |     |     |     |
| 1.       | Recpt 1 | * | 306.  | * | 2.7   | * | 0.0       | 0.1 | 0.0 | 0.0 | 0.0 | 0.2 | 0.1 | 0.0 |
| 2.       | Recpt 2 | * | 110.  | * | 2.6   | * | 0.0       | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |
| 3.       | Recpt 3 | * | 51.   | * | 2.6   | * | 0.0       | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |
| 4.       | Recpt 4 | * | 178.  | * | 2.6   | * | 0.0       | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 |

| RECEPTOR   | *<br>*<br>*<br>* | 9   | 10  | 11  | CONC/LINK<br>(PPM) | 12  | 13  | 14  | 15  | 16  |
|------------|------------------|-----|-----|-----|--------------------|-----|-----|-----|-----|-----|
| 1. Recpt 1 | *                | 0.0 | 0.0 | 0.0 | 0.0                | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 2. Recpt 2 | *                | 0.0 | 0.0 | 0.0 | 0.1                | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 3. Recpt 3 | *                | 0.0 | 0.0 | 0.0 | 0.0                | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 4. Recpt 4 | *                | 0.0 | 0.0 | 0.0 | 0.0                | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 |

| RECEPTOR   | *<br>*<br>*<br>* | CONC/LINK<br>(PPM) | 17  | 18  | 19  | 20  |
|------------|------------------|--------------------|-----|-----|-----|-----|
| 1. Recpt 1 | *                | 0.0                | 0.0 | 0.0 | 0.0 | 0.0 |
| 2. Recpt 2 | *                | 0.0                | 0.0 | 0.0 | 0.0 | 0.0 |
| 3. Recpt 3 | *                | 0.0                | 0.0 | 0.0 | 0.0 | 0.0 |
| 4. Recpt 4 | *                | 0.0                | 0.0 | 0.0 | 0.0 | 0.0 |

1

Run Ended on 4/05/2010 at 17:38:56

1

Cherry-Valley.lst  
CALINE4 - (DATED CALINE4x)

3.0.0 PC (32 BIT) VERSION  
(C) COPYRIGHT 2000, TRINITY CONSULTANTS

Run Began on 4/05/2010 at 17:36:05

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL  
JUNE 1989 VERSION  
PAGE 1

JOB: Cherry-Valley  
RUN: Hour 1 (WORST CASE ANGLE)  
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 0. (M)  
BRG= WORST CASE VD= 0.0 CM/S  
CLAS= 6 (F) VS= 0.0 CM/S  
MIXH= 1000. M AMB= 2.1 PPM  
SIGTH= 20. DEGREES TEMP= 15.0 DEGREE (C)

II. LINK VARIABLES

| LINK<br>DESCRIPTION | * | LINK COORDINATES (M) | * | TYPE | VPH  | EF<br>(G/MI) | H<br>(M) | W<br>(M) |
|---------------------|---|----------------------|---|------|------|--------------|----------|----------|
|                     | * | X1 Y1 X2 Y2          | * |      |      |              |          |          |
| 1. Y SB1            | * | 684 1256 711 1201    | * | AG   | 2444 | 0.9          | 0.0      | 36.2     |
| 2. Y SB2            | * | 711 1201 745 1133    | * | AG   | 2255 | 1.7          | 0.0      | 36.2     |
| 3. Y SB3            | * | 745 1133 800 1025    | * | AG   | 2683 | 0.9          | 0.0      | 36.2     |
| 4. Y SB4            | * | 800 1025 858 906     | * | AG   | 2683 | 0.9          | 0.0      | 36.2     |
| 5. Y NB1            | * | 868 911 813 1024     | * | AG   | 4714 | 0.9          | 0.0      | 36.2     |
| 6. Y NB2            | * | 814 1024 761 1138    | * | AG   | 4510 | 1.7          | 0.0      | 36.2     |
| 7. Y NB3            | * | 761 1138 728 1205    | * | AG   | 4663 | 0.9          | 0.0      | 36.2     |
| 8. Y NB4            | * | 728 1205 700 1263    | * | AG   | 4663 | 0.9          | 0.0      | 36.2     |
| 9. Y LT1            | * | 720 1198 753 1134    | * | AG   | 189  | 1.7          | 0.0      | 36.2     |
| 10. Y LT2           | * | 753 1134 802 1038    | * | AG   | 204  | 1.7          | 0.0      | 36.2     |
| 11. X EB1           | * | 596 1103 682 1125    | * | AG   | 1426 | 0.9          | 0.0      | 39.6     |
| 12. X EB2           | * | 682 1125 750 1141    | * | AG   | 1273 | 1.7          | 0.0      | 39.6     |
| 13. X EB3           | * | 750 1141 826 1158    | * | AG   | 1462 | 0.9          | 0.0      | 39.6     |
| 14. X EB4           | * | 826 1158 923 1182    | * | AG   | 1462 | 0.9          | 0.0      | 39.6     |
| 15. X WB1           | * | 924 1170 832 1147    | * | AG   | 1082 | 0.9          | 0.0      | 39.6     |
| 16. X WB2           | * | 832 1147 757 1128    | * | AG   | 654  | 1.7          | 0.0      | 39.6     |
| 17. X WB3           | * | 757 1128 687 1111    | * | AG   | 858  | 0.9          | 0.0      | 39.6     |
| 18. X WB4           | * | 687 1111 599 1090    | * | AG   | 858  | 0.9          | 0.0      | 39.6     |
| 19. X LT1           | * | 674 1115 753 1134    | * | AG   | 153  | 1.7          | 0.0      | 39.6     |
| 20. X LT2           | * | 753 1134 841 1157    | * | AG   | 428  | 1.7          | 0.0      | 39.6     |

III. RECEPTOR LOCATIONS

| RECEPTOR   | * | COORDINATES (M) |
|------------|---|-----------------|
|            | * | X Y Z           |
| 1. Recpt 1 | * | 805 1099 1.8    |
| 2. Recpt 2 | * | 691 1157 1.8    |
| 3. Recpt 3 | * | 729 1093 1.8    |
| 4. Recpt 4 | * | 778 1179 1.8    |

# Cherry-Valley.lst

## IV. MODEL RESULTS (WORST CASE WIND ANGLE )

|          |         | * |       | * | PRED  | * | CONC/LINK |     |     |     |     |     |     |     |
|----------|---------|---|-------|---|-------|---|-----------|-----|-----|-----|-----|-----|-----|-----|
|          |         | * | BRG   | * | CONC  | * | (PPM)     |     |     |     |     |     |     |     |
| RECEPTOR |         | * | (DEG) | * | (PPM) | * | 1         | 2   | 3   | 4   | 5   | 6   | 7   | 8   |
|          |         | * |       | * |       | * |           |     |     |     |     |     |     |     |
| 1.       | Recpt 1 | * | 306.  | * | 2.6   | * | 0.0       | 0.1 | 0.0 | 0.0 | 0.0 | 0.2 | 0.1 | 0.0 |
| 2.       | Recpt 2 | * | 126.  | * | 2.5   | * | 0.0       | 0.0 | 0.1 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 |
| 3.       | Recpt 3 | * | 54.   | * | 2.5   | * | 0.0       | 0.0 | 0.1 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 |
| 4.       | Recpt 4 | * | 178.  | * | 2.5   | * | 0.0       | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 |

| RECEPTOR   | *<br>*<br>*<br>* | 9   | 10  | 11  | CONC/LINK<br>(PPM) | 12  | 13  | 14  | 15  | 16  |
|------------|------------------|-----|-----|-----|--------------------|-----|-----|-----|-----|-----|
| 1. Recpt 1 | *                | 0.0 | 0.0 | 0.0 | 0.0                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2. Recpt 2 | *                | 0.0 | 0.0 | 0.0 | 0.1                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3. Recpt 3 | *                | 0.0 | 0.0 | 0.0 | 0.0                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4. Recpt 4 | *                | 0.0 | 0.0 | 0.0 | 0.0                | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

| RECEPTOR   | *<br>*<br>*<br>* | CONC/LINK<br>(PPM) | 17  | 18  | 19  | 20  |
|------------|------------------|--------------------|-----|-----|-----|-----|
| 1. Recpt 1 | *                | 0.0                | 0.0 | 0.0 | 0.0 | 0.0 |
| 2. Recpt 2 | *                | 0.0                | 0.0 | 0.0 | 0.0 | 0.0 |
| 3. Recpt 3 | *                | 0.0                | 0.0 | 0.0 | 0.0 | 0.0 |
| 4. Recpt 4 | *                | 0.0                | 0.0 | 0.0 | 0.0 | 0.0 |

1

Run Ended on 4/05/2010 at 17:36:05



1

Citrus-10 EB ramps.lst  
CALINE4 - (DATED CALINE4x)

3.0.0 PC (32 BIT) VERSION  
(C) COPYRIGHT 2000, TRINITY CONSULTANTS

Run Began on 4/06/2010 at 9:13:02

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL  
JUNE 1989 VERSION  
PAGE 1

JOB: Citrus-10 EB ramps  
RUN: Hour 1 (WORST CASE ANGLE)  
POLLUTANT: Carbon Monoxide

#### I. SITE VARIABLES

|                    |                       |             |
|--------------------|-----------------------|-------------|
| U= 0.5 M/S         | Z0= 100. CM           | ALT= 0. (M) |
| BRG= WORST CASE    | VD= 0.0 CM/S          |             |
| CLAS= 6 (F)        | VS= 0.0 CM/S          |             |
| MIXH= 1000. M      | AMB= 2.1 PPM          |             |
| SIGTH= 20. DEGREES | TEMP= 15.0 DEGREE (C) |             |

#### II. LINK VARIABLES

| LINK DESCRIPTION | * | LINK COORDINATES (M) | * | TYPE | VPH  | EF (G/MI) | H (M) | W (M) |
|------------------|---|----------------------|---|------|------|-----------|-------|-------|
|                  | * | X1 Y1 X2 Y2          | * |      |      |           |       |       |
| 1. Link A        | * | 6284 -181 6284 -246  | * | AG   | 0    | 2.9       | 0.0   | 21.5  |
| 2. Link B        | * | 6284 -246 6284 -300  | * | AG   | 0    | 6.8       | 0.0   | 21.5  |
| 3. Link C        | * | 6284 -300 6279 -453  | * | AG   | 0    | 2.9       | 0.0   | 21.5  |
| 4. Link D        | * | 6297 -460 6298 -378  | * | AG   | 1111 | 2.9       | 0.0   | 21.5  |
| 5. Link E        | * | 6298 -378 6298 -319  | * | AG   | 1111 | 2.9       | 0.0   | 21.5  |
| 6. Link F        | * | 6298 -319 6297 -176  | * | AG   | 1111 | 2.9       | 0.0   | 21.5  |
| 7. Link G        | * | 6284 -265 6300 -314  | * | AG   | 0    | 6.8       | 0.0   | 21.5  |
| 8. Link H        | * | 6300 -314 6462 -325  | * | AG   | 0    | 2.9       | 0.0   | 18.1  |
| 9. Link I        | * | 6523 -313 6380 -311  | * | AG   | 3375 | 2.9       | 0.0   | 18.1  |
| 10. Link J       | * | 6380 -311 6298 -301  | * | AG   | 3375 | 6.8       | 0.0   | 18.1  |
| 11. Link K       | * | 6370 -310 6284 -326  | * | AG   | 0    | 6.8       | 0.0   | 18.1  |

#### III. RECEPTOR LOCATIONS

| RECEPTOR   | * | COORDINATES (M) |
|------------|---|-----------------|
|            | * | X Y Z           |
| 1. Recpt 1 | * | 6325 -280 1.7   |
| 2. Recpt 2 | * | 6315 -339 1.7   |
| 3. Recpt 3 | * | 6243 -327 1.7   |
| 4. Recpt 4 | * | 6246 -277 1.7   |

#### IV. MODEL RESULTS (WORST CASE WIND ANGLE )

| RECEPTOR   | * | BRG (DEG) | * | PRED CONC (PPM) | * | CONC/LINK (PPM) | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   |
|------------|---|-----------|---|-----------------|---|-----------------|-----|-----|-----|-----|-----|-----|-----|-----|
| 1. Recpt 1 | * | 203.      | * | 3.0             | * | 0.0             | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 |

Citrus-10 EB ramps.lst

|          |   |   |      |   |     |   |     |     |     |     |     |     |     |     |
|----------|---|---|------|---|-----|---|-----|-----|-----|-----|-----|-----|-----|-----|
| 2. Recpt | 2 | * | 354. | * | 2.8 | * | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |
| 3. Recpt | 3 | * | 78.  | * | 2.7 | * | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4. Recpt | 4 | * | 107. | * | 2.7 | * | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |

|          |   | *CONC/LINK |     |     |     |
|----------|---|------------|-----|-----|-----|
|          |   | *(PPM)     |     |     |     |
| RECEPTOR | * | 9          | 10  | 11  |     |
| -----    |   |            |     |     |     |
| 1. Recpt | 1 | *          | 0.0 | 0.8 | 0.0 |
| 2. Recpt | 2 | *          | 0.0 | 0.5 | 0.0 |
| 3. Recpt | 3 | *          | 0.1 | 0.4 | 0.0 |
| 4. Recpt | 4 | *          | 0.1 | 0.4 | 0.0 |

1

Run Ended on 4/06/2010 at 9:13:02

## Water Consumption Indirect Emissions

|                | Acre Feet<br>per year | Electricity<br>Usage<br>kWh/year | Units     | CO       | ROG      | NO <sub>x</sub> | SO <sub>x</sub> | PM <sub>10</sub>     | CO <sub>2</sub> | N <sub>2</sub> O | CH <sub>4</sub> |
|----------------|-----------------------|----------------------------------|-----------|----------|----------|-----------------|-----------------|----------------------|-----------------|------------------|-----------------|
|                |                       |                                  |           | 2.00E-04 | 1.00E-05 | 1.15E-03        | 1.20E-04        | 4.00E-05             | 0.772           | 6.59E-06         | 4.04E-05        |
| Project Demand | 3886.4                | 6,474,742                        | pounds/yr | 1.29E+03 | 6.47E+01 | 7.45E+03        | 7.77E+02        | 2.59E+02             | 5.00E+06        | 4.27E+01         | 2.61E+02        |
|                |                       |                                  | tons/yr   | 6.47E-01 | 3.24E-02 | 3.72E+00        | 3.88E-01        | 1.29E-01             | 2.50E+03        | 2.13E-02         | 1.31E-01        |
|                |                       |                                  | mt/yr     | 5.87E-01 | 2.94E-02 | 3.38E+00        | 3.52E-01        | 1.17E-01             | 2.27E+03        | 1.94E-02         | 1.19E-01        |
|                |                       |                                  |           |          |          |                 |                 | MTCO <sub>2</sub> EQ | 2267.28         | 6.61             | 2.74            |

Energy Factor        1,666 kWh/acre-foot

Based on energy usage factors for water conveyance from the California Energy Commission, Water Energy Use in California, Accessed May 2009.  
<http://www.energy.ca.gov/research/iaw/industry/water.html>

### Emissions From Electricity Consumed By Land Uses

| Land Use                            | Amount     | kilowatt-hours per year <sup>1</sup> | CO<br>2.00E-04  | ROG<br>1.00E-05 | NO <sub>x</sub><br>1.15E-03 | SO <sub>x</sub><br>1.20E-04 | PM <sub>10</sub><br>4.00E-05 | CO <sub>2</sub><br>0.772 | N <sub>2</sub> O<br>6.59E-06 | CH <sub>4</sub><br>4.04E-05 |
|-------------------------------------|------------|--------------------------------------|-----------------|-----------------|-----------------------------|-----------------------------|------------------------------|--------------------------|------------------------------|-----------------------------|
| Residential (Dwelling Units)        |            | 5626.5                               | 0.00            | 0.00            | 0.00                        | 0.00                        | 0.00                         | 0.00                     | 0.00                         | 0.00                        |
| Food Store (SF)                     |            | 53.3                                 | 0.00            | 0.00            | 0.00                        | 0.00                        | 0.00                         | 0.00                     | 0.00                         | 0.00                        |
| Restaurant (SF)                     |            | 47.45                                | 0.00            | 0.00            | 0.00                        | 0.00                        | 0.00                         | 0.00                     | 0.00                         | 0.00                        |
| Hospitals (SF)                      |            | 21.7                                 | 0.00            | 0.00            | 0.00                        | 0.00                        | 0.00                         | 0.00                     | 0.00                         | 0.00                        |
| Retail (SF)                         | 5,483,431  | 13.55                                | 40.71           | 2.04            | 234.10                      | 24.43                       | 8.14                         | 157,150.63               | 1.34                         | 8.22                        |
| College/University (SF)             |            | 11.55                                | 0.00            | 0.00            | 0.00                        | 0.00                        | 0.00                         | 0.00                     | 0.00                         | 0.00                        |
| High School (SF)                    |            | 10.5                                 | 0.00            | 0.00            | 0.00                        | 0.00                        | 0.00                         | 0.00                     | 0.00                         | 0.00                        |
| Elementary School (SF)              |            | 5.9                                  | 0.00            | 0.00            | 0.00                        | 0.00                        | 0.00                         | 0.00                     | 0.00                         | 0.00                        |
| Office (SF)                         | 1,766,129  | 12.95                                | 12.53           | 0.63            | 72.06                       | 7.52                        | 2.51                         | 48,374.52                | 0.41                         | 2.53                        |
| Hotel/Motel (SF)                    |            | 9.95                                 | 0.00            | 0.00            | 0.00                        | 0.00                        | 0.00                         | 0.00                     | 0.00                         | 0.00                        |
| Warehouse (SF)                      | 22,387,358 | 4.35                                 | 53.36           | 2.67            | 306.83                      | 32.02                       | 10.67                        | 205,975.96               | 1.76                         | 10.77                       |
| Miscellaneous (SF)                  |            | 10.5                                 | 0.00            | 0.00            | 0.00                        | 0.00                        | 0.00                         | 0.00                     | 0.00                         | 0.00                        |
| Blank                               |            |                                      | 0.00            | 0.00            | 0.00                        | 0.00                        | 0.00                         | 0.00                     | 0.00                         | 0.00                        |
| <b>TOTAL - pounds per day</b>       | --         | --                                   | <b>1.07E-01</b> | <b>5.33E+00</b> | <b>6.13E+02</b>             | <b>6.40E+01</b>             | <b>2.13E+01</b>              | <b>411,501.10</b>        | <b>3.51</b>                  | <b>21.52</b>                |
| <b>TOTAL - tons per year</b>        | --         | --                                   | <b>1.95E-02</b> | <b>9.73E-01</b> | <b>1.12E+02</b>             | <b>1.17E+01</b>             | <b>3.89E+00</b>              | <b>75,098.95</b>         | <b>0.64</b>                  | <b>3.93</b>                 |
| <b>TOTAL - metric tons per year</b> | --         | --                                   | <b>1.76E-02</b> | <b>8.82E-01</b> | <b>1.01E+02</b>             | <b>1.06E+01</b>             | <b>3.53E+00</b>              | <b>68128.62</b>          | <b>0.58</b>                  | <b>3.56</b>                 |

|                                              | CO <sub>2</sub> | N <sub>2</sub> O | CH <sub>4</sub> |
|----------------------------------------------|-----------------|------------------|-----------------|
| <b>metric tons per year</b>                  | 68,128.62       | 0.58             | 3.56            |
| <b>metric tons CO<sub>2</sub>eq per year</b> | 68,128.62       | 180.28           | 74.82           |

Notes:

1. Usage rate; average for SCE and LADWP.

Source:

South Coast Air Quality Management District, *CEQA Air Quality Handbook*, November 1993, Table A9-11.

Source for greenhouse gas emissions rates:

U.S. Energy Information Administration, *Domestic Electricity Emissions Factors 1999-2002*, October 2007. <http://www.eia.doe.gov/oiat/1605/techassist.html>

### Emissions From Natural Gas Consumed By Land Uses

| <i>Land Use</i>                     | <i>Amount</i> | Cubic feet per unit/square feet/customer per month | <i>CO</i><br>2.00E+01 | <i>ROG</i><br>5.30E+00 | <i>NO<sub>x</sub></i><br><i>Residential</i><br>8.00E+01 | <i>NO<sub>x</sub></i><br><i>Non-Residential</i><br>1.20E+02 | <i>SO<sub>x</sub></i><br>negligible | <i>PM<sub>10</sub></i><br>2.00E-01 | <i>CO<sub>2</sub></i><br>0.12 | <i>N<sub>2</sub>O</i><br>2.20E-06 | <i>CH<sub>4</sub></i><br>2.30E-06 |
|-------------------------------------|---------------|----------------------------------------------------|-----------------------|------------------------|---------------------------------------------------------|-------------------------------------------------------------|-------------------------------------|------------------------------------|-------------------------------|-----------------------------------|-----------------------------------|
| <b>Residential</b>                  |               |                                                    |                       |                        |                                                         |                                                             |                                     |                                    |                               |                                   |                                   |
| Single Family Units                 |               | 6,665                                              | 0.00                  | 0.00                   | 0.00                                                    | 0.00                                                        | --                                  | 0.00                               | 0.00                          | 0.00                              | 0.00                              |
| Multi-Family Units                  |               | 4,011.5                                            | 0.00                  | 0.00                   | 0.00                                                    | 0.00                                                        | --                                  | 0.00                               | 0.00                          | 0.00                              | 0.00                              |
| <b>NonResidential</b>               |               |                                                    |                       |                        |                                                         |                                                             |                                     |                                    |                               |                                   |                                   |
| Indutserial                         | 22,387,358    | 25                                                 | 373.12                | 98.88                  | 1,492.49                                                | 2,238.74                                                    | --                                  | 3.73                               | 2,209,278.75                  | 40.50                             | 42.34                             |
| Hotel/Motel                         |               | 45                                                 | 0.00                  | 0.00                   | 0.00                                                    | 0.00                                                        | --                                  | 0.00                               | 0.00                          | 0.00                              | 0.00                              |
| Retail/Shopping Center              | 5483431       | 49.7                                               | 181.68                | 48.15                  | 726.74                                                  | 1,090.11                                                    | --                                  | 1.82                               | 1,075,762.58                  | 19.72                             | 20.62                             |
| Office                              | 1,766,129     | 40.0                                               | 47.10                 | 12.48                  | 188.39                                                  | 282.58                                                      | --                                  | 0.47                               | 278,862.47                    | 5.11                              | 5.34                              |
| Blank                               |               | 5.0                                                | 0.00                  | 0.00                   | 0.00                                                    |                                                             | --                                  | 0.00                               | 0.00                          | 0.00                              | 0.00                              |
| <b>TOTAL - pounds per day</b>       | --            | --                                                 | <b>6.02E+02</b>       | <b>1.60E+02</b>        | <b>2.41E+03</b>                                         | <b>3.61E+03</b>                                             | --                                  | <b>6.02E+00</b>                    | <b>3,563,903.81</b>           | <b>65.34</b>                      | <b>68.31</b>                      |
| <b>TOTAL - tons per year</b>        | --            | --                                                 | <b>1.10E+02</b>       | <b>2.91E+01</b>        | <b>4.39E+02</b>                                         | <b>6.59E+02</b>                                             | --                                  | <b>1.10E+00</b>                    | <b>650,412.4445</b>           | <b>11.9242</b>                    | <b>12.4662</b>                    |
| <b>TOTAL - metric tons per year</b> | --            | --                                                 | <b>9.97E+01</b>       | <b>2.64E+01</b>        | <b>3.99E+02</b>                                         | <b>5.98E+02</b>                                             | --                                  | <b>9.97E-01</b>                    | <b>5.90E+05</b>               | <b>1.08E+01</b>                   | <b>1.13E+01</b>                   |

|                                              | <i>CO<sub>2</sub></i> | <i>N<sub>2</sub>O</i> | <i>CH<sub>4</sub></i> |
|----------------------------------------------|-----------------------|-----------------------|-----------------------|
| <b>metric tons per year</b>                  | 590044.22             | 10.82                 | 11.31                 |
| <b>metric tons CO<sub>2</sub>eq per year</b> | 590,044.22            | 3,353.42              | 237.49                |

Notes:

1. Usage rate; average for SCE and LADWP.

Source:

South Coast Air Quality Management District, *CEQA Air Quality Handbook*, November 1993, Table A9-12.

### Mobile Source Emissions Calculations

|                               | Total     | Breakdown  |           | Emission Factor |            | Total Emis Passenger | Total Emis Delivery | Passnger  | Delivery  | Total Emissions |                  |
|-------------------------------|-----------|------------|-----------|-----------------|------------|----------------------|---------------------|-----------|-----------|-----------------|------------------|
|                               | VMT       | Passnger   | Delivery  | Passnger        | Delivery   | pounds/day           |                     | tons/year | tons/year | tons/year       | metric tons/year |
| CO                            | 2,455,153 | 2332395.17 | 122757.64 | 0.00709228      | 0.01407778 | 16542.00             | 1728.16             | 3018.91   | 315.39    | 3334.30         | 3024.83          |
| NO <sub>x</sub>               | 2,455,153 | 2332395.17 | 122757.64 | 0.00071158      | 0.01577311 | 1659.69              | 1936.27             | 302.89    | 353.37    | 656.26          | 595.35           |
| N <sub>2</sub> O <sup>1</sup> | N/A       | N/A        | N/A       | N/A             | N/A        | N/A                  | N/A                 | N/A       | N/A       | 31.98           | 29.01            |
| ROG                           | 2,455,153 | 2332395.17 | 122757.64 | 0.00074567      | 0.00206295 | 1739.20              | 253.24              | 317.40    | 46.22     | 363.62          | 329.87           |
| SO <sub>x</sub>               | 2,455,153 | 2332395.17 | 122757.64 | 0.00001072      | 0.00002682 | 25.00                | 3.29                | 4.56      | 0.60      | 5.16            | 4.68             |
| PM <sub>10</sub>              | 2,455,153 | 2332395.17 | 122757.64 | 0.00009067      | 0.00059956 | 211.48               | 73.60               | 38.59     | 13.43     | 52.03           | 47.20            |
| PM <sub>2.5</sub>             | 2,455,153 | 2332395.17 | 122757.64 | 0.00005834      | 0.00050174 | 136.07               | 61.59               | 24.83     | 11.24     | 36.07           | 32.73            |
| CH <sub>4</sub>               | 2,455,153 | 2332395.17 | 122757.64 | 0.00006707      | 0.00009703 | 156.43               | 11.91               | 28.55     | 2.17      | 30.72           | 27.87            |
| CO <sub>2</sub>               | 2,455,153 | 2332395.17 | 122757.64 | 1.10087435      | 2.78163459 | 2567674.02           | 341466.90           | 468600.51 | 62317.71  | 530918.22       | 481,640.88       |

|                                         | CO <sub>2</sub> | N <sub>2</sub> O | CH <sub>4</sub> |
|-----------------------------------------|-----------------|------------------|-----------------|
| metric tons per year                    | 481,640.88      | 29.01            | 27.87           |
| metric tons CO <sub>2</sub> eq per year | 481,640.88      | 8,993.55         | 585.30          |

#### Notes:

1. VMT based upon URBEMIS 2007 model output.
2. Emission Factor based upon EMFAC 2007 (version 2.3), *Highest (Most Conservative) Emission Factors for On-Road Passenger Vehicles and Delivery Trucks*.
3. Breakdown of Passenger and Delivery Trucks assumes 95% auto and 5% truck.
4. Emission Factor for N<sub>2</sub>O based upon a conversion ratio of 0.04873 from NO<sub>x</sub> to N<sub>2</sub>O. Based upon California Air Resources Board: *Estimates of Nitrous Oxide*



## **D. Biological Constraints Analysis**

**BIOLOGICAL CONSTRAINTS ANALYSIS  
FOR THE  
SOUTHWEST INDUSTRIAL PARK  
SPECIFIC PLAN AMENDMENT  
CITY OF FONTANA, SAN BERNARDINO COUNTY**

USGS – Fontana and Guasti Quadrangles,  
Section 22-27 and Section 27 , Township 1 South, Range 6 West

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Prepared for:

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Prepared by:

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2150 North Arrowhead Avenue  
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**Updated March 2010**



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## CERTIFICATION

CERTIFICATION: *"I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief. Fieldwork conducted for this assessment was performed by me or under my direct supervision. I certify that I have not signed a non-disclosure or consultant confidentiality agreement with the project applicant or applicant's representative and that I have no financial interest in the project."*



DATE: March 30, 2010

SIGNED: \_\_\_\_\_  
Report Author

Fieldwork Performed By:

Shay Lawrey  
Name

# 1 Executive Summary

Tom Dodson and Associates (TDA) has prepared this report to relay their findings of an assessment of biological resources and potential biological constraints associated with the Southwest industrial Park (SWIP) Specific Plan Amendment for the City of Fontana. The SWIP Specific Plan was adopted to develop the City of Fontana's industrial uses south of the I-10 Freeway. It is located within Township 1 South, Range 6 West, Sections 22-27 of the USGS – Fontana and Section 27 of the Guasti Quadrangles, 7.5 Minute Series topographic maps. The study area of the SWIP Specific Plan amendment is located north of Jurupa Avenue, west of Citrus Avenue, south of Valley Boulevard and east of Mulberry Avenue. The existing SWIP area encompasses 1,843 acres. The proposed additional areas include approximately 1,318 acres. The vast majority of land use within the study area is industrial. However, a few vacant lots and residential housing exist within the study area. The purpose of the proposed SWIP Specific Plan amendment is increase and maximize industrial development in the area. At this time, many of the parcels in the study area are considered to be underutilized.

For the general biological assessment and constraints analysis a California Natural Diversity Database (CNDDDB) search was completed for the USGS – Fontana and Guasti Quadrangles, 7.5 Minute Series (topographic). According to the CNDDDB, 29 sensitive species have been documented within these two USGS Quadrangles and of the 29 sensitive species identified for the two quads, six (6) sensitive species have a potential to occur in the vicinity of the study area. The species of special status identified to have a potential to occur within the vicinity of the project area include burrowing owl (*Athene cunicularia*), northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*), western mastiff bat (*Eumops perotis californicus*), western yellow bat (*Lasiurus xanthinus*), San Diego desert woodrat (*Neotoma lepida intermedia*), and Delhi Sands flower-loving fly (DSF) (*Rhaphiomidas terminatus abdominalis*).

After examining the background information sources TDA biologist, Shay Lawrey, conducted a pedestrian and windshield habitat assessment and general biological survey of the project area on October 23 and 24, 2008. The survey concluded that the habitat within and adjacent to the study area is highly disturbed and devoid sensitive habitat types or communities.

No sensitive plant or animal species are known or suspected to occur on or near the site. No part of the project falls within designated critical habitat for the federally listed endangered San Bernardino kangaroo rat or California gnatcatcher. Designated critical habitat for the federally listed endangered Delhi Sands flower-loving fly occurs adjacent to and within a small section of the project study area, between Almond Avenue and Live Oak avenue, north of Jurupa Avenue. No aspects of the Specific Plan amendment or annexation will result in direct impacts to Delhi Sands flower-loving fly, or their critical habitat. However, site specific evaluations will be necessary prior to the approval of site specific development projects within the SWIP boundaries.

Potential biological constraints to site specific development within the study area may include raptor, bat, and DSF habitat and regulated waters. Within the study area, there are small stands of eucalyptus trees which may provide suitable nesting, roosting and foraging habitat for various bat and raptor species. The few patches of open ground may provide suitable habitat

for burrowing owl, San Diego Pocket mouse, and/or DSF. It is not known if any of the parcels planned to be annexed into the SWIP Specific Plan contain any streambed, wetland, riparian, or Delhi Sands habitat types. Therefore, once site specific development projects move towards approval, site specific evaluations for burrowing owl, DSF and/or jurisdictional waters may be warranted and/or required. These potential biological resources do not pose a constraint to amending the Specific plan or to annexation of additional acreage, but they may pose a constraint on the future development of specific areas within the study area.

## **2 Biological Regulatory Setting**

### **2.1 Endangered Species Act**

Special status species are native species that have been afforded special legal or management protection because of concern for their continued existence. There are several categories of protection at both federal and state levels, depending on the magnitude of threat to the continued existence and existing knowledge of population levels. The U.S. Fish and Wildlife Service (USFWS) administers the federal Endangered Species Act (ESA) of 1973. The ESA provides a legal mechanism for listing species as either threatened or endangered, and a process of protection for those species listed. Section 9 of the ESA prohibits "take" of threatened or endangered species. The term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in such conduct. "Take" can include adverse modification of habitats used by a threatened or endangered species during any portion of its life history. Under the regulations of the ESA, the USFWS may authorize "take" when it is incidental to, but not the purpose of, an otherwise lawful act. Take authorization can be obtained under Section 7 or Section 10 of the ESA.

### **2.2 Migratory Bird Treaty Act**

The Migratory Bird Treaty Act protects all native breeding birds, whether or not they are considered sensitive by resource agencies.

### **2.3 California Endangered Species Act**

The California Department of Fish and Game (CDFG) administers the state Endangered Species Act. The State of California considers an endangered species one whose prospects of survival and reproduction are in immediate jeopardy. A threatened species is one present in such small numbers throughout its range that it is likely to become an endangered species in the near future in the absence of special protection or management and a rare species is one present in such small numbers throughout its range that it may become endangered if its present environment worsens. Rare species applies to California native plants. Further, all raptors and their nests are protected under '3503.5 of the California Fish and Game Code. Species that are California fully protected include those protected by special legislation for various reasons, such as the California condor. Species of Special Concern is an informal designation used by CDFG for some declining wildlife species that are not proposed for listing as threatened or endangered, such as the burrowing owl. This designation does not provide legal protection, but signifies that these species are recognized as sensitive by CDFG.

### **3 Jurisdictional Waters Regulatory Setting**

#### **3.1 Army Corps of Engineers**

The ACOE regulates discharges of dredged or fill material into *waters of the United States*. These *waters* include wetlands and non-wetland bodies of water that meet specific criteria. The ACOE regulatory jurisdiction pursuant to Section 404 of the Federal Clean Water Act (CWA) is founded on a connection, or *nexus*, between the water body in question and interstate commerce. This connection may be direct, through a tributary system linking a stream channel with traditional navigable waters used in interstate or foreign commerce, or may be indirect, through a nexus identified in the ACOE regulations.

#### **3.2 Regional Water Quality Control Board**

The RWQCB's regulatory jurisdiction is pursuant to Section 401 of the Federal CWA. The RWQCB typically regulates discharges of dredged or fill material into *waters of the United States*, however they also have regulatory authority over waste discharges into Waters of the State, which may be isolated, under the Porter-Cologne Water Quality Control Act issued by the State Water Resources Board.

#### **3.3 California Department of Fish and Game**

The CDFG, through provisions of the California Fish and Game Code (Sections 1601-1603), is empowered to issue agreements for any alteration of a river, stream, or lake where fish or wildlife resources may be adversely affected. Streams (and rivers) are defined by the presence of a channel bed and banks, and at least an intermittent flow of water. The CDFG typically extends the limits of their jurisdiction laterally beyond the channel banks for streams that support riparian vegetation. In these situations the outer edge of the riparian vegetation is generally used as the lateral extent of the stream and CDFG jurisdiction.

CDFG regulates wetland areas only to the extent that those wetlands are a part of a river, stream, or lake as defined by CDFG. While seasonal ponds are within the CDFG definition of wetlands, they are not part of a river, stream, or lake, and may, or may not, be subject to the jurisdiction of CDFG under Sections 1601-1603 of the Fish and Game Code.

### **4 Methodology**

Prior to conducting a field survey, the California Natural Diversity Data Base (CNDDB) and literature references were examined to obtain information on species occurrences in the project vicinity. A CNDDB search was completed for the USGS – Fontana and Guasti Quadrangles, 7.5 Minute Series (topographic). After examining the background information sources TDA biologist, Shay Lawrey, conducted a pedestrian and windshield habitat assessment and general biological survey of the project area on October 23 and 24, 2008. Photos were taken to characterize habitat conditions. Disturbance characteristics and animal species were recorded.

## 5 Results

According to the CNDDDB, 29 sensitive species have been documented within these two USGS Quadrangles and of the 29 sensitive species identified for the two quads, six (6) sensitive species have a potential to occur in the vicinity of the study area. Please refer to Table 1 for a complete list of the species occurrence potential on the property. The table includes the habitat requirements of each species and the potential of their occurrence on the site. The occurrence potential is based on site conditions and species range.

Currently, there are small patches of habitat, within the study area, marginally suitable for six (6) of the 29 sensitive species identified for the two quads. The species of special status identified to have a potential to occur within the vicinity of the project area include burrowing owl (*A. cunicularia*), northwestern San Diego pocket mouse (*C. fallax fallax*), western mastiff bat (*E. perotis californicus*), western yellow bat (*L. xanthinus*), San Diego desert woodrat (*N. lepida intermedia*), and Delhi Sands flower-loving fly (DSF) (*R. terminatus abdominalis*).

Some of the more common bird species found on site are the Greater roadrunner (*Geococcyx californianus*), brown-headed cowbird (*Molothrus ater*), Anna's hummingbird (*Calypte anna*), black phoebe (*Sayornis nigricans*), mourning dove (*Zenaida macroura*), house finch (*Carpodacus mexicanus*), and red-tailed hawk (*Buteo jamaicensis*). Mammal species that utilize the project site include, California ground squirrel (*Spermophilus beechyi*), cotton-tail rabbit (*Sylvilagus audubonii*), coyote (*Canis latrans*), and domestic dogs (*Canis lupis familiaris*). Common reptile species include, western fence lizard (*Sceloporus occidentalis*), and side-blotched lizard (*Uta stansburiana*).

The study area is designated for urban development (industrial). This is primarily due to existing land uses and the sites proximity to transportation corridors (I-10 Freeway, Southern Pacific Railroad, truck routes, etc.). The study area is located within a completely urbanized setting. The site is surrounded by urban development (paved roads, industrial, commercial and residential development, and freeway). No native vegetation or habitat exists on or near the project site. The land within the entirety of the study area is considered disturbed. There are existing industrial complexes, storage lots, residential housing and vacant lots. Weed abatement activities occur in all areas containing open ground as required by the City/County Code Enforcement.

The project does not occur within areas that are designated as unique or prime farmland under Williamson Act control, coastal zone, or containing wild or scenic rivers. No sensitive plant or animal species are known or suspected to occur on or near the site. Figure 9-3 of the City's General Plan indicates that no known natural biotic communities exist on or near the project site. Figure 9-4 of the City's General Plan indicates that potential habitat for sensitive wildlife resources, specifically for DSF occurs in the study area. Due to the urbanized nature of the area, no migratory corridors exist or will be affected by the proposed project. No part of the project falls within designated critical habitat for the federally listed as endangered San Bernardino kangaroo rat or California gnatcatcher. Designated critical habitat for the federally listed endangered DSF occurs adjacent to and within a small section of the project study area, between Almond Avenue and Live Oak avenue, north of Jurupa Avenue. No aspects of the

Specific Plan amendment or annexation will result in direct impacts to DSF or their critical habitat. However, site specific evaluations will be necessary prior to the approval of site specific development projects within the SWIP boundaries.

## **6 Potential Species of Concern Background Information**

### **6.1 Delhi Sands flower-loving fly**

The DSF is a mydid fly in the genus *Rhaphiomidas*, and the only fly presently on the Endangered Species List. This subspecies is restricted to the Delhi Sands formation, an area of ancient inland dunes of which only a few hundred acres out of more than 40 square miles (100 km<sup>2</sup>) remain, the rest largely now forming much or all of the foundation on which the towns of Colton, Fontana, and Ontario, California are built. The adults are only active for a few weeks each year, feeding on flowers, in August and September. Almost nothing is known about their biology, though early instar larvae appear to be attractive to ants, and are brought into the ant nest (it therefore seems likely that the larvae are predators of the ant brood).

This fly was emergency-listed by the United States Fish and Wildlife Service in 1993, and it has been an extremely contentious listing ever since. Political officials and news services from the region have repeatedly decried this fly as a disease-carrying pest, despite documentation that it is not; there have been repeated attempts by local officials to have the species de-listed. Residential and commercial development, agricultural conversion, sand mining, invasion by exotic species, dumping of cow manure and trash, and off-road vehicle use have resulted in significant loss and modification of the species' habitat. Estimates are that over 97% of the original habitat is already gone, and only a portion of what remains is suitable habitat for these flies.

There are an estimated 5-10 more species of insects endemic to the Delhi Sands formation, including newly-discovered and still unnamed species of scarab beetle, sand roach, and Jerusalem cricket

### **6.2 Burrowing owl**

Burrowing owls are a small ground-dwelling owl with a round head and no ear tufts. They have white eyebrows, yellow eyes, and long legs. The Owl is sandy colored on the head, back, and upperparts of the wings and white-to-cream with barring on the breast and belly and a prominent white chin stripe. They have a rounded head, and yellow eyes with white eyebrows. The young are brown on the head, back, and wings with a white belly and chest. They molt into an adult-like plumage during their first summer. Burrowing Owls are comparatively easy to see because they are often active in daylight, and are surprisingly bold and approachable.

The burrowing owl occurs in shortgrass prairies, grasslands, lowland scrub, agricultural lands (particularly rangelands), prairies, coastal dunes, desert floors, and some artificial, open areas as a year-long resident (Haug, et al. 1993). They may also use golf courses, cemeteries, road allowances within cities, airports, vacant lots in residential areas and university campuses, fairgrounds, abandoned buildings, and irrigation ditches (Haug, et al. 1993; Hayworth 1990 pers. obs.). They may also occur in forb and open shrub stages of pinyon-juniper and

ponderosa pine habitats (Zeiner, et al. 1990). As a critical habitat feature need, they require the use of rodent or other burrows for roosting and nesting cover. They may also dig their own burrow in soft, friable soil (as found in Florida) and may also use pipes, culverts, and nest boxes where burrows are scarce (Robertson 1929). The mammal burrows are modified and enlarged. One burrow is typically selected for use as the nest, however, satellite burrows are usually found within the immediate vicinity of the nest burrow within the defended territory of the owl.

The burrowing owl is a crepuscular hunter with a prey base including invertebrates and small vertebrates (Thomsen 1971). They typically forage in short-grass, mowed, or overgrazed pasture, golf courses and airports (Thomsen 1971). They are a relatively opportunistic forager (Haug, et al. 1993). Their diet is composed of a variety of foods included *Peromyscus*, *Microtus* and beetles. Beetles occur within their diet with more frequency, however, based on biomass, *Peromyscus* is dominant with *Microtus* appearing second in overall biomass (Marti 1974). Although they eat mostly insects and small mammals, they also may take reptiles, birds, and carrion.

Predators of burrowing owl include prairie falcons, red-tailed hawks, Swainson's hawks, ferruginous hawks, northern harriers, golden eagles, foxes, coyotes, and domestic dogs and cats (Martin 1973). The threats to the burrowing owl include conversion of grassland to agriculture, other habitat destruction, predators, collisions with vehicles, and pesticides/poisoning of ground squirrels (Grinnell and Miller 1944, Zarn 1974, Remsen 1978). Urban sites can act as unintentional preserves and support owl populations if habitat features necessary for owls are provided. This is supported by the documented population at Moffett Field in Santa Clara County California. The population has established itself and is using nest burrows under cement or other hard surfaces. The adult density, number of young fledged or pairs with emergent young is not different at Moffett Field compared to other intentional preserve areas (Trulio 1997).

### **6.3 Northwestern San Diego pocket mouse**

Northwestern pocket mice are moderately sized pocket mice, ranging in length from 170 to 200 mm and weighing from 17 to 22 grams. There is very little difference in size between males and females. Both are colored a dark brown on top and white underneath, with spines that are black on the rump and white on the hips. The northwestern San Diego pocket mouse inhabits coastal sage scrub, sage scrub/grassland ecotones, and chaparral communities. It inhabits open, sandy areas of both the Upper and Lower Sonoran life-zones of southwestern California and northern Baja California (in McClenaghan 1983). Bleich (1973) recorded the highest populations of the San Diego pocket mouse in coastal sage scrub supporting a mixture of coastal sagebrush (*Artemisia californica*) and California buckwheat (*Eriogonum fasciculatum*) on the Naval Weapons Station, Fallbrook Annex in northwestern San Diego County, but it was also relatively abundant in chaparral. The San Diego pocket mouse generally exhibits a strong microhabitat affinity for moderately gravelly and rocky substrates (Bleich 1973; Price and Waser 1984), and, to a lesser extent, shrubby areas (MWD and RCHCA 1995). In western Riverside County, the San Diego pocket mouse also commonly is found in disturbed grassland and open sage scrub vegetation with sandy-loam to loam soils.



Marginal records for the northwestern San Diego pocket mouse include Claremont; San Bernardino; Banning; and Jacumba (Hall 1981), and San Jacinto Lake, Riverside County (Mearns 1901). The northwestern San Diego pocket mouse occurs throughout western Riverside County and has been collected at elevations from 138 meters (452 ft) at Palm Springs, Riverside County, to 1,835 meters (6,018 ft) on the northern slopes of the San Bernardino Mountains in San Bernardino County (Lackey 1996). It is uncertain where the boundary between the northwestern San Diego pocket mouse and the pallid San Diego pocket mouse (*C. f. pallidus*) lies. The pallid San Diego pocket mouse occurs on the eastern slopes of the Peninsular Ranges in eastern Riverside County, but occurs in the transitional Cabazon area of Riverside County and the San Felipe Valley in San Diego County (Hall 1981). A transition zone between the two subspecies may occur in the eastern portion of the Anza or Terwilliger valleys or more to the east in the Santa Rosa Mountains.

Arid grassland and desert environments support a surprising diversity of coexisting rodent granivores. Pocket mice and other heteromyid rodents also modify their environments (Brown and Harney 1993; Price and Jenkins 1986). They dig burrows, which moves the soils and provides habitat and refugia for other species, including other rodents, reptiles, amphibians, birds and invertebrates. Collection, storage and consumption of seeds by kangaroo rats, for example, have profound effects on the vegetation structure of the habitats they occupy (Price and Jenkins 1986). In addition, resource use by pocket mice and kangaroo rats substantially overlaps with that of seed-eating birds and harvester ants. The San Diego pocket mouse appears to be sensitive to habitat fragmentation and degradation. Bolger et al. (1997) studied rodent diversity and abundance in isolated habitat fragments of varying size and age in San Diego County. The San Diego pocket mouse tended to occur in habitat patches with 90-100 percent shrub cover, with only two of eight occupied patches having shrub cover of 50 percent and 75 percent. Bolger et al. tentatively concluded that canyon fragments under 25 ha (61.8 acres) and isolated for more than 30 years support few populations of native rodents, including the San Diego pocket mouse. Their data also suggest that isolated habitat patches must be at least 25 ha (62 acres) to 80 ha (198 acres) to sustain native rodent populations. This species is still relatively common in sage scrub, chaparral, and grassland habitats.

#### **6.4 Western Mastiff Bat**

The western Mastiff Bat is the biggest North American bat, with a body length of 5.5 to 7.5" and a wingspan of over 22". Fur is dark brown, kind of thin, hairs white at base. Has huge ears, joined at base and extending out over forehead like a bonnet. They occur in two populations. One population is from the southwestern United States to central Mexico and the second is located in the central and northern portions of South America (Harvey and other 1999). The western or California mastiff bat subspecies is primarily known from low to mid-elevations in southern and central California southeast to Texas and south to central Mexico (Best and others 1996). There are isolated records of the species occurring in northern California, and few records east of the Sierra crest (Philpott 1997). Recent surveys in California (Brown report for West Mohave Plan Area) have shown that western mastiff bats are "more widely distributed than was previously realized" and significant populations occur in areas for which only single or scattered records were previously available.

Western mastiff bat is found in desert scrub, chaparral, mixed conifer forest, giant sequoia forests, and montane meadows (Philpott 1997). In the southwestern United States, this species is most often associated with upper and lower Sonoran life zones (Best and others 1996, Krutzsch 1943). In southern California, most western mastiff bat roosts are found in semiarid areas with low-growing chaparral (Best and others 1996) that do not significantly obstruct rock cliffs or outcrops. Because of its large wingspan, the western mastiff bat requires roosts that have at least 6.5 feet (2 meters) of free space to drop from to initiate flight. In the southwestern United States, day roosts are generally found in areas with rugged, rocky canyons and cliffs (Best and others 1996). Crevices in granitic rocks and consolidated sandstone are a common roosting substrate (Best and others 1996). These bats will also roost in building crevices—as nearly as many day roosts are known in buildings as in natural crevices (Barbour and Davis 1969). They are found in cities such as Tucson and Los Angeles (Best and others 1996). It requires large bodies of flat water for drinking sites. Its long, narrow wings preclude it from drinking at ponds less than 100 feet long (Bat Conservation International 2002).

Western mastiff bats are insectivorous and feed primarily on moths (Philpott 1997). They forage in broad open areas including dry desert washes, flood plains, chaparral, oak woodland, open ponderosa pine forest, grassland, montane meadows, and agricultural areas. They generally forage high above the ground (Bat Conservation International 2002), and have been recorded to feed on insects carried by air currents to altitudes higher than 1,000 feet (304.8 meters) (Best and others 1996, Vaughan 1959). Western mastiff bats utilize large pools with open space for approach (Best and others 1996) and are generally not netted over small ponds where other bats are frequently found (Best and others 1996). They may forage 6–15 miles (10–25 km) away from roost sites (Vaughan 1959).

## **6.5 Western yellow bat**

The western yellow bat can be distinguished from other bat species by the combination of yellow coloration, size (forearm = 42-50 mm), and short ears. Sexual dimorphism in size exists, with females averaging 2mm longer in forearm length than males.

They were formerly considered conspecific with the southern yellow bat, but currently considered a distinct species, *Lasiurus xanthinus* occurs in northern Mexico, western Arizona, southern California, southern Nevada, and southwestern New Mexico. Western yellow bats are associated with dry, thorny vegetation on the Mexican Plateau, and are found in desert regions of the southwestern United States, where they show a particular association with palms and other desert riparian habitats. They are known to occur in a number of palm oases, but are also believed to be expanding their range with the increased usage of ornamental palms in landscaping. *L. xanthinus* occurs up to ca. 2,000 m. in the mountains in Arizona.

Yellow bats are suspected to be non-colonial. Individuals usually roost in trees, hanging from the underside of a leaf. They are commonly found in the southwestern U.S. roosting in the skirt of dead fronds in both native and non-native palm trees, and have also been documented roosting in cottonwood trees. At least some individuals or populations may be migratory, although some individuals appear to be present year-round, even in the northernmost portion of

their range. Yellow bats probably do not hibernate; activity has been observed year-round in both the southern and northern portions of their range.

Yellow bats are insectivorous. Analysis of fecal samples of western yellow bats indicate their diet includes Coleoptera, Diptera, Hemiptera, Homoptera, Lepidoptera, and Orthoptera. Capture sites are often associated with natural and non-natural water features in open grassy areas and scrub, as well as canyon and riparian situations. Captures are also reported over swimming pools, lawns in residential areas, and orchards. In the U.S., pregnant females are known from late April through June, with lactation occurring during June and July. The number of embryos carried by pregnant females varies from one to four. Predators include barn owls, domestic dogs and domestic cats.

Few threats to the survival of yellow bats have been reported. Probably one of the primary threats in the U.S., however, is the cosmetic trimming of palm fronds. The use of pesticides in date-palm and other orchards may also constitute a threat to both roosting bats and the insects upon which they forage. Domestic cats, whether pets or feral, may be a substantial source of predation, as they are for many lizards, songbirds, and rodents.

## **6.6 San Diego desert woodrat**

The San Diego desert woodrat has a compact body, long tail, large ears, and large, slightly bulging, black eyes. Their feet are strongly built for grasping. Desert woodrats are a pale to dark gray washed with yellow above, light undersides, grayish to yellowish below, and gray at the base of the throat region. Hair bases are slate gray. Their tail, over half of the body length, is distinctively bicolored. Their hind feet are white. Desert woodrats are 22-38 cm (9-15 in) long with a 9.5-18 cm (3.75-7.25 in) long tail. They weigh 109-136 gm (4-4.75 oz). These woodrats live in high desert areas, chaparral, sagebrush flats, pinyon-juniper pine, and desert trees such as catclaw and Joshua (yucca).

Desert woodrats usually feed at night and are primarily herbivores. In their desert habitats their diet consists of spiny cactus, yucca pods, creosote bush, cholla, pinyon nuts, seeds, prickly pear, and any available green vegetation. This species does not drink water. Instead water is obtained from the instead getting it from succulent, moisture-containing plants in the diet of the desert woodrat.

Woodrats are commonly called “pack rats” because they have a tendency to collect any curious object they find, especially those that are small, bright, and shiny, and “pack” them back to their house or den. Should they find something more interesting, the first treasure is dropped to pick up the new one. Some objects are used in the construction of their houses to add strength and some are either deposited inside or at the entrance. In the desert houses are often constructed in or around cactus with cholla and beavertail cactus pads and spines used in the construction plus the collected man-made debris. The entrance is often fortified with cactus spines. A nest is constructed inside the house. These shelters help to make the nest cooler in the hot summer and to retain the woodrat’s body heat in the desert’s cold winter. They also provide protection from most predators.

## 7 Conclusions

Potential biological constraints to site specific development within the study area may include raptor, bat, and DSF habitat and regulated waters. Within the study area, there are small stands of eucalyptus trees which may provide suitable nesting, roosting and foraging habitat for various bat and raptor species. The few patches of open ground may provide suitable habitat for burrowing owl, San Diego Pocket mouse, and/or DSF. It is not known if any of the parcels planned to be annexed into the SWIP Specific Plan contain any streambed, wetland, riparian, or Delhi Sands habitat types. Therefore, once site specific development projects move towards approval, site specific evaluations for burrowing owl, DSF and/or jurisdictional waters may be warranted and/or required. These potential biological resources do not pose a constraint to amending the Specific plan or to annexation of additional acreage, but they may pose a constraint on the future development of specific properties within the study area.

Any future land disturbances for site specific developments within the study area should be conducted outside of the State identified raptor (February 15 through July 31) and bird (March 15 through September 1) nesting seasons. Alternatively, the site would need to be evaluated by a qualified biologist to determine if raptors or birds were nesting in the shrubs or trees to be removed prior to initiation of ground disturbance. Similarly, impacts to trees have a limited potential to impact roosting bats, should any occur. Trees scheduled for removal should be evaluated by a biologist for roosting bats, and if a roost is present the biologist should develop a plan to minimize impacts to the bats to the greatest extent feasible.

The project proponent is hereby informed that in the event that a listed species is observed within the construction areas prior to or during grading/construction, that the loss of any listed species is considered an illegal take under both state and federal law. This report and recommendations do not constitute authorization for incidental take of state or federally listed endangered, threatened or sensitive species or for state regulated bird nests or state or locally regulated plant species.

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## TABLES

CNDDDB Species Occurrence Potential in the USGS Fontana and Guasti Quads

| Scientific name                            | Common Name                         | Status Fed/State | General Habitat                                                                                                | Micro Habitat                                                                                                       | Occurrence Potential                                                                         |
|--------------------------------------------|-------------------------------------|------------------|----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| <i>Agelaius tricolor</i>                   | tricolored blackbird                | NONE             | Highly colonial species, most numerous in central valley & vicinity. Largely endemic to California.            | Requires open water, protected nesting substrate, & foraging area with insect prey within a few km of the colony.   | Habitat not found on site. There is no occurrence potential                                  |
| <i>Arenaria paludicola</i>                 | marsh sandwort                      | E/E              | Marshes and swamps.                                                                                            | Growing up through dense mats of <i>typha</i> , <i>juncus</i> , <i>scirpus</i> , etc. In freshwater marsh. 10-170m. | Habitat not found on site. There is no occurrence potential                                  |
| <i>Athene cunicularia</i>                  | burrowing owl                       | NONE             | Open, dry annual or perennial grasslands, deserts & scrublands characterized by low-growing vegetation.        | Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.                | Habitat is present. Occurrence potential is moderate                                         |
| <i>Calochortus plummerae</i>               | Plummer's mariposa-lily             | NONE             | Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest. | Occurs on rocky and sandy sites, usually of granitic or alluvial material. Can be very common after fire. 90-1610m. | This species is not known to occur in the project vicinity. Occurrence potential is very low |
| <i>Catostomus santaanae</i>                | Santa Ana sucker                    | T/ NONE          | Endemic to Los Angeles basin south coastal streams.                                                            | Habitat generalists, but prefer sand-rubble-boulder bottoms, cool, clear water, & algae.                            | Habitat not found on site. There is no occurrence potential                                  |
| <i>Chaetodipus fallax fallax</i>           | northwestern San Diego pocket mouse | NONE             | Coastal scrub, chaparral, grasslands, sagebrush, etc. In western San Diego co.                                 | Sandy, herbaceous areas, usually in association with rocks or coarse gravel.                                        | Habitat is present. Occurrence potential is moderate                                         |
| <i>Cicindela tranquebarica viridissima</i> | greenest tiger beetle               | NONE             | Inhabits the woodlands adjacent to the Santa Ana river basin.                                                  | Usually found in open spots between trees.                                                                          | Habitat not found on site. There is no occurrence potential                                  |
| <i>Cladium californicum</i>                | California saw-grass                | NONE             | Freshwater and alkali marshes, seeps.                                                                          | Freshwater or alkaline moist habitats. 60-600m.                                                                     | Habitat not found on site. There is no occurrence potential                                  |



| Scientific name                              | Common Name                       | Status Fed/State | General Habitat                                                                                                          | Micro Habitat                                                                                                        | Occurrence Potential                                                                                                             |
|----------------------------------------------|-----------------------------------|------------------|--------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| <i>Cordylanthus maritimus ssp. maritimus</i> | salt marsh bird's-beak            | E/E              | Coastal salt marsh, coastal dunes.                                                                                       | Limited to the higher zones of the salt marsh habitat. 0-30m.                                                        | Habitat not found on site. There is no occurrence potential                                                                      |
| <i>Dodecahema leptoceras</i>                 | slender-horned spineflower        | E/E              | Chaparral, coastal scrub (alluvial fan sage scrub).                                                                      | Flood deposited terraces and washes; assoc include encelia, dalea, lepidospartum, etc. 200-760m.                     | Habitat not found on site. There is no occurrence potential                                                                      |
| <i>Eriastrum densifolium ssp. sanctorum</i>  | Santa Ana River woollystar        | E/E              | Coastal scrub, chaparral.                                                                                                | In sandy soils on river floodplains or terraced fluvial deposits. 150-610m.                                          | Habitat not found on site. There is no occurrence potential                                                                      |
| <i>Eumops perotis californicus</i>           | western mastiff bat               | NONE             | Many open, semi-arid to arid habitats, including conifer & deciduous woodlands, coastal scrub, grasslands, chaparral etc | Roosts in crevices in cliff faces, high buildings, trees & tunnels.                                                  | Ornamental trees exist within the boundaries of the study area and there is a potential for this species to utilize these trees. |
| <i>Gila orcuttii</i>                         | arroyo chub                       | NONE             | Los Angeles basin south coastal streams.                                                                                 | Slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation & associated invertebrates. | Habitat not found on site. There is no occurrence potential                                                                      |
| <i>Horkelia cuneata ssp. puberula</i>        | mesa horkelia                     | NONE             | Chaparral, cismontane woodland, coastal scrub.                                                                           | Sandy or gravelly sites. 70-810m.                                                                                    | Habitat not found on site. There is no occurrence potential                                                                      |
| <i>Lasiurus xanthinus</i>                    | western yellow bat                | NONE             | Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats.                                | Roosts in trees, particularly palms. Forages over water and among trees.                                             | Ornamental trees exist within the boundaries of the study area and there is a potential for this species to utilize these trees. |
| <i>Lepidium virginicum var. robinsonii</i>   | Robinson's pepper-grass           | NONE             | Chaparral, coastal scrub.                                                                                                | Dry soils, shrubland. 1-945m.                                                                                        | Habitat not found on site. There is no occurrence potential                                                                      |
| <i>Lepus californicus bennettii</i>          | San Diego black-tailed jackrabbit | NONE             | Intermediate canopy stages of shrub habitats & open shrub / herbaceous & tree / herbaceous edges.                        | Coastal sage scrub habitats in southern California.                                                                  | Habitat not found on site. There is no occurrence potential                                                                      |

| Scientific name                                      | Common Name                     | Status Fed/State | General Habitat                                                                                                          | Micro Habitat                                                                                                           | Occurrence Potential                                                                                             |
|------------------------------------------------------|---------------------------------|------------------|--------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| <i>Lycium parishii</i>                               | Parish's desert-thorn           | NONE             | Coastal scrub, Sonoran desert scrub.                                                                                     | 300-1000m.                                                                                                              | Habitat not found on site. There is no occurrence potential                                                      |
| <i>Monardella pringlei</i>                           | Pringle's monardella            | NONE             | Coastal scrub.                                                                                                           | Sandy hills. 300-400m.                                                                                                  | Habitat not found on site. There is no occurrence potential                                                      |
| <i>Muhlenbergia californica</i>                      | California muhly                | NONE             | Coastal sage, chaparral, lower montane coniferous forest, meadows.                                                       | Usually found near streams or seeps. 400-2000m.                                                                         | Habitat not found on site. There is no occurrence potential                                                      |
| <i>Navarretia prostrata</i>                          | prostrate navarretia            | NONE             | Coastal scrub, valley and foothill grassland, vernal pools.                                                              | Alkaline soils in grassland, or in vernal pools. Mesic, alkaline sites. 15-700m.                                        | There are no vernal pools on site or alkaline soils. Habitat not found on site. There is no occurrence potential |
| <i>Neotoma lepida intermedia</i>                     | San Diego desert woodrat        | NONE             | Coastal scrub of southern California from san Diego county to san Luis Obispo county.                                    | Moderate to dense canopies preferred. They are particularly abundant in rock outcrops & rocky cliffs & slopes.          | Habitat is present. Occurrence potential is moderate                                                             |
| <i>Nyctinomops femorosaccus</i>                      | pocketed free-tailed bat        | NONE             | Variety of arid areas in southern California; pine-juniper woodlands, desert scrub, palm oasis, desert wash, desert ripa | Rocky areas with high cliffs.                                                                                           | Habitat not found on site. There is no occurrence potential                                                      |
| <i>Perognathus longimembris brevinasus</i>           | Los Angeles pocket mouse        | NONE             | Lower elevation grasslands & coastal sage communities in and around the los Angeles basin.                               | Open ground with fine sandy soils. May not dig extensive burrows, hiding under weeds & dead leaves instead.             | Habitat not found on site. There is no occurrence potential                                                      |
| <i>Phrynosoma coronatum (blainvillii population)</i> | coast (San Diego) horned lizard | NONE             | Inhabits coastal sage scrub and chaparral in arid and semi-arid climate condit                                           | Prefers friable, rocky, or shallow sandy soils.                                                                         | Habitat not found on site. There is no occurrence potential                                                      |
| <i>Polioptila californica californica</i>            | coastal California gnatcatcher  | T/ NONE          | Obligate, permanent resident of coastal sage scrub below 2500 ft in southern California.                                 | Low, coastal sage scrub in arid washes, on mesas & slopes. Not all areas classified as coastal sage scrub are occupied. | Habitat not found on site. There is no occurrence potential                                                      |

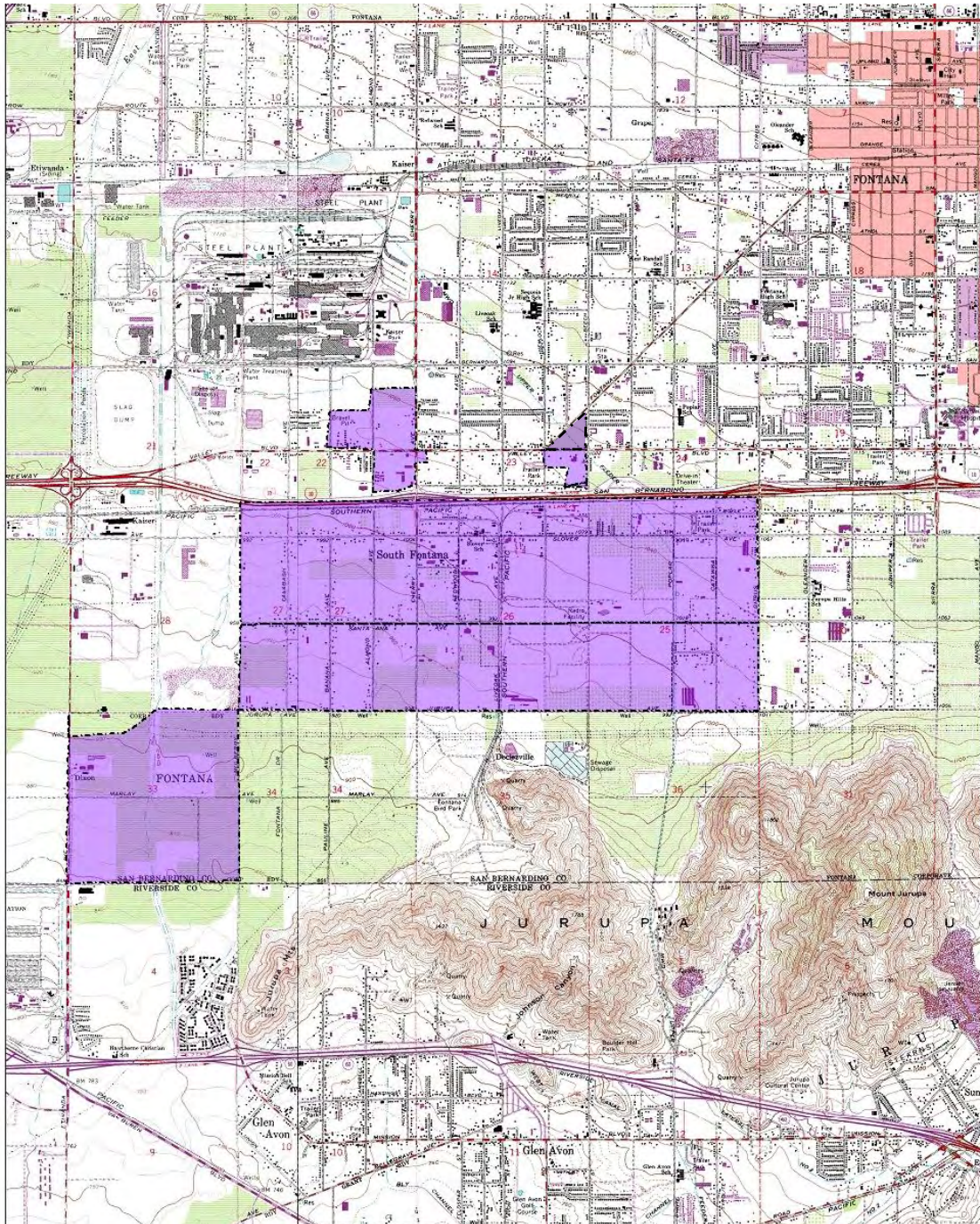
| Scientific name                            | Common Name                         | Status<br>Fed/State | General Habitat                                                                                                        | Micro Habitat                                                                                                           | Occurrence Potential                                                                                                                                                                                                                                       |
|--------------------------------------------|-------------------------------------|---------------------|------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Rhaphiomidas terminatus abdominalis</i> | Delhi Sands flower-loving fly       | E/ NONE             | Found only in areas of the Delhi sands formation in southwestern san Bernardino & northwestern riverside counties.     | Requires fine, sandy soils, often with wholly or partly consolidated dunes & sparse vegetation. Oviposition req. Shade. | This species is known to occur in the project vicinity. Delhi sand habitat may be present. It is not known if the plant associations indicative of this species exist on site. Occurrence potential is unknown. Site specific evaluations may be required. |
| <i>Riversidian Alluvial Fan Sage Scrub</i> | Riversidian Alluvial Fan Sage Scrub | NONE                | Open natural channels and alluvial fans.                                                                               |                                                                                                                         | Habitat not found on site. There is no occurrence potential                                                                                                                                                                                                |
| <i>Symphyotrichum defoliatum</i>           | San Bernardino aster                | NONE                | Meadows and seeps, marshes and swamps, coastal scrub, cismontane woodland, lower montane coniferous forest, grassland. | Vernally mesic grassland or near ditches, streams and springs; disturbed areas. 2-2040m.                                | Habitat not found on site. There is no occurrence potential                                                                                                                                                                                                |
| <i>Vireo bellii pusillus</i>               | least Bell's vireo                  | E/E                 | Summer resident of southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft.    | Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, baccharis, mesquite.         | Habitat not found on site. There is no occurrence potential                                                                                                                                                                                                |

## FIGURES

The map displays the SWIP Project area, which is highlighted by a dashed rectangular box. This area is located in the central part of the map, near the intersection of the San Bernardino Freeway (SR 15) and the San Diego Freeway (SR 52). The project area is situated between the cities of Fontana and Rialto. The map shows a network of major highways, including SR 15, SR 52, SR 78, and SR 94. Other labeled locations include San Bernardino, Fontana, Rialto, San Diego, and various reservoirs and parks. The map also shows the San Gabriel River, San Diego River, and Lake Mead. The project area is located in the central part of the map, near the intersection of the San Bernardino Freeway (SR 15) and the San Diego Freeway (SR 52).

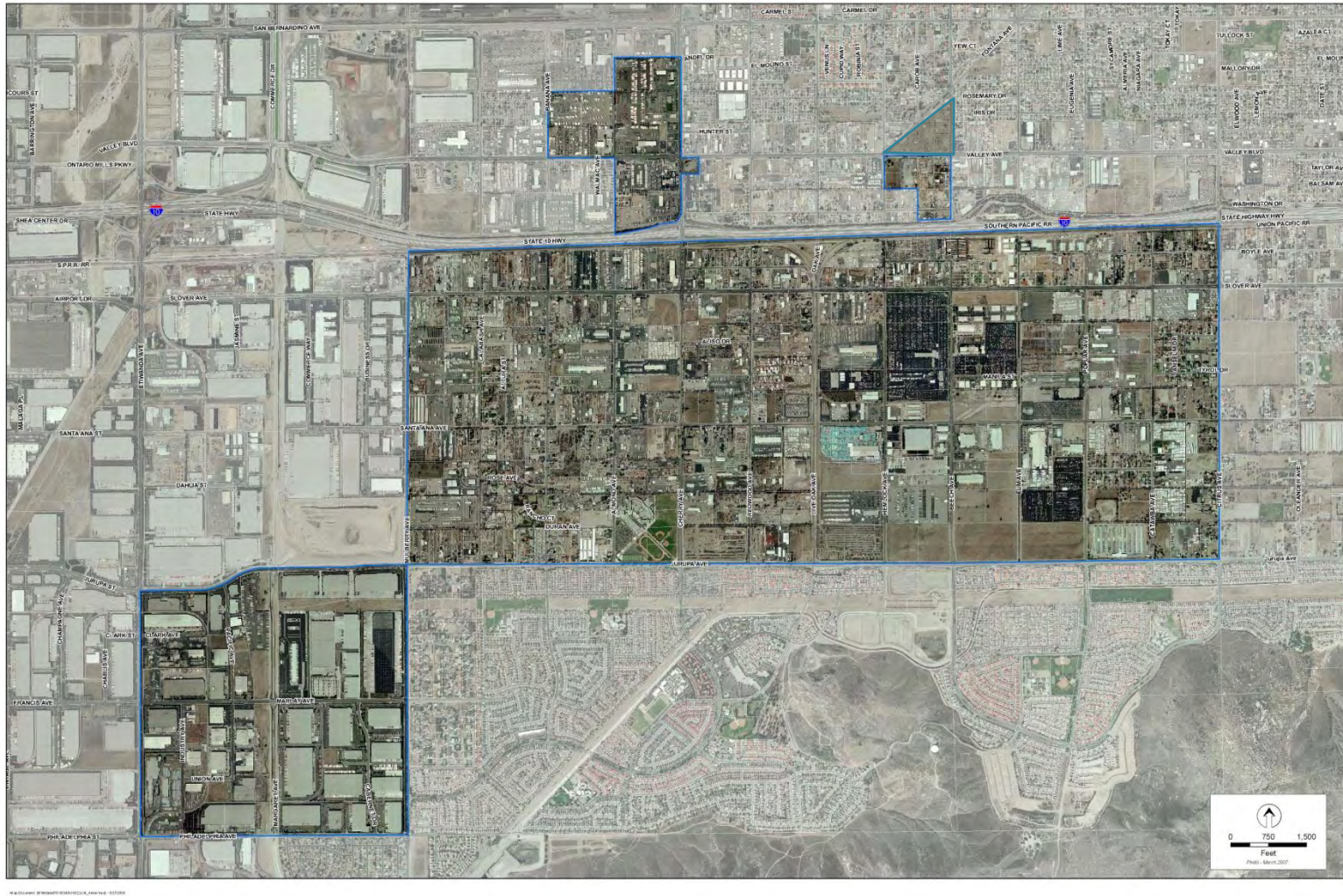


**FIGURE 2. VICINITY MAP**





**FIGURE 3. SWIP SPECIFIC PLAN AMENDMENT STUDY AREA**



## **SITE PHOTOS**





PHOTO 1. Looking southeast along Mulberry Ave. and Slover Ave.



PHOTO 2. Looking North along Mulberry Ave. towards Slover Ave.



PHOTO 3. Looking north along Jurupa Ave., west of Cherry Ave.



PHOTO 4. Looking at general site conditions of Industrial area along Jurupa Ave.



PHOTO 5. Looking north at general site conditions of residential aspects along Jurupa Ave.



PHOTO 6. Looking north at general site conditions of vacant areas along Jurupa Ave.





PHOTO 7. Looking west at general site conditions of vacant areas along Citrus Ave.



PHOTO 8. Looking west at general site conditions of residential areas south of I-10.



## **E. Historical/Archaeological Records Search**

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**CRM TECH**

1016 E. Cooley Drive, Suite A/B  
Colton, CA 92324

October 17, 2008

Aaron Pfannenstiel, AICP  
RBF Consulting  
3300 East Guasti Road, Suite 100  
Ontario, CA 91761

Re: Historical / Archaeological Resources Records Search  
Southwest Industrial Park Specific Plan Amendment  
City of Fontana, San Bernardino County, California  
CRM TECH Contract #2282

Dear Mr. Pfannenstiel:

At your request, CRM TECH has completed a historical / archaeological resources records search for the project referenced above. The purpose of the records search is to assist your firm and the lead agency for the project, namely the City of Fontana, in determining whether any potential "historical resources," as defined by the California Environmental Quality Act (CEQA), were previously identified within the project area (Fig. 1), and in assessing the project area's sensitivity for as-yet unrecorded historical / archaeological sites.

Since the project area is located near the Riverside-San Bernardino county line, the records search was conducted at both the Eastern Information Center (EIC) and the Archaeological Information Center (AIC). The EIC, located on the campus of the University of California, Riverside, is the State of California's official cultural resource records repository for Riverside County, while the AIC, located at the San Bernardino County Museum, Redlands, is its counterpart for San Bernardino County. The records search was conducted at the AIC on October 9, 2008, and at the EIC on October 10. Sources consulted during the records search include listings of California Historical Landmarks, Points of Historical Interest, and San Bernardino / Riverside County Landmarks, as well as the National Register of Historic Places, the California Register of Historical Resources, or the California Historical Resources Inventory.

According to the records research results, since 1976 more than 20 previous cultural resources studies have occurred on small portions of the project area (Fig. 2), four of which were carried out by CRM TECH. In addition, in 2001 CRM TECH performed a cultural resources survey for the City of Fontana General Plan update (Love et al. 2001), which covered the entire project area, although the survey was conducted at a reconnaissance level instead of an intensive level, as is usually required for project-related studies. As a result of these and other similar studies, nine historic-period sites were previously recorded in the project area, but no prehistoric— i.e., Native American—sites were found anywhere within the project boundaries.

The nine recorded historic-period sites include a segment of San Bernardino-Sonora Road (36-16417 / CPHI-SBr-21); four vernacular residences, one from the late 1920s (36-13863) and three from the 1950s (36-13862, 36-13864, and 36-7795); a single iron lamppost with a concrete base, originally from a 1940s gasoline station (36-9862); a segment of the former Southern Pacific Railroad (36-10330); the Declezville spur line on the Southern Pacific (36-7426); and a small portion of the former Kaiser Steel Mill site (36-4131 / CPHI-SBr-71).



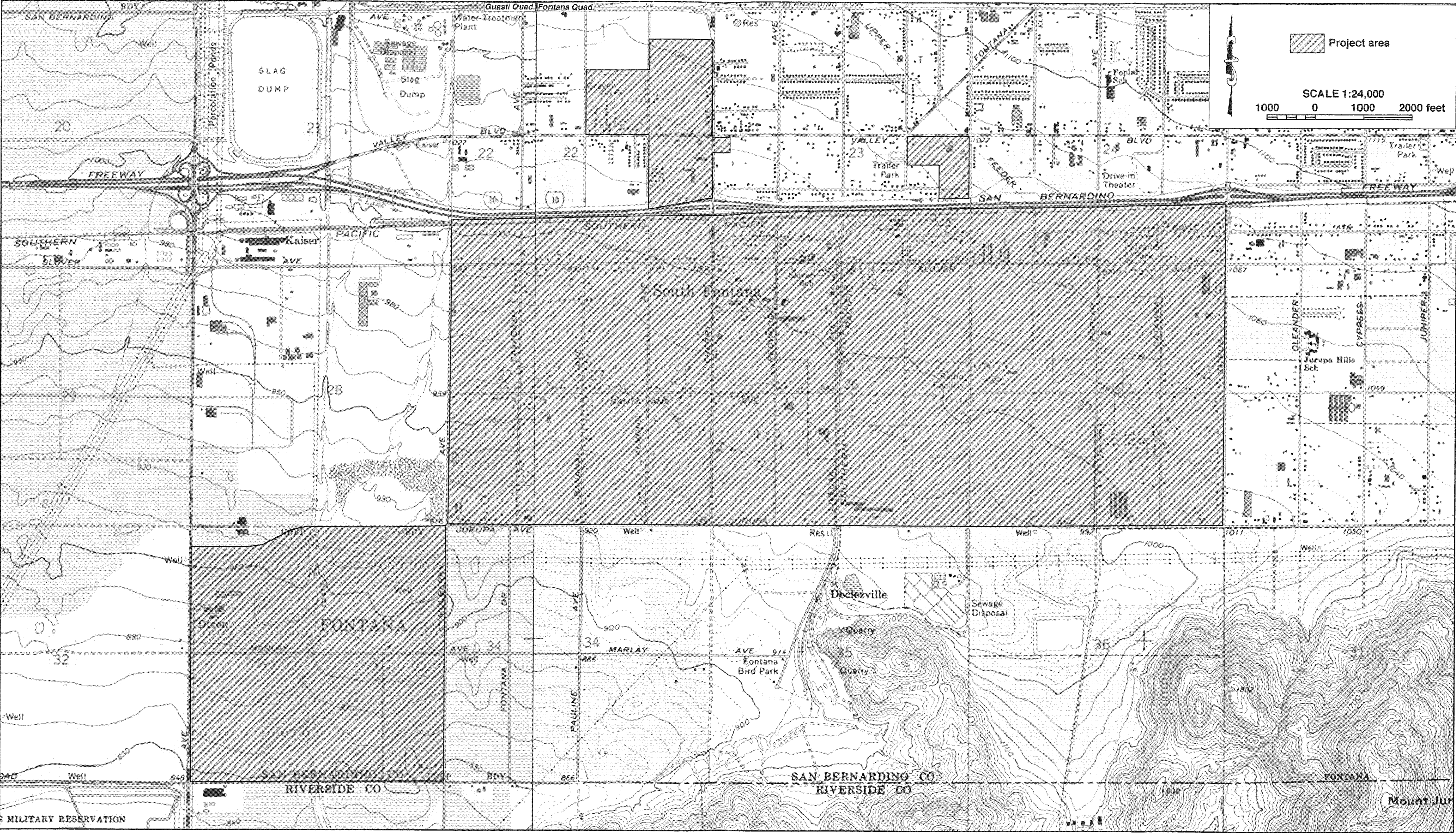
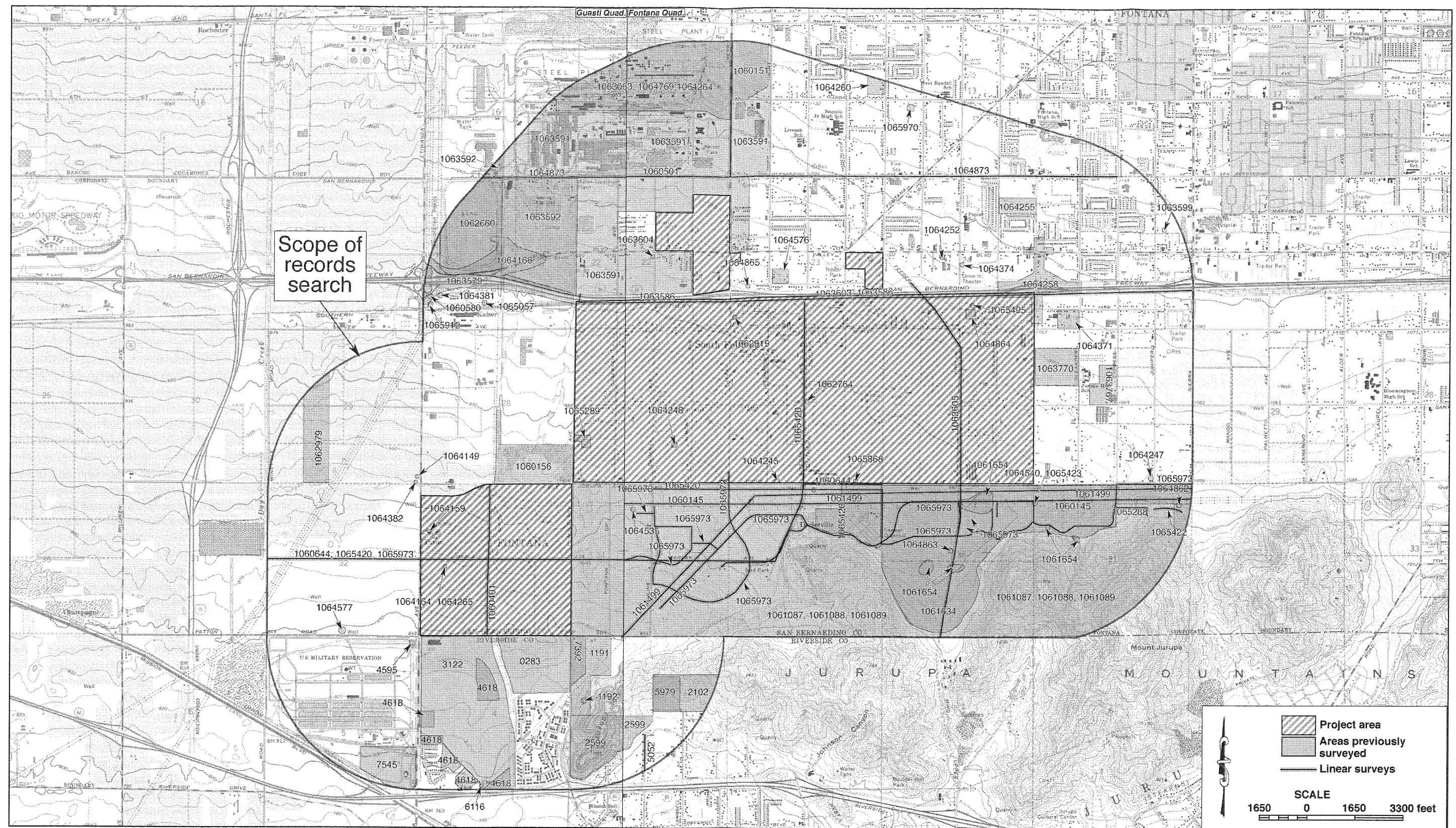


Figure 1. Project area (based on USGS Guasti and Fontana, Calif., 1:24,000 quadrangles).







Among these, Site 36-16417 represents the approximate route of the San Bernardino-Sonora Road, also known as the northern branch of the Emigrant Trail. It was delineated solely on the basis of historic maps, which suggest that the old wagon road may have pass through the project area near the present-day intersection of Mulberry Avenue and Jurupa Avenue in the early and mid-19th century. Since then, however, the cultural landscape in the project vicinity has changed drastically, likely obliterating all traces of the old road. No physical remains of the road were ever recorded in the San Bernardino Valley in the numerous cultural resources studies along its course, and it is highly unlikely for any to be encountered in the project area.

The Kaiser Steel Mill (Site 36-4131), built by Henry J. Kaiser in the early 1940s, is recognized as being significant in California and American history as the largest steel mill ever in operation on the West Coast and for the important role it played in the American war efforts during WWII. The mill closed in 1983, and the property was subsequently redeveloped into the California Speedway in the 1990s. While its former site overlaps a small portion of the project area on the northern edge, it is doubtful that any buildings, structures, objects, or features that contribute to the historic significance of the Kaiser Steel Mill would remain in existence within the project boundaries today.

Under CEQA provisions, Sites 36-4131 and 36-16417, both designated California Points of Historical Interest, potentially qualify as "historical resources." However, in light of the lack of important physical properties associated with them within the project area, the proposed project is unlikely to cause substantial adverse changes in the significance of these sites. The other seven recorded sites in the project area, in contrast, demonstrate little potential to be considered "historical resources" under CEQA.

Three of the historic-period residences recorded in the project area, 36-13862, 36-13863, and 36-13864, have been previously determined ineligible for listing in the National Register of Historic Places or the California Register of Historical Resources. The fourth residence, 36-7795, did not exhibit the historic or architectural quality to merit listing in the National Register or the California Register, nor did the iron lamppost (36-9862) or the Southern Pacific's Declezville line (36-7426), a localized spur line built in the late 19th century to serve a granulite quarry located nearby. The Southern Pacific (now Union Pacific) mainline (36-10330), constructed in 1876-1877, played a prominent role in the economic, political, and social history of southern California during late 19th and early 20th centuries. However, as a working component of the modern transportation infrastructure, the existing railroad retains little historic integrity to relate to the site's period of significance.

Outside the project area but within a one-mile radius, EIC and AIC records show over 100 other previous studies covering various tracts of land and linear features (Fig. 2). As a result, 47 additional sites, including 10 prehistoric sites and 37 historic-period sites, and 19 isolates—i.e., localities with fewer than three artifacts—were previously identified within the scope of the records search.

All of the prehistoric archaeological sites were located to the south of the project area, the majority of them concentrated along the foothills of the Jurupa Mountains. Situated on the lower slopes of the foothills were three sites consisting of bedrock milling features with shallow slicks, once used by the Native population to process foodstuffs and other resources. At one of these sites, 36-716, three panels of petroglyphs, or rock art, were also

recorded. Seven sites were found near the base of the foothills, featuring surface scatters of groundstone and/or chipped-stone artifacts of various types and quantities. Eighteen of the isolates were also prehistoric in nature, consisting of either groundstone tools, such as manos or metates, or surface scatters of chipped-stone debitage—i.e., discards from lithic tool manufacturing.

The oldest historic-period site within the one-mile radius was an old vineyard and winery that dated to the mid-1870s. The second oldest was the Declez Ranch, another vineyard and winery complex that once featured a house, ancillary buildings, a windmill, a hand dug well, and a chapel, ca. 1890s. The vast majority of the historic-period sites represented single-family residences built between the 1930s and the mid-1950s in the Tudor, Ranch, Minimal Traditional, and Modern styles, while four other sites consisted of commercial buildings built in the 1950s. One site was recorded as the remains of a WWII-era military complex, namely the Mira Loma Quartermaster Depot. One of the 19 isolates also dated to the historic period, consisting of two shards of sun-altered amethyst glass.

In light of the results of past studies in the vicinity and the fact that the project area has been fully developed, the likelihood of encountering potentially significant prehistoric archaeological remains within the project boundaries appears to be rather low. The records search results generally support the existing prehistoric hunter-gatherer settlement-subsistence models for Inland California, which suggest that longer-term residential settlement was more likely to occur on elevated terraces, hills, and finger ridges near permanent or reliable sources of water, while the valley floor was more often utilized for resource procurement, travel, and opportunistic camping. In the Fontana area, all of the known prehistoric archaeological sites were found near the foothills of the San Gabriel and the Jurupa Mountains, and none was found on the valley floor (Love et al. 2001:6).

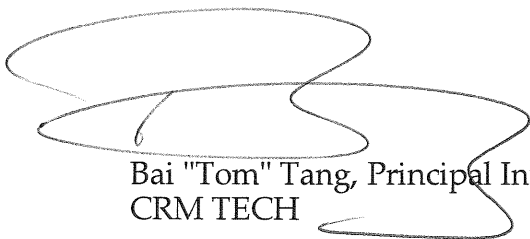
In CRM TECH's 2001 study for the Fontana General Plan, the entire city was determined to have moderate level of sensitivity for buildings, structures, objects, or archaeological remains dating to the historic period (Love et al. 2001:9). However, historic maps indicate that the project area, located several miles south of downtown Fontana, experienced significantly less development activities during the historic period than the central portion of the city. In the mid-19th century, the "Emigrant Trail" (Site 36-16417) was the only man-made feature observed in the project vicinity (GLO 1856a; 1856b). In the late 19th century and the mid-20th century, the area exhibited a cultural landscape that was typical for rural southern California at the time, with crisscrossing roads lined by scattered roads and, presumably, large stretches of agricultural land (USGS 1901; 1903; 1941; 1943). The Southern Pacific Railroad (Site 36-10330), its spur line (Site 36-7426), and the Declezville granulite quarry south of the project area were the most notable features in the vicinity.

In summary, the project area appears to be relatively low in sensitivity for cultural resources from both the prehistoric and historic periods. Nonetheless, a determination of low sensitivity does not equal a declaration of "no historical resources." As Figure 2 illustrates, only a small percentage of the project area has been surveyed for cultural resources, making it impossible at this time to make a final determination on whether any additional historical/ archaeological sites, aside from the nine mentioned above, are located within the project area and yet to be recorded. In order to reach that determination, a systematic field survey of the entire project area would be necessary, at least at a reconnaissance level.

Based on these considerations, CRM TECH recommends that once the exact location and configuration a specific development project within the current project area are established, a field survey of the area to be impacted be performed, at least on a reconnaissance level, in compliance with the pertinent statutes and regulations. The objective of the field survey is to identify any historical/archaeological sites that may exist within each specific project area and to facilitate the final determination on whether a proposed project would cause substantial adverse changes to any "historic properties" or "historical resources," as mandated by federal and state laws.

Thank you for this opportunity to be of service. If you have any questions regarding this study or need any further information, please feel free to contact our office.

Sincerely,

A handwritten signature in black ink, appearing to read 'Bai Tom Tang', written over a horizontal line.

Bai "Tom" Tang, Principal Investigator  
CRM TECH

## References

GLO (General Land Office, U.S. Department of the Interior)

1856a Plat Map: Township No. I South Range No. V West, San Bernardino Meridian; surveyed in 1852-1856.

1856b Plat Map: Township No. I South Range No. VI West, San Bernardino Meridian; surveyed in 1852-1856.

Love, Bruce, Bai "Tom" Tang, Mariam Dahdul, and Michael Hogan

2001 Cultural Resources Technical Report: City of Fontana General Plan, Part I: Existing Conditions. On file, Archaeological Information Center, San Bernardino County Museum, Redlands.

USGS (United States Geological Survey, U.S. Department of the Interior)

1901 Map: San Bernardino, Calif. (15', 1:62,500); surveyed in 1893-1894.

1903 Map: Cucamonga, Calif. (15', 1:62,500); surveyed in 1894.

1941 Map: Guasti and Vicinity, Calif. (1:31,680), surveyed in 1933.

1943 Map: Fontana, Calif. (1:31,680); surveyed in 1938.



## **G. Noise Data**

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**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

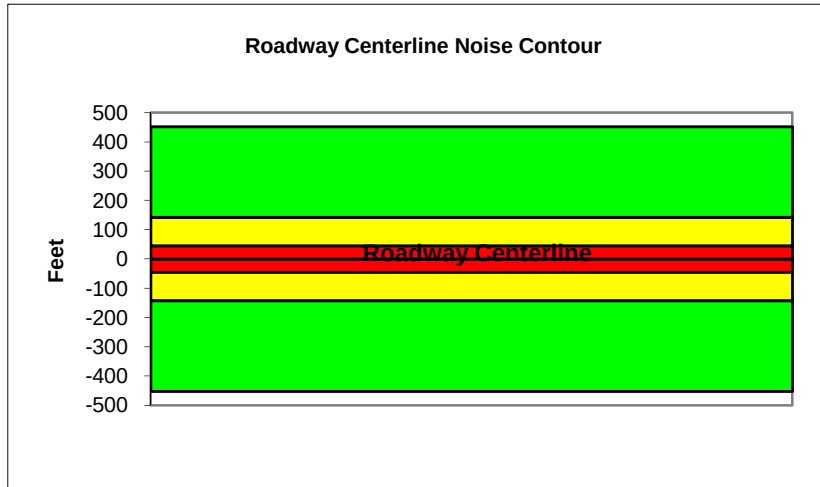
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Armstrong Road  
Road Segment: Between SR-60 and Sierra Ave.

| PROJECT DATA                   |               | SITE DATA                        |        |         |       |        |
|--------------------------------|---------------|----------------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:                      | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:           | 19,299 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:               | 1929.9 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:                   | 40     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:           | 35     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS                     |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions <b>HARD SITE</b> |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                        |        |         |       |        |
| Observer Height (above grade): | 0             | Type                             | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                             | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                       | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck                      | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                                  |        |         |       |        |
| Medium Trucks:                 | 2.3           |                                  |        |         |       |        |
| Heavy Trucks:                  | 8             |                                  |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |          |         |             |           |      |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|------|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn  | CNEL |
| Autos:                                                           | 54.4     | 63.1    | 61.4        | 55.3      | 63.9 | 64.5 |
| Medium Trucks:                                                   | 63.3     | 55.2    | 48.9        | 47.3      | 55.8 | 56.0 |
| Heavy Trucks:                                                    | 68.2     | 56.2    | 47.2        | 48.4      | 58.1 | 58.2 |
| Vehicle Noise:                                                   | 70.5     | 64.7    | 61.8        | 56.8      | 65.4 | 65.9 |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 452 |
| 65 dBA                   | 143 |
| 70 dBA                   | 45  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

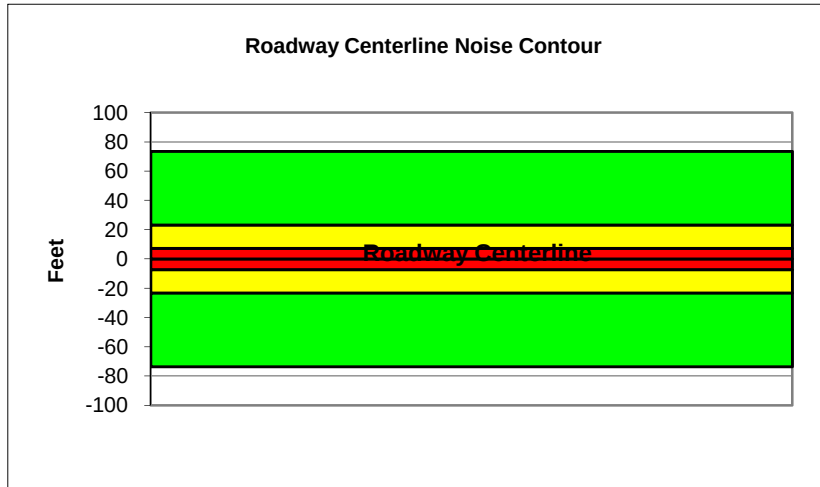
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Beech Avenue  
Road Segment: Between Slover Ave. and Jurupa St.

| PROJECT DATA                   |               |  | SITE DATA                 |       |         |       |        |  |
|--------------------------------|---------------|--|---------------------------|-------|---------|-------|--------|--|
| Centerline Dist to Barrier     | 0             |  | Road Grade:               | 0     |         |       |        |  |
| Barrier (0=wall, 1= berm):     | 0             |  | Average Daily Traffic:    | 4,276 |         |       |        |  |
| Receiver Barrier Dist:         | 0             |  | Peak Hour Traffic:        | 427.6 |         |       |        |  |
| Centerline Dist. To Observer:  | 100           |  | Vehicle Speed:            | 35    |         |       |        |  |
| Barrier Near Lane CL Dist:     | 0             |  | Centerline Separation:    | 22    |         |       |        |  |
| Barrier Far lane CL Dist:      | 0             |  | NOISE INPUTS              |       |         |       |        |  |
| Pad Elevation:                 | 0.5           |  | Site conditions HARD SITE |       |         |       |        |  |
| Road Elevation:                | 0             |  | FLEET MIX                 |       |         |       |        |  |
| Observer Height (above grade): | 0             |  | Type                      | Day   | Evening | Night | Daily  |  |
| Barrier Height:                | 0             |  | Auto                      | 0.775 | 0.129   | 0.096 | 0.9742 |  |
| Rt View: 90                    | Lft View: -90 |  | Med. Truck                | 0.848 | 0.049   | 0.103 | 0.0184 |  |
| NOISE SOURCE ELEVATIONS (Feet) |               |  | Heavy Truck               | 0.865 | 0.027   | 0.108 | 0.0074 |  |
| Autos:                         | 0             |  |                           |       |         |       |        |  |
| Medium Trucks:                 | 2.3           |  |                           |       |         |       |        |  |
| Heavy Trucks:                  | 8             |  |                           |       |         |       |        |  |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 46.4        | 55.1        | 53.4        | 47.3        | 55.9        | 56.5        |
| Medium Trucks:                                                   | 56.1        | 48.0        | 41.6        | 40.1        | 48.5        | 48.8        |
| Heavy Trucks:                                                    | 61.3        | 49.4        | 40.3        | 41.5        | 51.4        | 51.6        |
| <b>Vehicle Noise:</b>                                            | <b>63.7</b> | <b>57.1</b> | <b>53.9</b> | <b>49.2</b> | <b>57.8</b> | <b>58.2</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |    |
|--------------------------|----|
| Unmitigated              |    |
| 60 dBA                   | 74 |
| 65 dBA                   | 23 |
| 70 dBA                   | 7  |
| Mitigated                |    |
| 60 dBA                   |    |
| 65 dBA                   |    |
| 70 dBA                   |    |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

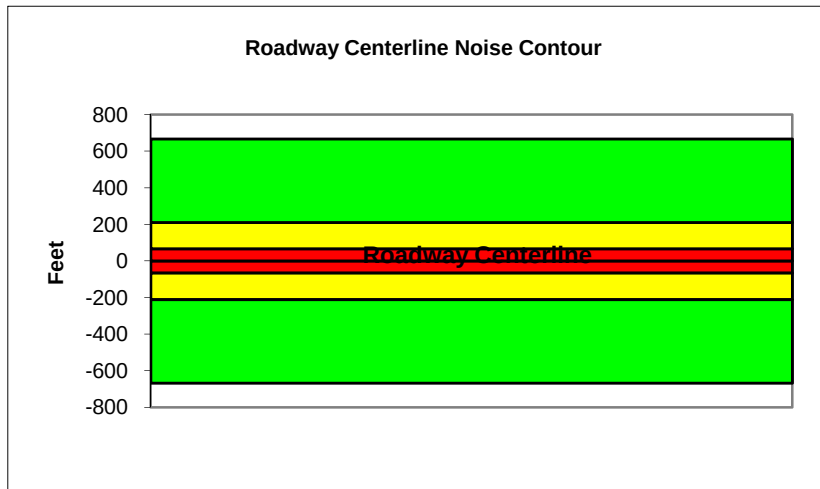
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Cherry Avenue  
Road Segment: Between San Bernardino Ave. and Valley Blvd.

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 16,528 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 1652.8 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 50     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 42     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 56.4        | 65.1        | 63.4        | 57.3        | 65.9        | 66.5        |
| Medium Trucks:                                                   | 64.0        | 56.0        | 49.6        | 48.0        | 56.5        | 56.7        |
| Heavy Trucks:                                                    | 68.3        | 56.3        | 47.3        | 48.5        | 57.9        | 58.0        |
| <b>Vehicle Noise:</b>                                            | <b>70.6</b> | <b>66.2</b> | <b>63.7</b> | <b>58.4</b> | <b>67.0</b> | <b>67.5</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 667 |
| 65 dBA                   | 211 |
| 70 dBA                   | 67  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

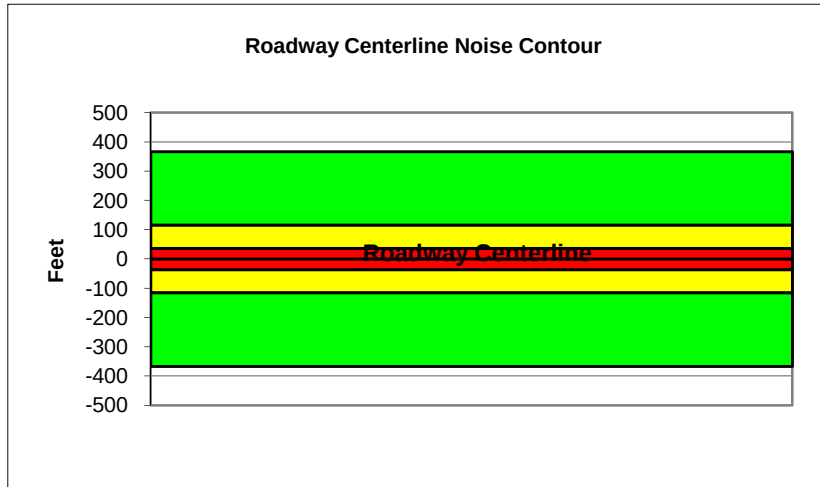
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Cherry Avenue  
Road Segment: Between Slover Ave. and Jurupa St.

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 11,810 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 1181   |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 45     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 43     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 53.6        | 62.4        | 60.6        | 54.5        | 63.1        | 63.7        |
| Medium Trucks:                                                   | 61.9        | 53.8        | 47.4        | 45.8        | 54.3        | 54.5        |
| Heavy Trucks:                                                    | 66.4        | 54.4        | 45.4        | 46.6        | 56.1        | 56.3        |
| <b>Vehicle Noise:</b>                                            | <b>68.7</b> | <b>63.7</b> | <b>60.9</b> | <b>55.8</b> | <b>64.4</b> | <b>64.9</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 367 |
| 65 dBA                   | 116 |
| 70 dBA                   | 37  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |





**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

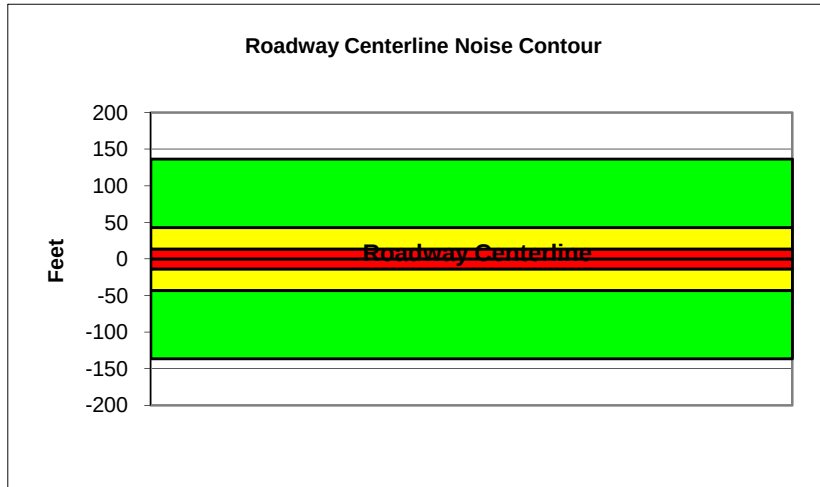
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Citrus Avenue  
Road Segment: Between I-10 and Santa Ana Avenue

| PROJECT DATA                   |               |  | SITE DATA                        |       |         |       |        |  |
|--------------------------------|---------------|--|----------------------------------|-------|---------|-------|--------|--|
| Centerline Dist to Barrier     | 0             |  | Road Grade:                      | 0     |         |       |        |  |
| Barrier (0=wall, 1= berm):     | 0             |  | Average Daily Traffic:           | 7,916 |         |       |        |  |
| Receiver Barrier Dist:         | 0             |  | Peak Hour Traffic:               | 791.6 |         |       |        |  |
| Centerline Dist. To Observer:  | 100           |  | Vehicle Speed:                   | 35    |         |       |        |  |
| Barrier Near Lane CL Dist:     | 0             |  | Centerline Separation:           | 23    |         |       |        |  |
| Barrier Far lane CL Dist:      | 0             |  | NOISE INPUTS                     |       |         |       |        |  |
| Pad Elevation:                 | 0.5           |  | Site conditions <b>HARD SITE</b> |       |         |       |        |  |
| Road Elevation:                | 0             |  | FLEET MIX                        |       |         |       |        |  |
| Observer Height (above grade): | 0             |  | Type                             | Day   | Evening | Night | Daily  |  |
| Barrier Height:                | 0             |  | Auto                             | 0.775 | 0.129   | 0.096 | 0.9742 |  |
| Rt View: 90                    | Lft View: -90 |  | Med. Truck                       | 0.848 | 0.049   | 0.103 | 0.0184 |  |
| NOISE SOURCE ELEVATIONS (Feet) |               |  | Heavy Truck                      | 0.865 | 0.027   | 0.108 | 0.0074 |  |
| Autos:                         | 0             |  |                                  |       |         |       |        |  |
| Medium Trucks:                 | 2.3           |  |                                  |       |         |       |        |  |
| Heavy Trucks:                  | 8             |  |                                  |       |         |       |        |  |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |          |         |             |           |      |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|------|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn  | CNEL |
| Autos:                                                           | 49.0     | 57.8    | 56.0        | 49.9      | 58.6 | 59.2 |
| Medium Trucks:                                                   | 58.7     | 50.7    | 44.3        | 42.7      | 51.2 | 51.4 |
| Heavy Trucks:                                                    | 64.0     | 52.0    | 43.0        | 44.2      | 54.1 | 54.2 |
| Vehicle Noise:                                                   | 66.4     | 59.8    | 56.6        | 51.9      | 60.4 | 60.9 |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 136 |
| 65 dBA                   | 43  |
| 70 dBA                   | 14  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

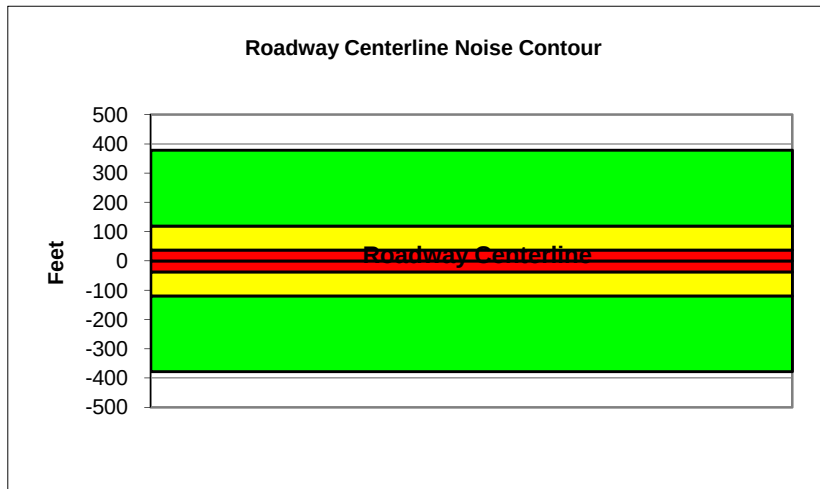
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Citrus Avenue  
Road Segment: Between San Bernardino Ave. and Valley Blvd.

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 16,138 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 1613.8 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 40     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 23     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 53.8        | 62.6        | 60.8        | 54.7        | 63.3        | 63.9        |
| Medium Trucks:                                                   | 62.7        | 54.7        | 48.3        | 46.7        | 55.2        | 55.4        |
| Heavy Trucks:                                                    | 67.6        | 55.6        | 46.6        | 47.8        | 57.5        | 57.7        |
| <b>Vehicle Noise:</b>                                            | <b>70.0</b> | <b>64.1</b> | <b>61.2</b> | <b>56.3</b> | <b>64.9</b> | <b>65.3</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 378 |
| 65 dBA                   | 120 |
| 70 dBA                   | 38  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

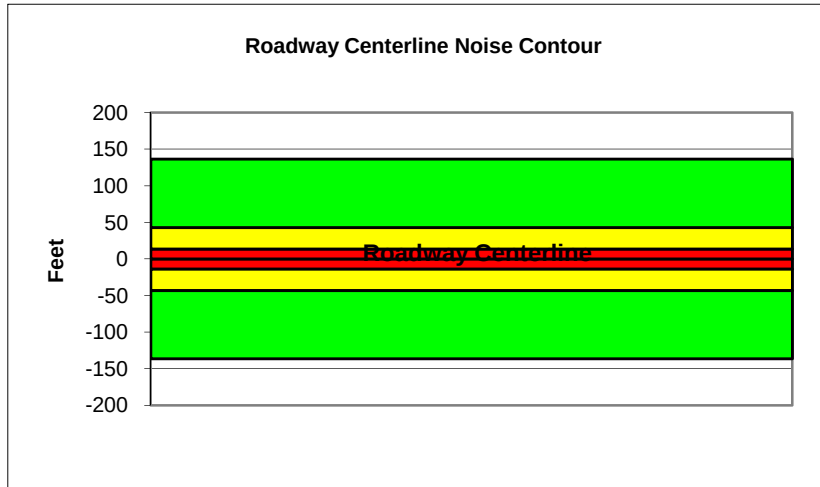
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Citrus Avenue  
Road Segment: Between Santa Ana Ave. and Jurupa St.

| PROJECT DATA                   |               | SITE DATA                 |       |         |       |        |
|--------------------------------|---------------|---------------------------|-------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0     |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 7,916 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 791.6 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 35    |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 23    |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |       |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |       |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |       |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day   | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775 | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848 | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865 | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |       |         |       |        |
| Medium Trucks:                 | 2.3           |                           |       |         |       |        |
| Heavy Trucks:                  | 8             |                           |       |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 49.0        | 57.8        | 56.0        | 49.9        | 58.6        | 59.2        |
| Medium Trucks:                                                   | 58.7        | 50.7        | 44.3        | 42.7        | 51.2        | 51.4        |
| Heavy Trucks:                                                    | 64.0        | 52.0        | 43.0        | 44.2        | 54.1        | 54.2        |
| <b>Vehicle Noise:</b>                                            | <b>66.4</b> | <b>59.8</b> | <b>56.6</b> | <b>51.9</b> | <b>60.4</b> | <b>60.9</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 136 |
| 65 dBA                   | 43  |
| 70 dBA                   | 14  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

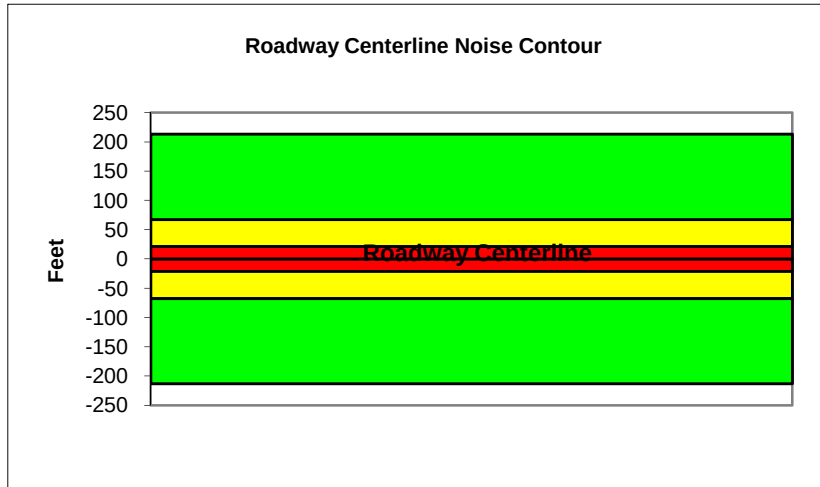
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing  
Analyst: Brian Allee      Job #: 65100340  
Roadway: East Airport Drive  
Road Segment: Between I-15 and Etiwanda Ave.

| PROJECT DATA                   |               | SITE DATA                 |       |         |       |        |
|--------------------------------|---------------|---------------------------|-------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0     |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 6,867 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 686.7 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 45    |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 23    |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |       |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |       |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |       |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day   | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775 | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848 | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865 | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |       |         |       |        |
| Medium Trucks:                 | 2.3           |                           |       |         |       |        |
| Heavy Trucks:                  | 8             |                           |       |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 51.5        | 60.3        | 58.5        | 52.5        | 61.1        | 61.7        |
| Medium Trucks:                                                   | 59.8        | 51.8        | 45.4        | 43.8        | 52.3        | 52.5        |
| Heavy Trucks:                                                    | 64.3        | 52.4        | 43.3        | 44.6        | 54.1        | 54.2        |
| <b>Vehicle Noise:</b>                                            | <b>66.7</b> | <b>61.6</b> | <b>58.9</b> | <b>53.8</b> | <b>62.3</b> | <b>62.8</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 213 |
| 65 dBA                   | 67  |
| 70 dBA                   | 21  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

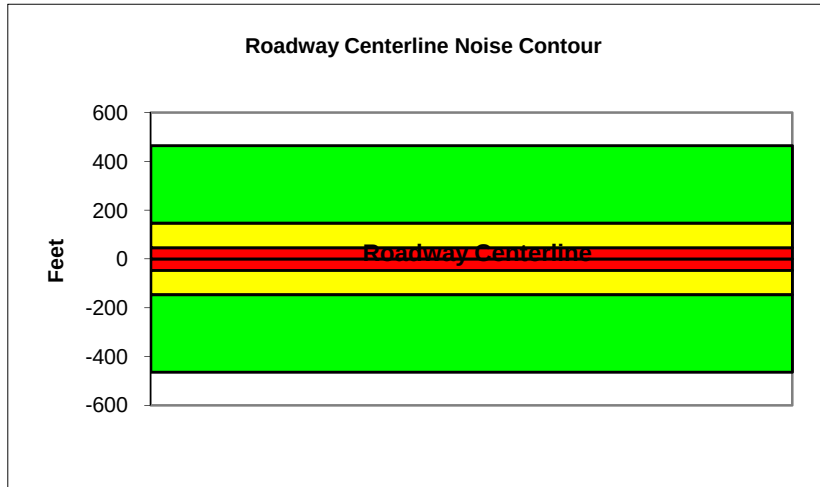
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Etiwanda Avenue  
Road Segment: Between Jurupa St. and Philadelphia Ave.

| PROJECT DATA                   |           |     | SITE DATA                 |        |         |       |        |
|--------------------------------|-----------|-----|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0         |     | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0         |     | Average Daily Traffic:    | 14,941 |         |       |        |
| Receiver Barrier Dist:         | 0         |     | Peak Hour Traffic:        | 1494.1 |         |       |        |
| Centerline Dist. To Observer:  | 100       |     | Vehicle Speed:            | 45     |         |       |        |
| Barrier Near Lane CL Dist:     | 0         |     | Centerline Separation:    | 42     |         |       |        |
| Barrier Far lane CL Dist:      | 0         |     | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5       |     | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0         |     | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0         |     | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0         |     | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: | -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |           |     | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0         |     |                           |        |         |       |        |
| Medium Trucks:                 | 2.3       |     |                           |        |         |       |        |
| Heavy Trucks:                  | 8         |     |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 54.6        | 63.4        | 61.6        | 55.5        | 64.2        | 64.8        |
| Medium Trucks:                                                   | 62.9        | 54.8        | 48.4        | 46.9        | 55.4        | 55.6        |
| Heavy Trucks:                                                    | 67.4        | 55.5        | 46.4        | 47.6        | 57.2        | 57.3        |
| <b>Vehicle Noise:</b>                                            | <b>69.7</b> | <b>64.7</b> | <b>62.0</b> | <b>56.8</b> | <b>65.4</b> | <b>65.9</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 465 |
| 65 dBA                   | 147 |
| 70 dBA                   | 46  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

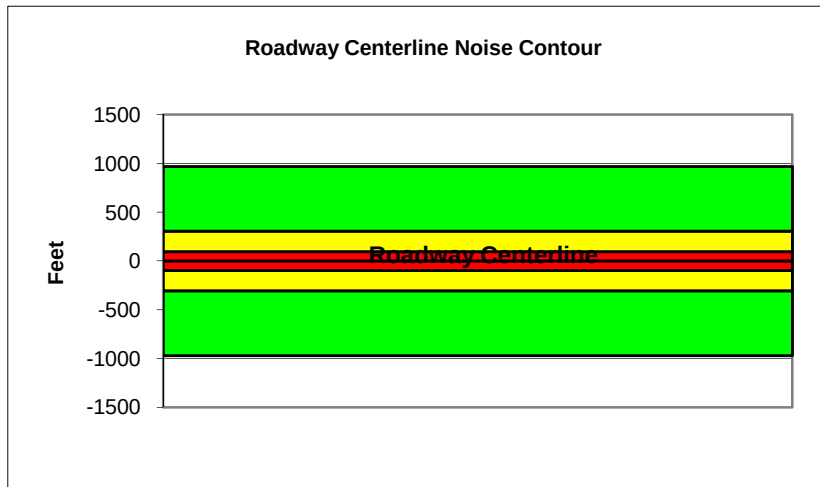
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Etiwanda Avenue  
Road Segment: Between Philadelphia Ave. and SR-60

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 18,873 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 1887.3 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 55     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 45     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 58.1        | 66.9        | 65.1        | 59.0        | 67.6        | 68.3        |
| Medium Trucks:                                                   | 65.2        | 57.1        | 50.8        | 49.2        | 57.7        | 57.9        |
| Heavy Trucks:                                                    | 69.2        | 57.2        | 48.2        | 49.4        | 58.7        | 58.8        |
| <b>Vehicle Noise:</b>                                            | <b>71.5</b> | <b>67.8</b> | <b>65.3</b> | <b>59.9</b> | <b>68.5</b> | <b>69.1</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 970 |
| 65 dBA                   | 307 |
| 70 dBA                   | 97  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

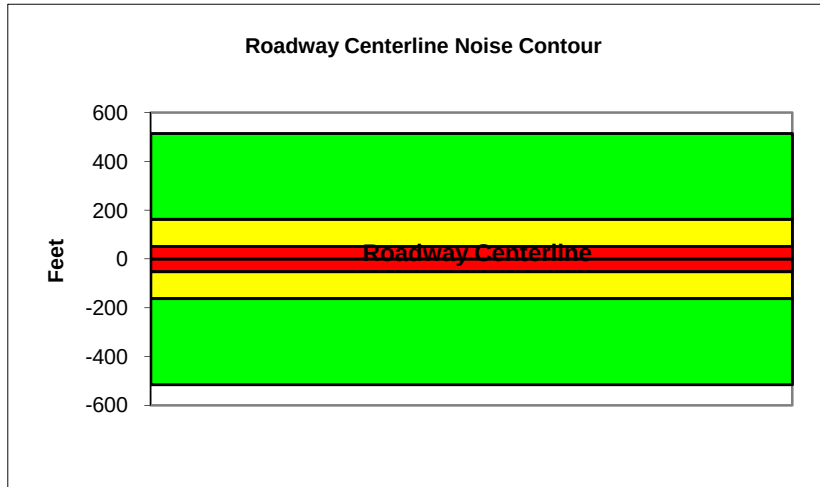
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Etiwanda Avenue  
Road Segment: Between San Bernardino Ave and Valley Blvd

| PROJECT DATA                   |               | SITE DATA                        |        |         |       |        |
|--------------------------------|---------------|----------------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:                      | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:           | 16,571 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:               | 1657.1 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:                   | 45     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:           | 24     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS                     |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions <b>HARD SITE</b> |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                        |        |         |       |        |
| Observer Height (above grade): | 0             | Type                             | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                             | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                       | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck                      | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                                  |        |         |       |        |
| Medium Trucks:                 | 2.3           |                                  |        |         |       |        |
| Heavy Trucks:                  | 8             |                                  |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |          |         |             |           |      |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|------|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn  | CNEL |
| Autos:                                                           | 55.4     | 64.1    | 62.3        | 56.3      | 64.9 | 65.5 |
| Medium Trucks:                                                   | 63.6     | 55.6    | 49.2        | 47.6      | 56.1 | 56.3 |
| Heavy Trucks:                                                    | 68.2     | 56.2    | 47.2        | 48.4      | 57.9 | 58.0 |
| Vehicle Noise:                                                   | 70.5     | 65.4    | 62.7        | 57.6      | 66.2 | 66.7 |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 515 |
| 65 dBA                   | 163 |
| 70 dBA                   | 51  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

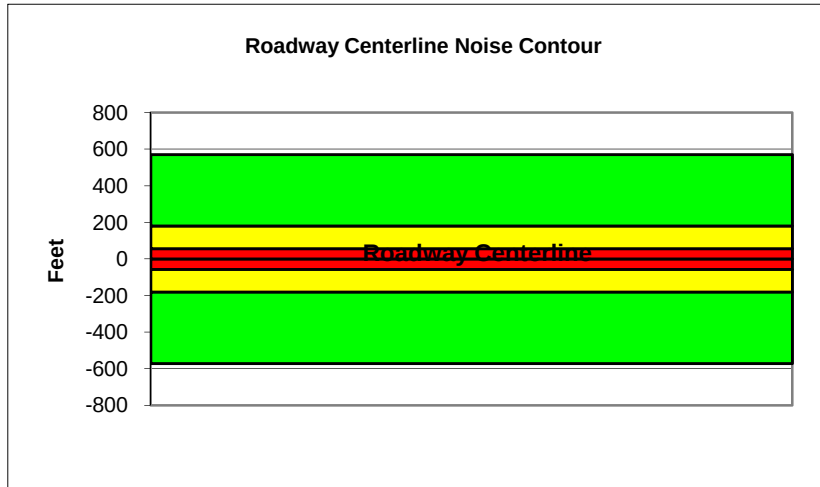
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Etiwanda Avenue  
Road Segment: Between Slover Ave. and Jurupa St.

| PROJECT DATA                   |               | SITE DATA                        |        |         |       |        |
|--------------------------------|---------------|----------------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:                      | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:           | 18,393 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:               | 1839.3 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:                   | 45     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:           | 38     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS                     |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions <b>HARD SITE</b> |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                        |        |         |       |        |
| Observer Height (above grade): | 0             | Type                             | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                             | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                       | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck                      | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                                  |        |         |       |        |
| Medium Trucks:                 | 2.3           |                                  |        |         |       |        |
| Heavy Trucks:                  | 8             |                                  |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |          |         |             |           |      |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|------|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn  | CNEL |
| Autos:                                                           | 55.6     | 64.4    | 62.6        | 56.5      | 65.1 | 65.7 |
| Medium Trucks:                                                   | 63.9     | 55.8    | 49.4        | 47.8      | 56.3 | 56.6 |
| Heavy Trucks:                                                    | 68.4     | 56.4    | 47.4        | 48.6      | 58.1 | 58.3 |
| Vehicle Noise:                                                   | 70.7     | 65.7    | 62.9        | 57.8      | 66.4 | 66.9 |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 571 |
| 65 dBA                   | 181 |
| 70 dBA                   | 57  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |





**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

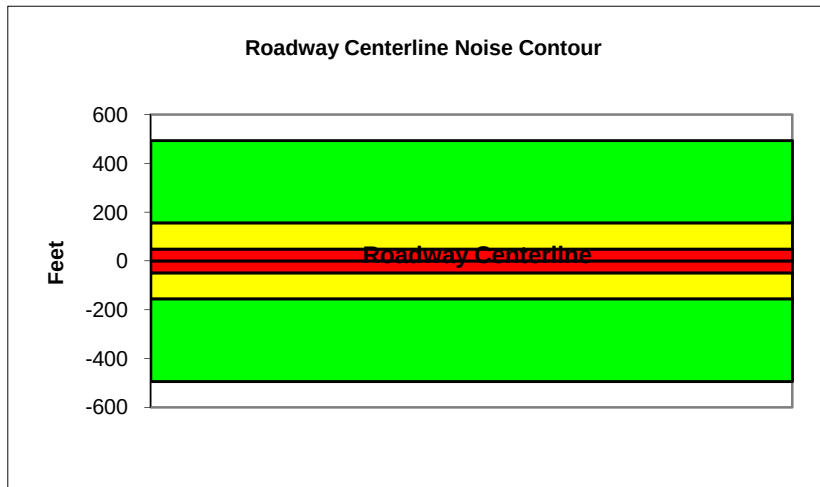
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Jurupa Street  
Road Segment: Between Cherry Ave. and Citrus Ave.

| PROJECT DATA                   |               | SITE DATA                        |        |         |       |        |
|--------------------------------|---------------|----------------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:                      | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:           | 15,891 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:               | 1589.1 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:                   | 45     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:           | 48     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS                     |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions <b>HARD SITE</b> |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                        |        |         |       |        |
| Observer Height (above grade): | 0             | Type                             | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                             | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                       | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck                      | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                                  |        |         |       |        |
| Medium Trucks:                 | 2.3           |                                  |        |         |       |        |
| Heavy Trucks:                  | 8             |                                  |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |          |         |             |           |      |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|------|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn  | CNEL |
| Autos:                                                           | 54.8     | 63.6    | 61.8        | 55.7      | 64.3 | 65.0 |
| Medium Trucks:                                                   | 63.1     | 55.0    | 48.6        | 47.0      | 55.5 | 55.8 |
| Heavy Trucks:                                                    | 67.6     | 55.6    | 46.6        | 47.8      | 57.4 | 57.5 |
| Vehicle Noise:                                                   | 69.9     | 64.9    | 62.1        | 57.0      | 65.6 | 66.1 |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 494 |
| 65 dBA                   | 156 |
| 70 dBA                   | 49  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

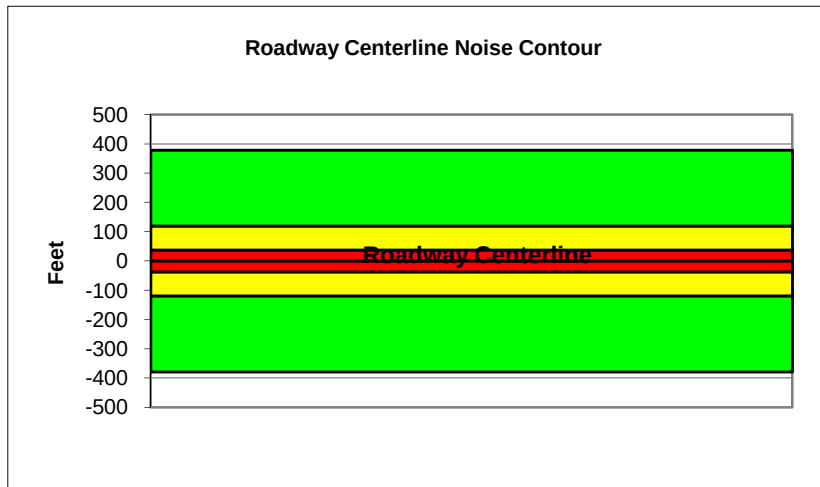
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Jurupa Street  
Road Segment: Between Citrus Ave. and Sierra Ave.

| PROJECT DATA                   |           |     | SITE DATA                        |        |         |       |        |  |
|--------------------------------|-----------|-----|----------------------------------|--------|---------|-------|--------|--|
| Centerline Dist to Barrier     | 0         |     | Road Grade:                      | 0      |         |       |        |  |
| Barrier (0=wall, 1= berm):     | 0         |     | Average Daily Traffic:           | 12,182 |         |       |        |  |
| Receiver Barrier Dist:         | 0         |     | Peak Hour Traffic:               | 1218.2 |         |       |        |  |
| Centerline Dist. To Observer:  | 100       |     | Vehicle Speed:                   | 45     |         |       |        |  |
| Barrier Near Lane CL Dist:     | 0         |     | Centerline Separation:           | 45     |         |       |        |  |
| Barrier Far lane CL Dist:      | 0         |     | NOISE INPUTS                     |        |         |       |        |  |
| Pad Elevation:                 | 0.5       |     | Site conditions <b>HARD SITE</b> |        |         |       |        |  |
| Road Elevation:                | 0         |     | FLEET MIX                        |        |         |       |        |  |
| Observer Height (above grade): | 0         |     | Type                             | Day    | Evening | Night | Daily  |  |
| Barrier Height:                | 0         |     | Auto                             | 0.775  | 0.129   | 0.096 | 0.9742 |  |
| Rt View: 90                    | Lft View: | -90 | Med. Truck                       | 0.848  | 0.049   | 0.103 | 0.0184 |  |
| NOISE SOURCE ELEVATIONS (Feet) |           |     | Heavy Truck                      | 0.865  | 0.027   | 0.108 | 0.0074 |  |
| Autos:                         | 0         |     |                                  |        |         |       |        |  |
| Medium Trucks:                 | 2.3       |     |                                  |        |         |       |        |  |
| Heavy Trucks:                  | 8         |     |                                  |        |         |       |        |  |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |          |         |             |           |      |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|------|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn  | CNEL |
| Autos:                                                           | 53.7     | 62.5    | 60.7        | 54.6      | 63.2 | 63.8 |
| Medium Trucks:                                                   | 62.0     | 53.9    | 47.5        | 45.9      | 54.4 | 54.7 |
| Heavy Trucks:                                                    | 66.5     | 54.5    | 45.5        | 46.7      | 56.2 | 56.4 |
| Vehicle Noise:                                                   | 68.8     | 63.8    | 61.0        | 55.9      | 64.5 | 65.0 |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 379 |
| 65 dBA                   | 120 |
| 70 dBA                   | 38  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

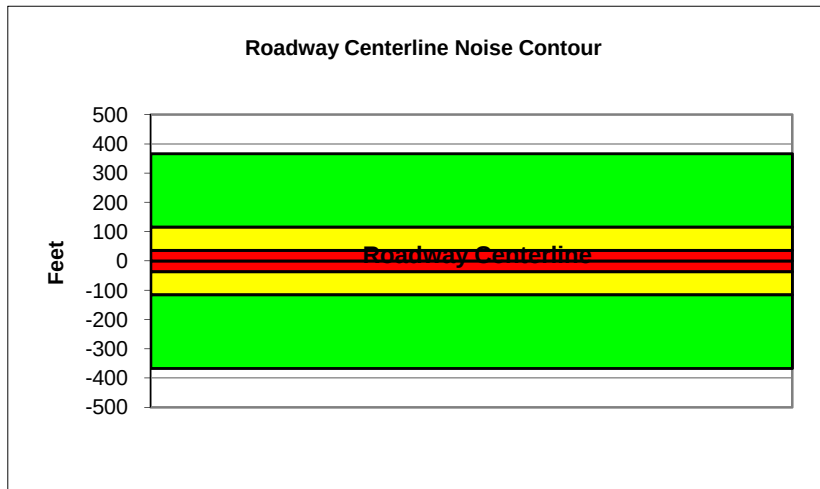
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Jurupa Street  
Road Segment: Between Etiwanda Ave. and Mulberry Ave.

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 11,803 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 1180.3 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 45     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 35     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 53.7        | 62.5        | 60.7        | 54.6        | 63.3        | 63.9        |
| Medium Trucks:                                                   | 62.0        | 53.9        | 47.5        | 46.0        | 54.4        | 54.7        |
| Heavy Trucks:                                                    | 66.5        | 54.6        | 45.5        | 46.7        | 56.3        | 56.4        |
| <b>Vehicle Noise:</b>                                            | <b>68.8</b> | <b>63.8</b> | <b>61.1</b> | <b>55.9</b> | <b>64.5</b> | <b>65.0</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 367 |
| 65 dBA                   | 116 |
| 70 dBA                   | 37  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

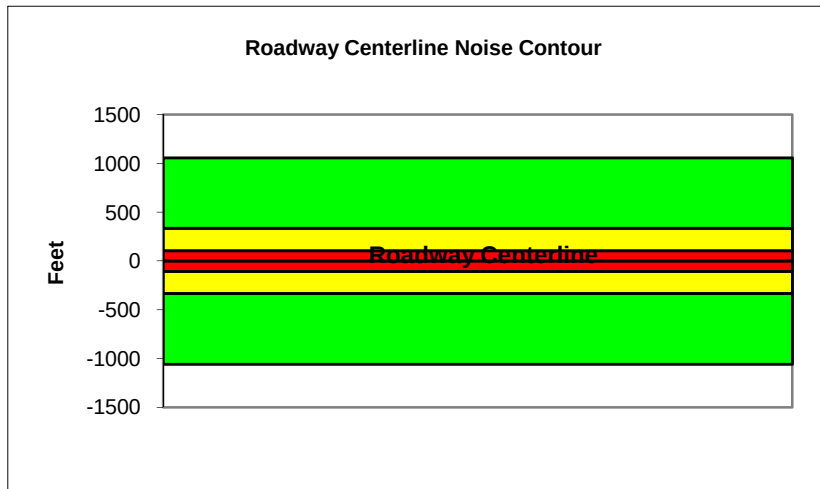
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Jurupa Street  
Road Segment: Between I-15 and Etiwanda Ave.

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 26,207 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 2620.7 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 50     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 45     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 58.3        | 67.1        | 65.3        | 59.2        | 67.9        | 68.5        |
| Medium Trucks:                                                   | 66.0        | 57.9        | 51.5        | 50.0        | 58.5        | 58.7        |
| Heavy Trucks:                                                    | 70.2        | 58.3        | 49.2        | 50.4        | 59.8        | 60.0        |
| <b>Vehicle Noise:</b>                                            | <b>72.5</b> | <b>68.2</b> | <b>65.6</b> | <b>60.3</b> | <b>68.9</b> | <b>69.4</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |      |
|--------------------------|------|
| Unmitigated              |      |
| 60 dBA                   | 1059 |
| 65 dBA                   | 335  |
| 70 dBA                   | 106  |
| Mitigated                |      |
| 60 dBA                   |      |
| 65 dBA                   |      |
| 70 dBA                   |      |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

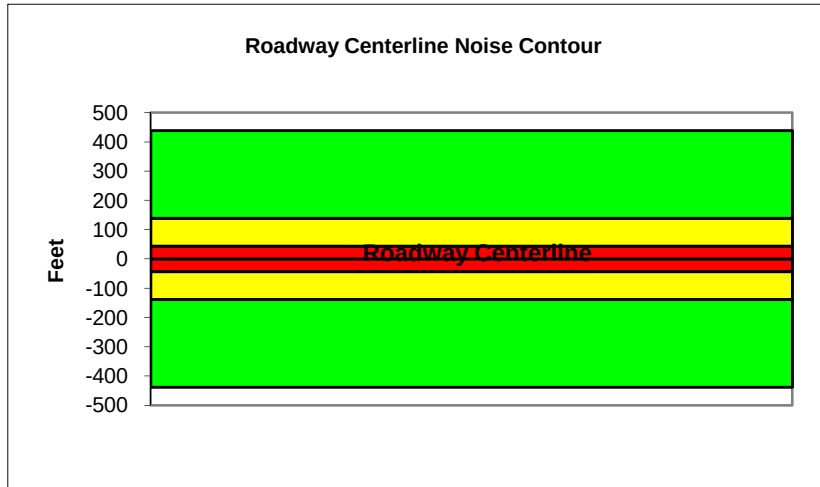
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Jurupa Street  
Road Segment: Between Mulberry Ave. and Cherry Ave.

| PROJECT DATA                   |           |     | SITE DATA                 |        |         |       |        |  |
|--------------------------------|-----------|-----|---------------------------|--------|---------|-------|--------|--|
| Centerline Dist to Barrier     | 0         |     | Road Grade:               | 0      |         |       |        |  |
| Barrier (0=wall, 1= berm):     | 0         |     | Average Daily Traffic:    | 14,118 |         |       |        |  |
| Receiver Barrier Dist:         | 0         |     | Peak Hour Traffic:        | 1411.8 |         |       |        |  |
| Centerline Dist. To Observer:  | 100       |     | Vehicle Speed:            | 45     |         |       |        |  |
| Barrier Near Lane CL Dist:     | 0         |     | Centerline Separation:    | 40     |         |       |        |  |
| Barrier Far lane CL Dist:      | 0         |     | NOISE INPUTS              |        |         |       |        |  |
| Pad Elevation:                 | 0.5       |     | Site conditions HARD SITE |        |         |       |        |  |
| Road Elevation:                | 0         |     | FLEET MIX                 |        |         |       |        |  |
| Observer Height (above grade): | 0         |     | Type                      | Day    | Evening | Night | Daily  |  |
| Barrier Height:                | 0         |     | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |  |
| Rt View: 90                    | Lft View: | -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |  |
| NOISE SOURCE ELEVATIONS (Feet) |           |     | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |  |
| Autos:                         | 0         |     |                           |        |         |       |        |  |
| Medium Trucks:                 | 2.3       |     |                           |        |         |       |        |  |
| Heavy Trucks:                  | 8         |     |                           |        |         |       |        |  |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 54.4        | 63.2        | 61.4        | 55.3        | 64.0        | 64.6        |
| Medium Trucks:                                                   | 62.7        | 54.6        | 48.2        | 46.6        | 55.1        | 55.4        |
| Heavy Trucks:                                                    | 67.2        | 55.3        | 46.2        | 47.4        | 57.0        | 57.1        |
| <b>Vehicle Noise:</b>                                            | <b>69.5</b> | <b>64.5</b> | <b>61.8</b> | <b>56.6</b> | <b>65.2</b> | <b>65.7</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 439 |
| 65 dBA                   | 139 |
| 70 dBA                   | 44  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

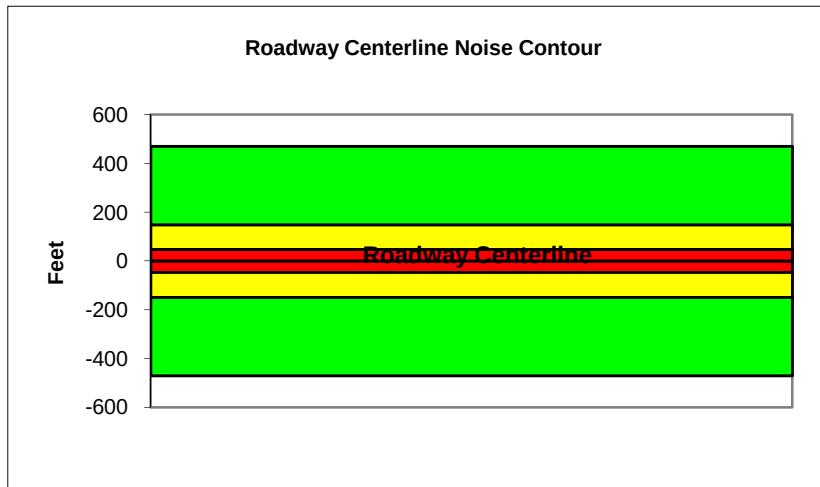
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Mulberry Avenue  
Road Segment: Between Jurupa St. and Philadelphia Ave.

| PROJECT DATA                   |           |     | SITE DATA                 |        |         |       |        |
|--------------------------------|-----------|-----|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0         |     | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0         |     | Average Daily Traffic:    | 11,661 |         |       |        |
| Receiver Barrier Dist:         | 0         |     | Peak Hour Traffic:        | 1166.1 |         |       |        |
| Centerline Dist. To Observer:  | 100       |     | Vehicle Speed:            | 50     |         |       |        |
| Barrier Near Lane CL Dist:     | 0         |     | Centerline Separation:    | 45     |         |       |        |
| Barrier Far lane CL Dist:      | 0         |     | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5       |     | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0         |     | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0         |     | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0         |     | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: | -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |           |     | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0         |     |                           |        |         |       |        |
| Medium Trucks:                 | 2.3       |     |                           |        |         |       |        |
| Heavy Trucks:                  | 8         |     |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 54.8        | 63.6        | 61.8        | 55.7        | 64.4        | 65.0        |
| Medium Trucks:                                                   | 62.5        | 54.4        | 48.0        | 46.5        | 54.9        | 55.2        |
| Heavy Trucks:                                                    | 66.7        | 54.8        | 45.7        | 46.9        | 56.3        | 56.5        |
| <b>Vehicle Noise:</b>                                            | <b>69.0</b> | <b>64.7</b> | <b>62.1</b> | <b>56.8</b> | <b>65.4</b> | <b>65.9</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 471 |
| 65 dBA                   | 149 |
| 70 dBA                   | 47  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

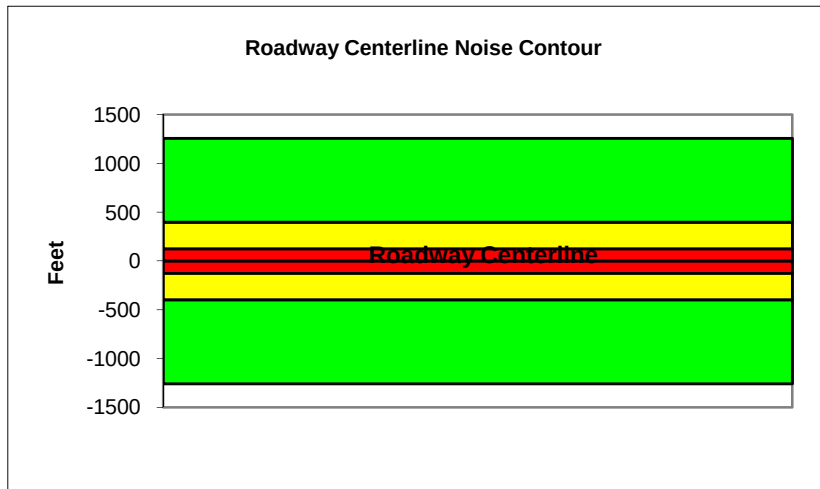
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Mulberry Avenue  
Road Segment: Between Philadelphia Ave. and SR-60

| PROJECT DATA                   |           |     | SITE DATA                 |        |         |       |        |  |
|--------------------------------|-----------|-----|---------------------------|--------|---------|-------|--------|--|
| Centerline Dist to Barrier     | 0         |     | Road Grade:               | 0      |         |       |        |  |
| Barrier (0=wall, 1= berm):     | 0         |     | Average Daily Traffic:    | 24,479 |         |       |        |  |
| Receiver Barrier Dist:         | 0         |     | Peak Hour Traffic:        | 2447.9 |         |       |        |  |
| Centerline Dist. To Observer:  | 100       |     | Vehicle Speed:            | 55     |         |       |        |  |
| Barrier Near Lane CL Dist:     | 0         |     | Centerline Separation:    | 45     |         |       |        |  |
| Barrier Far lane CL Dist:      | 0         |     | NOISE INPUTS              |        |         |       |        |  |
| Pad Elevation:                 | 0.5       |     | Site conditions HARD SITE |        |         |       |        |  |
| Road Elevation:                | 0         |     | FLEET MIX                 |        |         |       |        |  |
| Observer Height (above grade): | 0         |     | Type                      | Day    | Evening | Night | Daily  |  |
| Barrier Height:                | 0         |     | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |  |
| Rt View: 90                    | Lft View: | -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |  |
| NOISE SOURCE ELEVATIONS (Feet) |           |     | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |  |
| Autos:                         | 0         |     |                           |        |         |       |        |  |
| Medium Trucks:                 | 2.3       |     |                           |        |         |       |        |  |
| Heavy Trucks:                  | 8         |     |                           |        |         |       |        |  |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 59.2        | 68.0        | 66.2        | 60.1        | 68.8        | 69.4        |
| Medium Trucks:                                                   | 66.3        | 58.3        | 51.9        | 50.3        | 58.8        | 59.0        |
| Heavy Trucks:                                                    | 70.3        | 58.4        | 49.3        | 50.5        | 59.8        | 59.9        |
| <b>Vehicle Noise:</b>                                            | <b>72.6</b> | <b>68.9</b> | <b>66.5</b> | <b>61.1</b> | <b>69.7</b> | <b>70.2</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |      |
|--------------------------|------|
| Unmitigated              |      |
| 60 dBA                   | 1258 |
| 65 dBA                   | 398  |
| 70 dBA                   | 126  |
| Mitigated                |      |
| 60 dBA                   |      |
| 65 dBA                   |      |
| 70 dBA                   |      |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

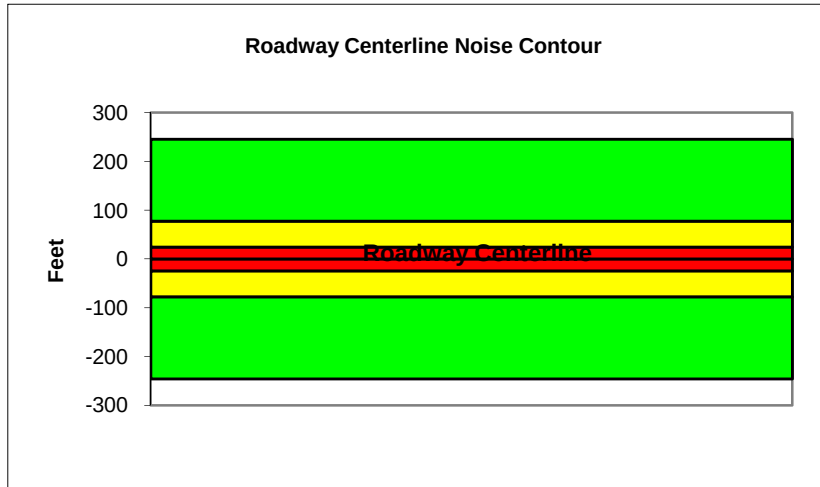
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Mulberry Avenue  
Road Segment: Between Slover Ave. and Jurupa St.

| PROJECT DATA                   |               | SITE DATA                 |       |         |       |        |
|--------------------------------|---------------|---------------------------|-------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0     |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 6,095 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 609.5 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 50    |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 34    |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |       |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |       |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |       |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day   | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775 | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848 | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865 | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |       |         |       |        |
| Medium Trucks:                 | 2.3           |                           |       |         |       |        |
| Heavy Trucks:                  | 8             |                           |       |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 52.2        | 60.9        | 59.2        | 53.1        | 61.7        | 62.3        |
| Medium Trucks:                                                   | 59.8        | 51.8        | 45.4        | 43.8        | 52.3        | 52.5        |
| Heavy Trucks:                                                    | 64.1        | 52.1        | 43.1        | 44.3        | 53.7        | 53.8        |
| <b>Vehicle Noise:</b>                                            | <b>66.4</b> | <b>62.0</b> | <b>59.5</b> | <b>54.2</b> | <b>62.8</b> | <b>63.3</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 246 |
| 65 dBA                   | 78  |
| 70 dBA                   | 25  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |





**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

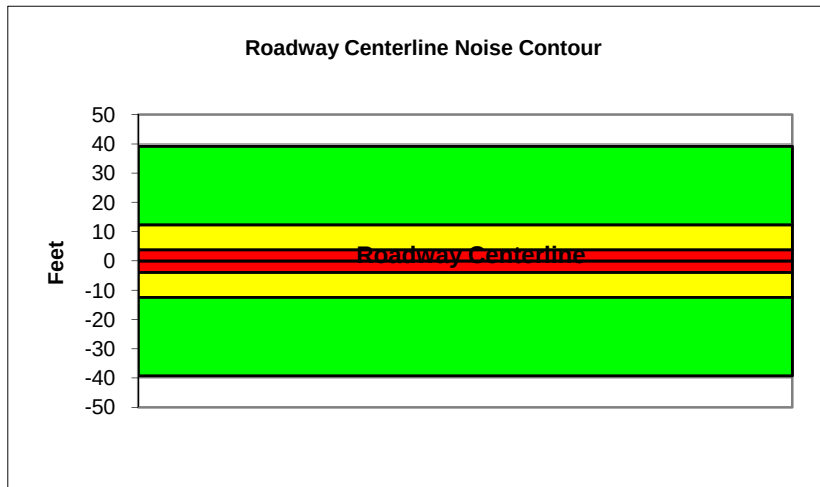
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Philadelphia Avenue  
Road Segment: Between Etiwanda Ave. and Country Village Rd.

| PROJECT DATA                   |               | SITE DATA                        |       |         |       |        |
|--------------------------------|---------------|----------------------------------|-------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:                      | 0     |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:           | 1,674 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:               | 167.4 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:                   | 40    |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:           | 35    |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS                     |       |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions <b>HARD SITE</b> |       |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                        |       |         |       |        |
| Observer Height (above grade): | 0             | Type                             | Day   | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                             | 0.775 | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                       | 0.848 | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck                      | 0.865 | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                                  |       |         |       |        |
| Medium Trucks:                 | 2.3           |                                  |       |         |       |        |
| Heavy Trucks:                  | 8             |                                  |       |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |          |         |             |           |      |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|------|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn  | CNEL |
| Autos:                                                           | 43.7     | 52.5    | 50.7        | 44.6      | 53.3 | 53.9 |
| Medium Trucks:                                                   | 52.7     | 44.6    | 38.2        | 36.7      | 45.2 | 45.4 |
| Heavy Trucks:                                                    | 57.5     | 45.6    | 36.5        | 37.8      | 47.5 | 47.6 |
| Vehicle Noise:                                                   | 59.9     | 54.1    | 51.2        | 46.2      | 54.8 | 55.3 |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |    |
|--------------------------|----|
| Unmitigated              |    |
| 60 dBA                   | 39 |
| 65 dBA                   | 12 |
| 70 dBA                   | 4  |
| Mitigated                |    |
| 60 dBA                   |    |
| 65 dBA                   |    |
| 70 dBA                   |    |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

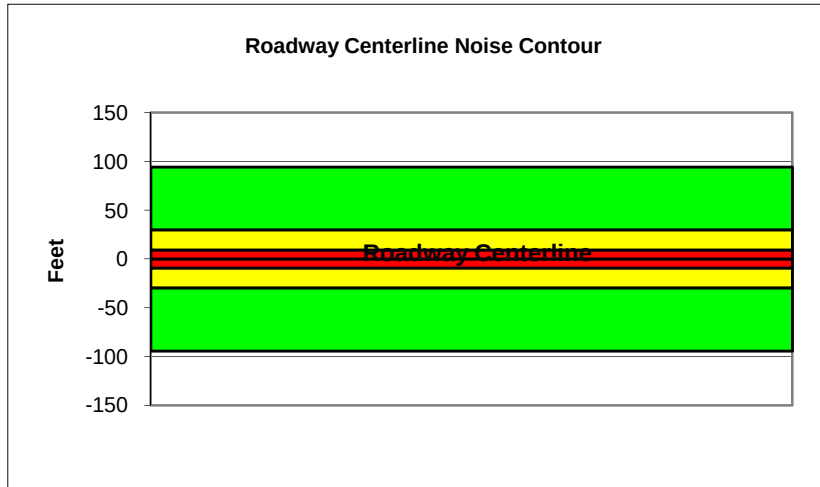
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Philadelphia Avenue  
Road Segment: Between I-15 and Etiwanda Ave.

| PROJECT DATA                   |               | SITE DATA                        |       |         |       |        |
|--------------------------------|---------------|----------------------------------|-------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:                      | 0     |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:           | 3,039 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:               | 303.9 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:                   | 45    |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:           | 30    |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS                     |       |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions <b>HARD SITE</b> |       |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                        |       |         |       |        |
| Observer Height (above grade): | 0             | Type                             | Day   | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                             | 0.775 | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                       | 0.848 | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck                      | 0.865 | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                                  |       |         |       |        |
| Medium Trucks:                 | 2.3           |                                  |       |         |       |        |
| Heavy Trucks:                  | 8             |                                  |       |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |          |         |             |           |      |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|------|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn  | CNEL |
| Autos:                                                           | 47.9     | 56.7    | 54.9        | 48.8      | 57.4 | 58.1 |
| Medium Trucks:                                                   | 56.2     | 48.1    | 41.7        | 40.1      | 48.6 | 48.9 |
| Heavy Trucks:                                                    | 60.7     | 48.7    | 39.7        | 40.9      | 50.5 | 50.6 |
| Vehicle Noise:                                                   | 63.0     | 58.0    | 55.2        | 50.1      | 58.7 | 59.2 |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |    |
|--------------------------|----|
| Unmitigated              |    |
| 60 dBA                   | 94 |
| 65 dBA                   | 30 |
| 70 dBA                   | 9  |
| Mitigated                |    |
| 60 dBA                   |    |
| 65 dBA                   |    |
| 70 dBA                   |    |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

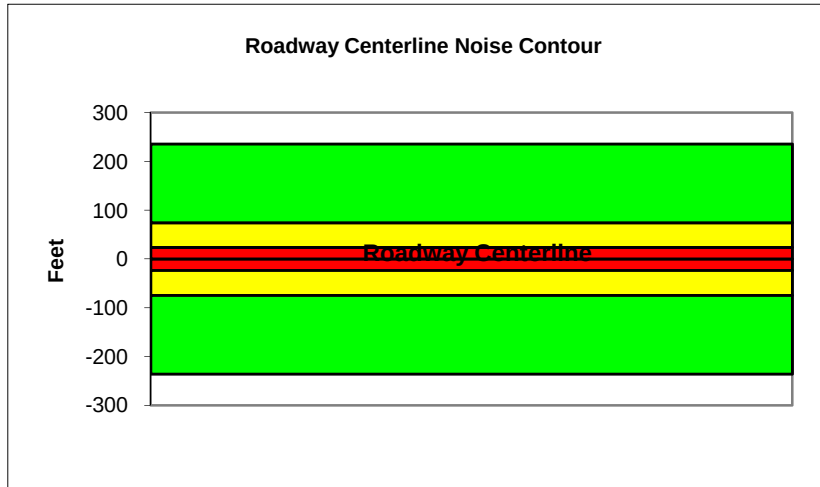
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing  
Analyst: Brian Allee      Job #: 65100340  
Roadway: San Bernardino Avenue  
Road Segment: Between Cherry Ave. and Fontana Ave.

| PROJECT DATA                   |               | SITE DATA                        |       |         |       |        |
|--------------------------------|---------------|----------------------------------|-------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:                      | 0     |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:           | 7,591 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:               | 759.1 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:                   | 45    |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:           | 23    |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS                     |       |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions <b>HARD SITE</b> |       |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                        |       |         |       |        |
| Observer Height (above grade): | 0             | Type                             | Day   | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                             | 0.775 | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                       | 0.848 | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck                      | 0.865 | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                                  |       |         |       |        |
| Medium Trucks:                 | 2.3           |                                  |       |         |       |        |
| Heavy Trucks:                  | 8             |                                  |       |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |          |         |             |           |      |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|------|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn  | CNEL |
| Autos:                                                           | 52.0     | 60.8    | 59.0        | 52.9      | 61.5 | 62.1 |
| Medium Trucks:                                                   | 60.3     | 52.2    | 45.8        | 44.2      | 52.7 | 53.0 |
| Heavy Trucks:                                                    | 64.8     | 52.8    | 43.8        | 45.0      | 54.5 | 54.7 |
| Vehicle Noise:                                                   | 67.1     | 62.1    | 59.3        | 54.2      | 62.8 | 63.3 |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 236 |
| 65 dBA                   | 75  |
| 70 dBA                   | 24  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

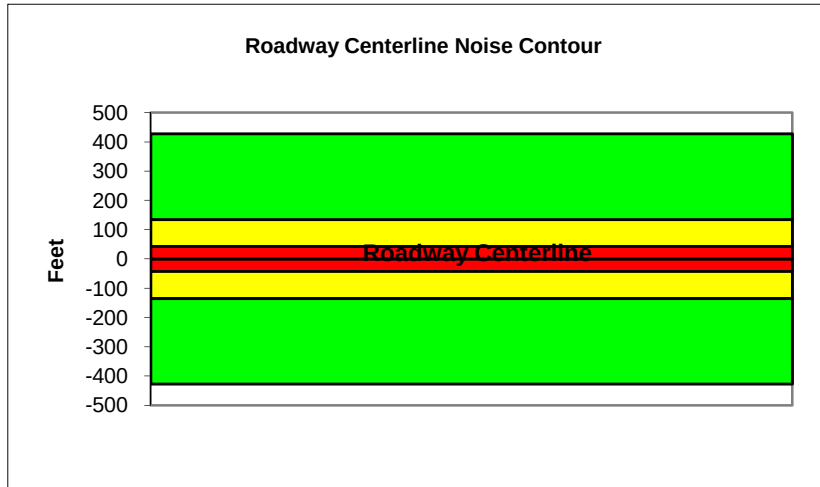
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing  
Analyst: Brian Allee      Job #: 65100340  
Roadway: San Bernardino Avenue  
Road Segment: Between Etiwanda Ave and Cherry Ave

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 10,591 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 1059.1 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 50     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 23     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 54.7        | 63.5        | 61.7        | 55.7        | 64.3        | 64.9        |
| Medium Trucks:                                                   | 62.4        | 54.4        | 48.0        | 46.4        | 54.9        | 55.1        |
| Heavy Trucks:                                                    | 66.6        | 54.7        | 45.7        | 46.9        | 56.3        | 56.4        |
| <b>Vehicle Noise:</b>                                            | <b>69.0</b> | <b>64.6</b> | <b>62.0</b> | <b>56.7</b> | <b>65.3</b> | <b>65.9</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 428 |
| 65 dBA                   | 135 |
| 70 dBA                   | 43  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

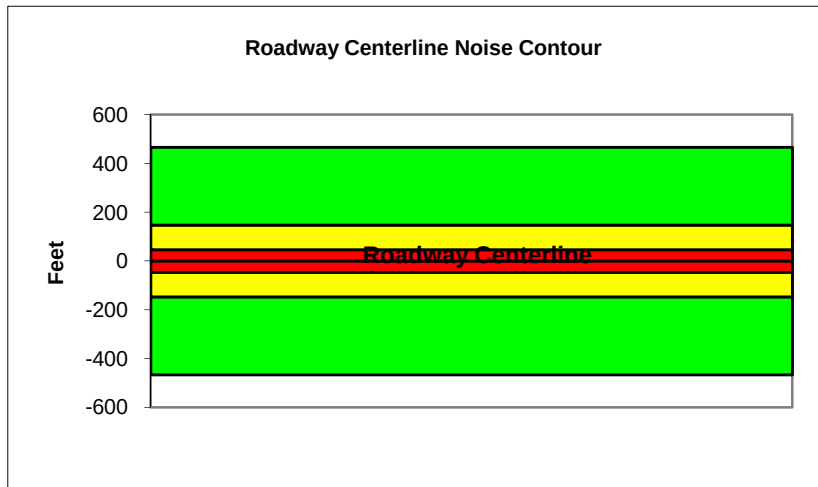
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Fourth Street  
Road Segment: Between I-15 and Etiwanda Ave

| PROJECT DATA                   |               | SITE DATA                        |        |         |       |        |
|--------------------------------|---------------|----------------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:                      | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:           | 11,558 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:               | 1155.8 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:                   | 50     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:           | 30     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS                     |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions <b>HARD SITE</b> |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                        |        |         |       |        |
| Observer Height (above grade): | 0             | Type                             | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                             | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                       | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck                      | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                                  |        |         |       |        |
| Medium Trucks:                 | 2.3           |                                  |        |         |       |        |
| Heavy Trucks:                  | 8             |                                  |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |          |         |             |           |      |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|------|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn  | CNEL |
| Autos:                                                           | 55.0     | 63.8    | 62.0        | 55.9      | 64.6 | 65.2 |
| Medium Trucks:                                                   | 62.7     | 54.6    | 48.2        | 46.7      | 55.1 | 55.4 |
| Heavy Trucks:                                                    | 66.9     | 55.0    | 45.9        | 47.1      | 56.5 | 56.7 |
| Vehicle Noise:                                                   | 69.2     | 64.9    | 62.3        | 57.0      | 65.6 | 66.1 |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 467 |
| 65 dBA                   | 148 |
| 70 dBA                   | 47  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

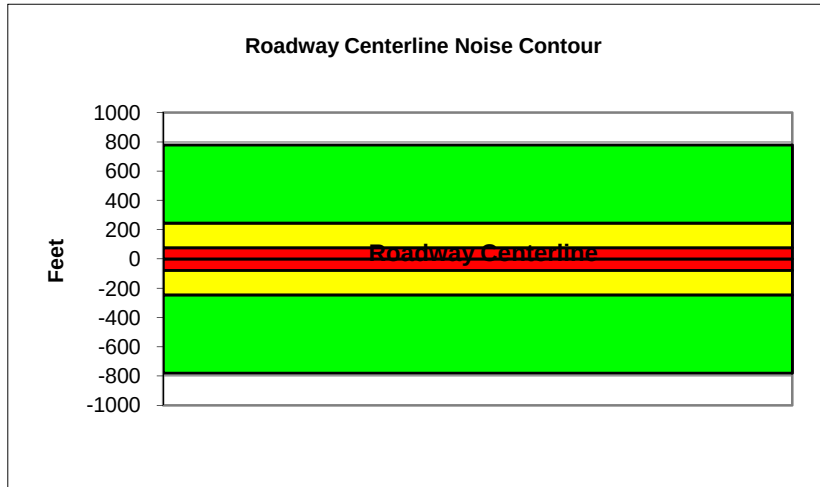
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Sierra Avenue  
Road Segment: Between Jurupa St. and Armstrong Rd.

| PROJECT DATA                   |               | SITE DATA                        |        |         |       |        |
|--------------------------------|---------------|----------------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:                      | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:           | 19,299 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:               | 1929.9 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:                   | 50     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:           | 45     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS                     |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions <b>HARD SITE</b> |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                        |        |         |       |        |
| Observer Height (above grade): | 0             | Type                             | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                             | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                       | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck                      | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                                  |        |         |       |        |
| Medium Trucks:                 | 2.3           |                                  |        |         |       |        |
| Heavy Trucks:                  | 8             |                                  |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |          |         |             |           |      |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|------|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn  | CNEL |
| Autos:                                                           | 57.0     | 65.8    | 64.0        | 57.9      | 66.6 | 67.2 |
| Medium Trucks:                                                   | 64.7     | 56.6    | 50.2        | 48.6      | 57.1 | 57.4 |
| Heavy Trucks:                                                    | 68.9     | 57.0    | 47.9        | 49.1      | 58.5 | 58.6 |
| Vehicle Noise:                                                   | 71.2     | 66.9    | 64.3        | 59.0      | 67.6 | 68.1 |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 779 |
| 65 dBA                   | 246 |
| 70 dBA                   | 78  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

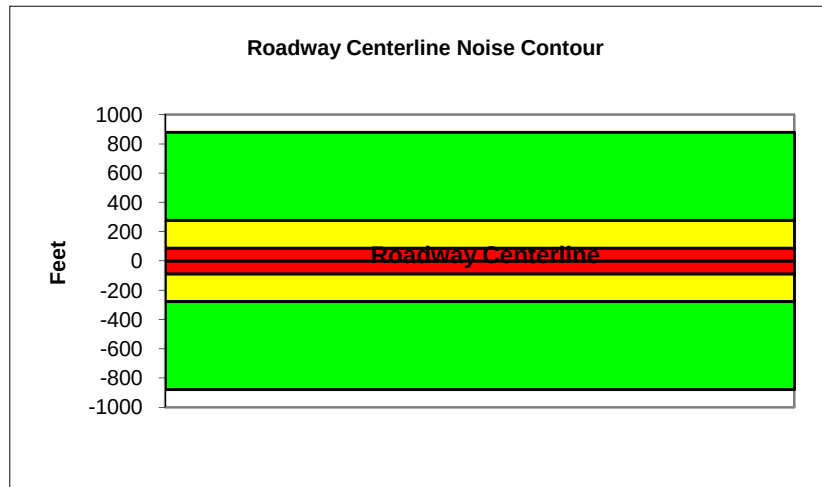
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Sierra Avenue  
Road Segment: Between Slover Ave. and Jurupa St.

| PROJECT DATA                   |               |  | SITE DATA                        |        |         |       |        |  |
|--------------------------------|---------------|--|----------------------------------|--------|---------|-------|--------|--|
| Centerline Dist to Barrier     | 0             |  | Road Grade:                      | 0      |         |       |        |  |
| Barrier (0=wall, 1= berm):     | 0             |  | Average Daily Traffic:           | 21,789 |         |       |        |  |
| Receiver Barrier Dist:         | 0             |  | Peak Hour Traffic:               | 2178.9 |         |       |        |  |
| Centerline Dist. To Observer:  | 100           |  | Vehicle Speed:                   | 50     |         |       |        |  |
| Barrier Near Lane CL Dist:     | 0             |  | Centerline Separation:           | 50     |         |       |        |  |
| Barrier Far lane CL Dist:      | 0             |  | NOISE INPUTS                     |        |         |       |        |  |
| Pad Elevation:                 | 0.5           |  | Site conditions <b>HARD SITE</b> |        |         |       |        |  |
| Road Elevation:                | 0             |  | FLEET MIX                        |        |         |       |        |  |
| Observer Height (above grade): | 0             |  | Type                             | Day    | Evening | Night | Daily  |  |
| Barrier Height:                | 0             |  | Auto                             | 0.775  | 0.129   | 0.096 | 0.9742 |  |
| Rt View: 90                    | Lft View: -90 |  | Med. Truck                       | 0.848  | 0.049   | 0.103 | 0.0184 |  |
| NOISE SOURCE ELEVATIONS (Feet) |               |  | Heavy Truck                      | 0.865  | 0.027   | 0.108 | 0.0074 |  |
| Autos:                         | 0             |  |                                  |        |         |       |        |  |
| Medium Trucks:                 | 2.3           |  |                                  |        |         |       |        |  |
| Heavy Trucks:                  | 8             |  |                                  |        |         |       |        |  |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |          |         |             |           |      |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|------|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn  | CNEL |
| Autos:                                                           | 57.4     | 66.2    | 64.4        | 58.4      | 67.0 | 67.6 |
| Medium Trucks:                                                   | 65.1     | 57.1    | 50.7        | 49.1      | 57.6 | 57.8 |
| Heavy Trucks:                                                    | 69.3     | 57.4    | 48.4        | 49.6      | 59.0 | 59.1 |
| Vehicle Noise:                                                   | 71.7     | 67.3    | 64.7        | 59.4      | 68.0 | 68.6 |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 879 |
| 65 dBA                   | 278 |
| 70 dBA                   | 88  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

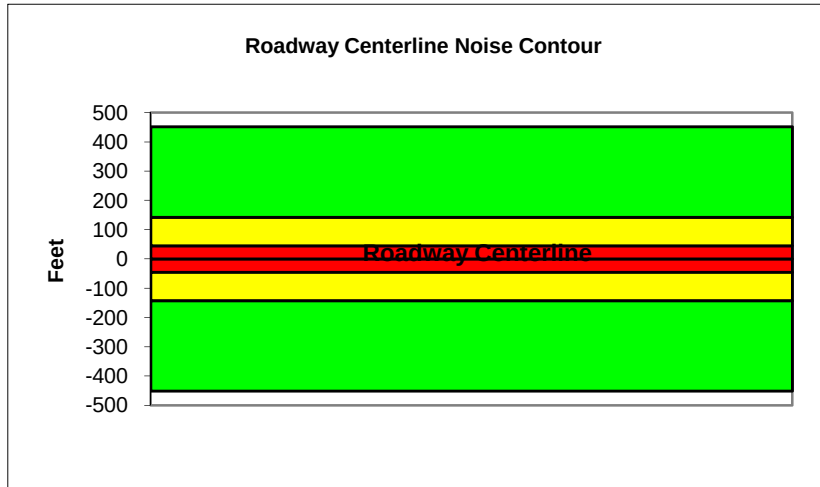
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Slover Avenue  
Road Segment: Between Cherry Ave. and Citrus Ave.

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 11,207 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 1120.7 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 50     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 30     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 54.9        | 63.7        | 61.9        | 55.8        | 64.4        | 65.0        |
| Medium Trucks:                                                   | 62.5        | 54.5        | 48.1        | 46.5        | 55.0        | 55.2        |
| Heavy Trucks:                                                    | 66.8        | 54.8        | 45.8        | 47.0        | 56.4        | 56.5        |
| <b>Vehicle Noise:</b>                                            | <b>69.1</b> | <b>64.7</b> | <b>62.2</b> | <b>56.9</b> | <b>65.5</b> | <b>66.0</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 452 |
| 65 dBA                   | 143 |
| 70 dBA                   | 45  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |





**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

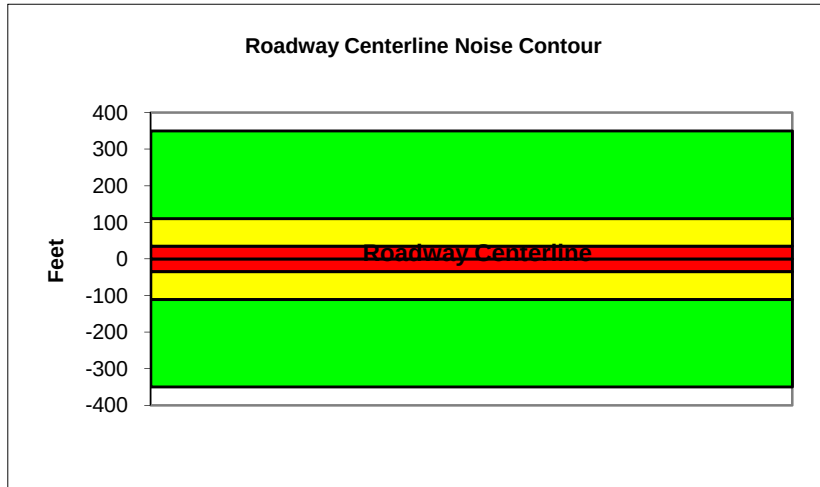
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Slover Avenue  
Road Segment: Between Citrus Ave. and Sierra Ave.

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 11,243 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 1124.3 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 45     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 30     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 53.6        | 62.3        | 60.6        | 54.5        | 63.1        | 63.7        |
| Medium Trucks:                                                   | 61.8        | 53.8        | 47.4        | 45.8        | 54.3        | 54.5        |
| Heavy Trucks:                                                    | 66.4        | 54.4        | 45.4        | 46.6        | 56.1        | 56.3        |
| <b>Vehicle Noise:</b>                                            | <b>68.7</b> | <b>63.6</b> | <b>60.9</b> | <b>55.8</b> | <b>64.4</b> | <b>64.9</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 350 |
| 65 dBA                   | 111 |
| 70 dBA                   | 35  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

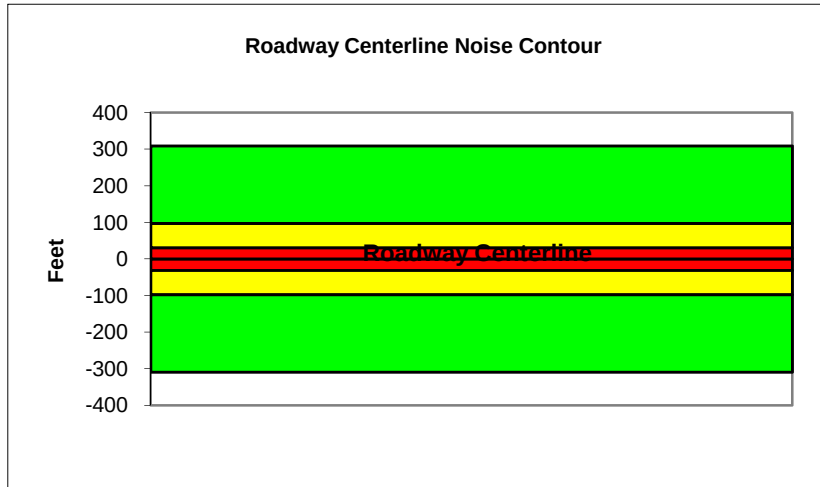
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Slover Avenue  
Road Segment: Between Etiwanda Ave. and Mulberry Ave.

| PROJECT DATA                   |               | SITE DATA                 |       |         |       |        |
|--------------------------------|---------------|---------------------------|-------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0     |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 9,941 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 994.1 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 45    |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 35    |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |       |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |       |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |       |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day   | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775 | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848 | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865 | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |       |         |       |        |
| Medium Trucks:                 | 2.3           |                           |       |         |       |        |
| Heavy Trucks:                  | 8             |                           |       |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 53.0        | 61.7        | 59.9        | 53.9        | 62.5        | 63.1        |
| Medium Trucks:                                                   | 61.2        | 53.2        | 46.8        | 45.2        | 53.7        | 53.9        |
| Heavy Trucks:                                                    | 65.7        | 53.8        | 44.8        | 46.0        | 55.5        | 55.6        |
| <b>Vehicle Noise:</b>                                            | <b>68.1</b> | <b>63.0</b> | <b>60.3</b> | <b>55.2</b> | <b>63.8</b> | <b>64.3</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 309 |
| 65 dBA                   | 98  |
| 70 dBA                   | 31  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

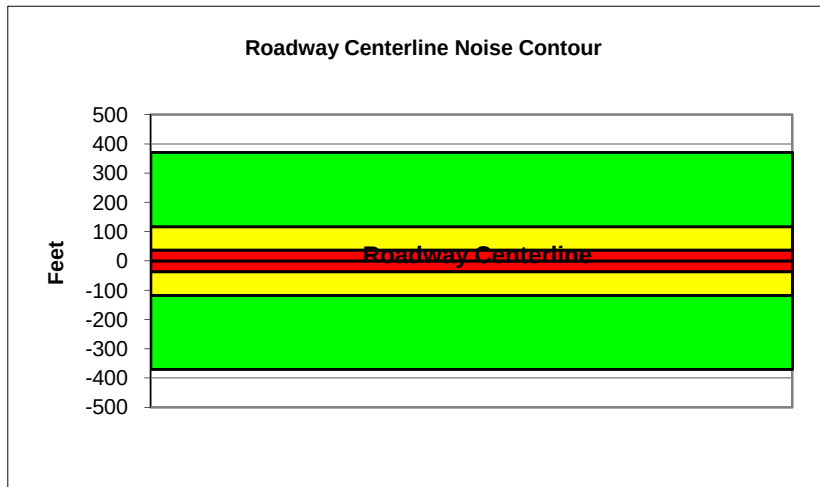
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Slover Avenue  
Road Segment: Between Mulberry Ave. and Cherry Ave.

| PROJECT DATA                   |           |     | SITE DATA                 |       |         |       |        |  |
|--------------------------------|-----------|-----|---------------------------|-------|---------|-------|--------|--|
| Centerline Dist to Barrier     | 0         |     | Road Grade:               | 0     |         |       |        |  |
| Barrier (0=wall, 1= berm):     | 0         |     | Average Daily Traffic:    | 9,176 |         |       |        |  |
| Receiver Barrier Dist:         | 0         |     | Peak Hour Traffic:        | 917.6 |         |       |        |  |
| Centerline Dist. To Observer:  | 100       |     | Vehicle Speed:            | 50    |         |       |        |  |
| Barrier Near Lane CL Dist:     | 0         |     | Centerline Separation:    | 30    |         |       |        |  |
| Barrier Far lane CL Dist:      | 0         |     | NOISE INPUTS              |       |         |       |        |  |
| Pad Elevation:                 | 0.5       |     | Site conditions HARD SITE |       |         |       |        |  |
| Road Elevation:                | 0         |     | FLEET MIX                 |       |         |       |        |  |
| Observer Height (above grade): | 0         |     | Type                      | Day   | Evening | Night | Daily  |  |
| Barrier Height:                | 0         |     | Auto                      | 0.775 | 0.129   | 0.096 | 0.9742 |  |
| Rt View: 90                    | Lft View: | -90 | Med. Truck                | 0.848 | 0.049   | 0.103 | 0.0184 |  |
| NOISE SOURCE ELEVATIONS (Feet) |           |     | Heavy Truck               | 0.865 | 0.027   | 0.108 | 0.0074 |  |
| Autos:                         | 0         |     |                           |       |         |       |        |  |
| Medium Trucks:                 | 2.3       |     |                           |       |         |       |        |  |
| Heavy Trucks:                  | 8         |     |                           |       |         |       |        |  |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 54.0        | 62.8        | 61.0        | 54.9        | 63.6        | 64.2        |
| Medium Trucks:                                                   | 61.7        | 53.6        | 47.2        | 45.7        | 54.1        | 54.4        |
| Heavy Trucks:                                                    | 65.9        | 54.0        | 44.9        | 46.1        | 55.5        | 55.6        |
| <b>Vehicle Noise:</b>                                            | <b>68.2</b> | <b>63.9</b> | <b>61.3</b> | <b>56.0</b> | <b>64.6</b> | <b>65.1</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 371 |
| 65 dBA                   | 117 |
| 70 dBA                   | 37  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

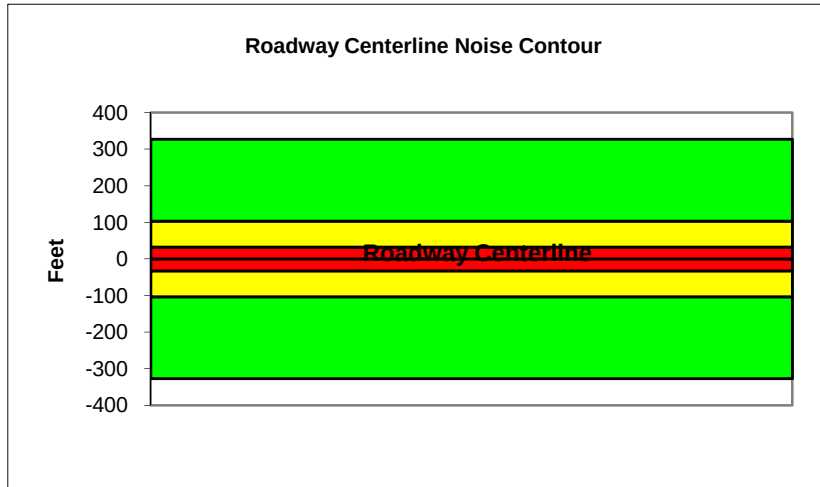
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Valley Boulevard  
Road Segment: Between Cherry Ave. and Fontana Ave.

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 10,535 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 1053.5 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 45     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 30     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 53.3        | 62.1        | 60.3        | 54.2        | 62.8        | 63.4        |
| Medium Trucks:                                                   | 61.6        | 53.5        | 47.1        | 45.5        | 54.0        | 54.3        |
| Heavy Trucks:                                                    | 66.1        | 54.1        | 45.1        | 46.3        | 55.9        | 56.0        |
| <b>Vehicle Noise:</b>                                            | <b>68.4</b> | <b>63.4</b> | <b>60.6</b> | <b>55.5</b> | <b>64.1</b> | <b>64.6</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 327 |
| 65 dBA                   | 104 |
| 70 dBA                   | 33  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

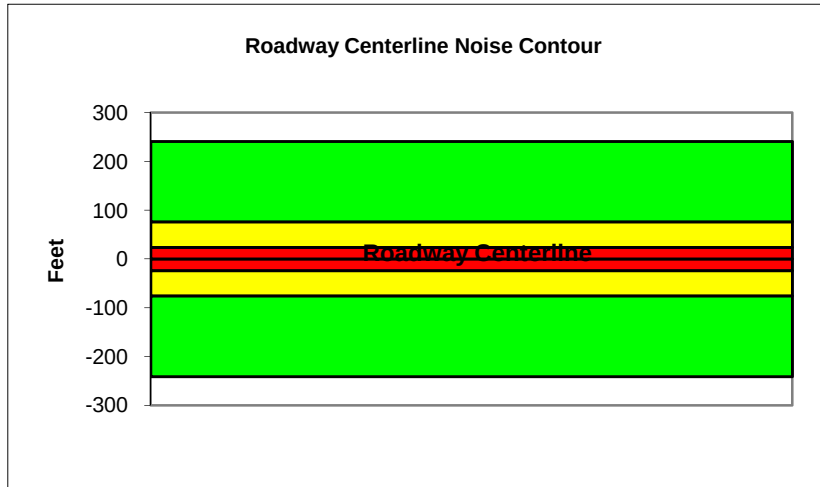
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Valley Boulevard  
Road Segment: Between Citrus Ave. and Sierra Ave.

| PROJECT DATA                   |               | SITE DATA                        |        |         |       |        |
|--------------------------------|---------------|----------------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:                      | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:           | 10,292 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:               | 1029.2 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:                   | 40     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:           | 30     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS                     |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions <b>HARD SITE</b> |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                        |        |         |       |        |
| Observer Height (above grade): | 0             | Type                             | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                             | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                       | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck                      | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                                  |        |         |       |        |
| Medium Trucks:                 | 2.3           |                                  |        |         |       |        |
| Heavy Trucks:                  | 8             |                                  |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |          |         |             |           |      |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|------|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn  | CNEL |
| Autos:                                                           | 51.7     | 60.5    | 58.7        | 52.6      | 61.3 | 61.9 |
| Medium Trucks:                                                   | 60.7     | 52.6    | 46.2        | 44.6      | 53.1 | 53.4 |
| Heavy Trucks:                                                    | 65.5     | 53.6    | 44.5        | 45.7      | 55.4 | 55.6 |
| Vehicle Noise:                                                   | 67.9     | 62.1    | 59.1        | 54.2      | 62.8 | 63.3 |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 241 |
| 65 dBA                   | 76  |
| 70 dBA                   | 24  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

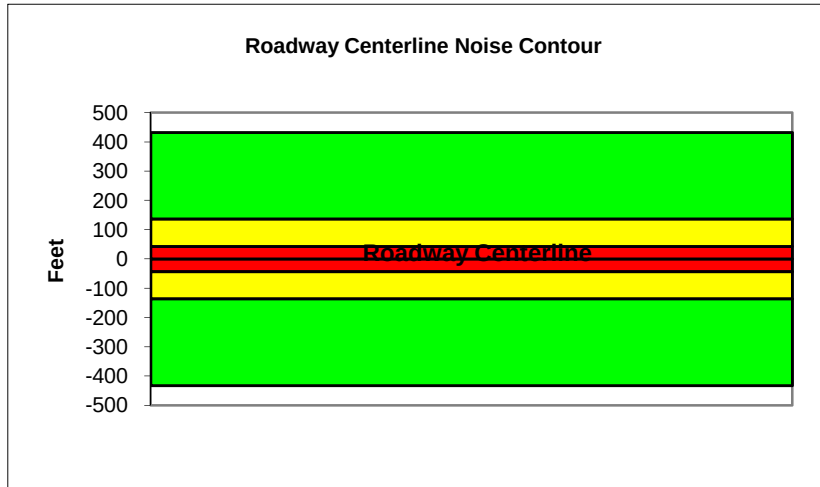
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Valley Boulevard  
Road Segment: Between Etiwanda Ave. and Cherry Ave.

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 13,917 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 1391.7 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 45     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 30     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 54.5        | 63.3        | 61.5        | 55.4        | 64.1        | 64.7        |
| Medium Trucks:                                                   | 62.8        | 54.7        | 48.3        | 46.7        | 55.2        | 55.5        |
| Heavy Trucks:                                                    | 67.3        | 55.4        | 46.3        | 47.5        | 57.1        | 57.2        |
| <b>Vehicle Noise:</b>                                            | <b>69.6</b> | <b>64.6</b> | <b>61.9</b> | <b>56.7</b> | <b>65.3</b> | <b>65.8</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 433 |
| 65 dBA                   | 137 |
| 70 dBA                   | 43  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

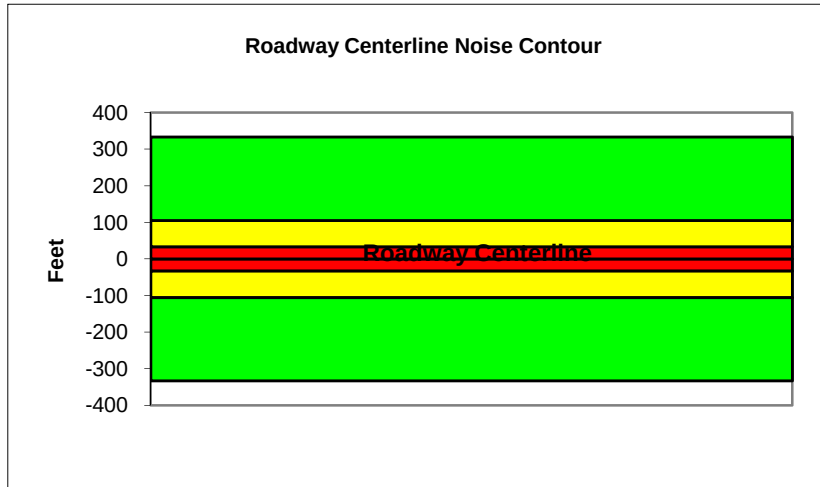
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Valley Boulevard  
Road Segment: Between Fontana Ave. and Citrus Ave.

| PROJECT DATA                   |               | SITE DATA                        |        |         |       |        |
|--------------------------------|---------------|----------------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:                      | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:           | 10,732 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:               | 1073.2 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:                   | 45     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:           | 23     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS                     |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions <b>HARD SITE</b> |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                        |        |         |       |        |
| Observer Height (above grade): | 0             | Type                             | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                             | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                       | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck                      | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                                  |        |         |       |        |
| Medium Trucks:                 | 2.3           |                                  |        |         |       |        |
| Heavy Trucks:                  | 8             |                                  |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |          |         |             |           |      |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|------|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn  | CNEL |
| Autos:                                                           | 53.5     | 62.3    | 60.5        | 54.4      | 63.0 | 63.7 |
| Medium Trucks:                                                   | 61.8     | 53.7    | 47.3        | 45.7      | 54.2 | 54.5 |
| Heavy Trucks:                                                    | 66.3     | 54.3    | 45.3        | 46.5      | 56.1 | 56.2 |
| Vehicle Noise:                                                   | 68.6     | 63.6    | 60.8        | 55.7      | 64.3 | 64.8 |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 333 |
| 65 dBA                   | 105 |
| 70 dBA                   | 33  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

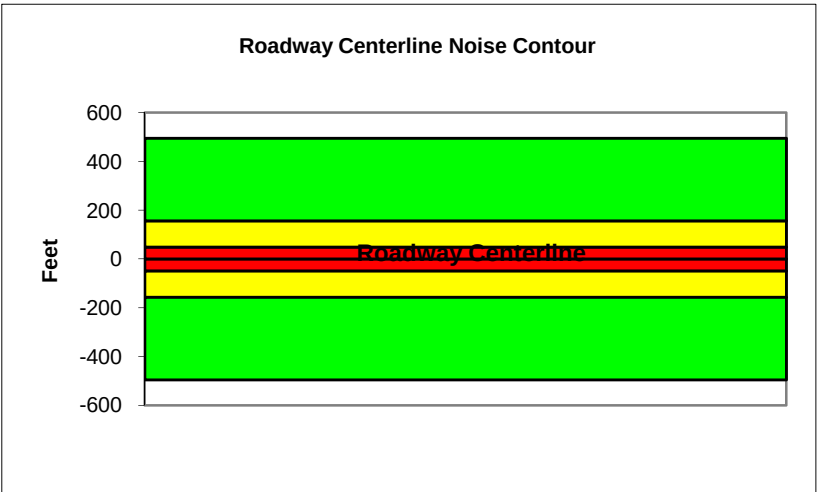
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Valley Boulevard  
Road Segment: Between Fontana Ave. and Citrus Ave.

| PROJECT DATA                   |           |     | SITE DATA                 |        |         |       |        |  |
|--------------------------------|-----------|-----|---------------------------|--------|---------|-------|--------|--|
| Centerline Dist to Barrier     | 0         |     | Road Grade:               | 0      |         |       |        |  |
| Barrier (0=wall, 1= berm):     | 0         |     | Average Daily Traffic:    | 15,948 |         |       |        |  |
| Receiver Barrier Dist:         | 0         |     | Peak Hour Traffic:        | 1594.8 |         |       |        |  |
| Centerline Dist. To Observer:  | 100       |     | Vehicle Speed:            | 45     |         |       |        |  |
| Barrier Near Lane CL Dist:     | 0         |     | Centerline Separation:    | 23     |         |       |        |  |
| Barrier Far lane CL Dist:      | 0         |     | NOISE INPUTS              |        |         |       |        |  |
| Pad Elevation:                 | 0.5       |     | Site conditions HARD SITE |        |         |       |        |  |
| Road Elevation:                | 0         |     | FLEET MIX                 |        |         |       |        |  |
| Observer Height (above grade): | 0         |     | Type                      | Day    | Evening | Night | Daily  |  |
| Barrier Height:                | 0         |     | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |  |
| Rt View: 90                    | Lft View: | -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |  |
| NOISE SOURCE ELEVATIONS (Feet) |           |     | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |  |
| Autos:                         | 0         |     |                           |        |         |       |        |  |
| Medium Trucks:                 | 2.3       |     |                           |        |         |       |        |  |
| Heavy Trucks:                  | 8         |     |                           |        |         |       |        |  |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 55.2        | 64.0        | 62.2        | 56.1        | 64.8        | 65.4        |
| Medium Trucks:                                                   | 63.5        | 55.4        | 49.0        | 47.5        | 55.9        | 56.2        |
| Heavy Trucks:                                                    | 68.0        | 56.1        | 47.0        | 48.2        | 57.8        | 57.9        |
| <b>Vehicle Noise:</b>                                            | <b>70.3</b> | <b>65.3</b> | <b>62.6</b> | <b>57.4</b> | <b>66.0</b> | <b>66.5</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 495 |
| 65 dBA                   | 157 |
| 70 dBA                   | 50  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |





**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

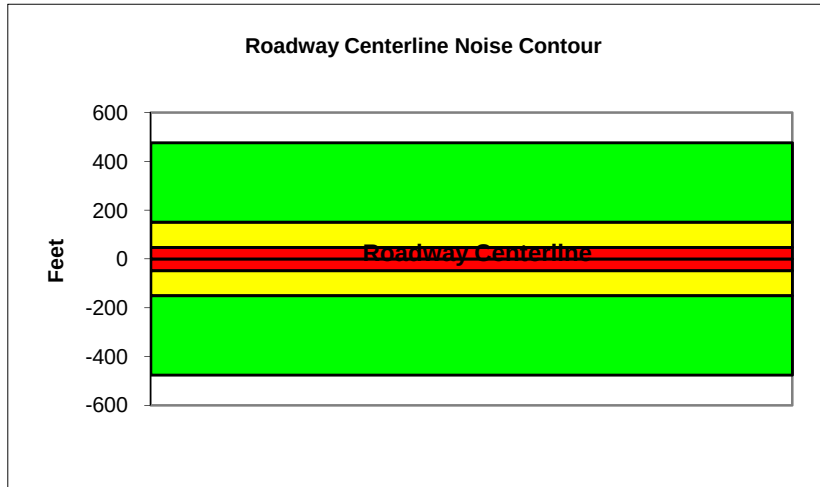
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Armstrong Road  
Road Segment: Between SR-60 and Sierra Ave.

| PROJECT DATA                   |               | SITE DATA                        |        |         |       |        |
|--------------------------------|---------------|----------------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:                      | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:           | 20,323 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:               | 2032.3 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:                   | 40     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:           | 35     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS                     |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions <b>HARD SITE</b> |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                        |        |         |       |        |
| Observer Height (above grade): | 0             | Type                             | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                             | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                       | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck                      | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                                  |        |         |       |        |
| Medium Trucks:                 | 2.3           |                                  |        |         |       |        |
| Heavy Trucks:                  | 8             |                                  |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |          |         |             |           |      |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|------|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn  | CNEL |
| Autos:                                                           | 54.6     | 63.4    | 61.6        | 55.5      | 64.1 | 64.7 |
| Medium Trucks:                                                   | 63.5     | 55.5    | 49.1        | 47.5      | 56.0 | 56.2 |
| Heavy Trucks:                                                    | 68.4     | 56.4    | 47.4        | 48.6      | 58.3 | 58.4 |
| Vehicle Noise:                                                   | 70.8     | 64.9    | 62.0        | 57.1      | 65.7 | 66.1 |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 477 |
| 65 dBA                   | 151 |
| 70 dBA                   | 48  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

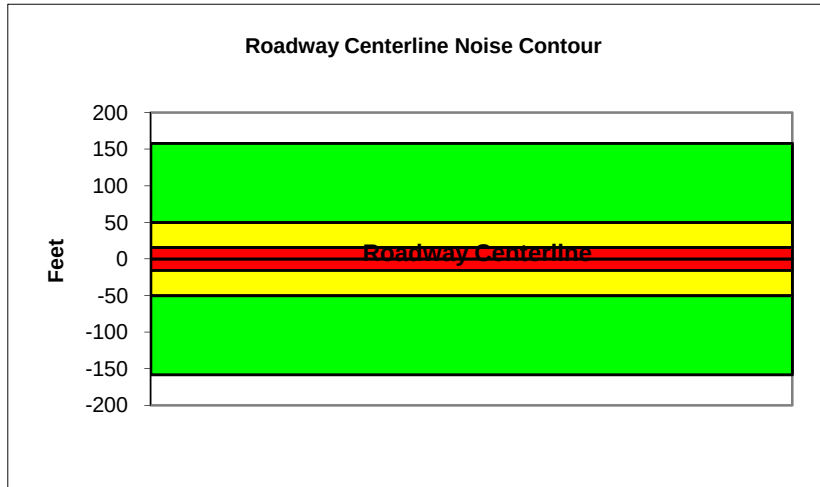
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Beech Avenue  
Road Segment: Between Slover Ave. and Jurupa St.

| PROJECT DATA                   |               | SITE DATA                 |       |         |       |        |
|--------------------------------|---------------|---------------------------|-------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0     |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 9,177 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 917.7 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 35    |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 22    |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |       |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |       |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |       |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day   | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775 | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848 | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865 | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |       |         |       |        |
| Medium Trucks:                 | 2.3           |                           |       |         |       |        |
| Heavy Trucks:                  | 8             |                           |       |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 49.7        | 58.5        | 56.7        | 50.6        | 59.2        | 59.8        |
| Medium Trucks:                                                   | 59.4        | 51.3        | 44.9        | 43.4        | 51.9        | 52.1        |
| Heavy Trucks:                                                    | 64.6        | 52.7        | 43.6        | 44.8        | 54.7        | 54.9        |
| <b>Vehicle Noise:</b>                                            | <b>67.1</b> | <b>60.4</b> | <b>57.2</b> | <b>52.5</b> | <b>61.1</b> | <b>61.6</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 158 |
| 65 dBA                   | 50  |
| 70 dBA                   | 16  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

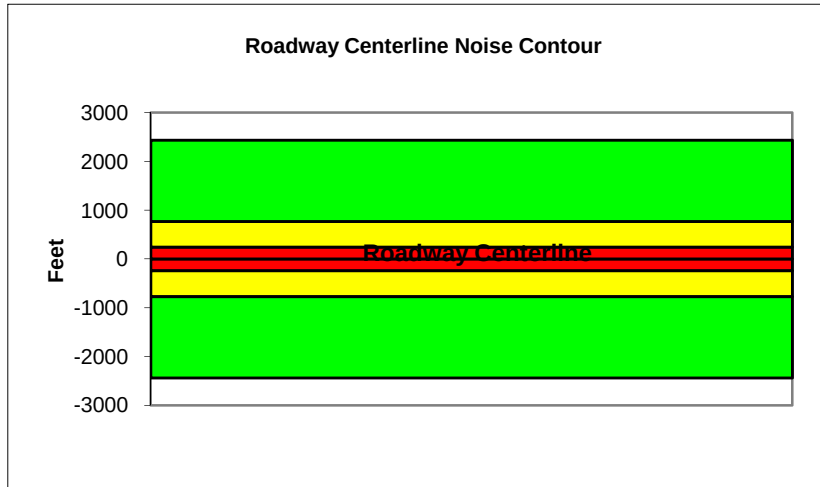
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Cherry Avenue  
Road Segment: Between San Bernardino Ave. and Valley Blvd.

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 60,416 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 6041.6 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 50     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 42     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 62.0        | 70.8        | 69.0        | 62.9        | 71.6        | 72.2        |
| Medium Trucks:                                                   | 69.7        | 61.6        | 55.2        | 53.6        | 62.1        | 62.4        |
| Heavy Trucks:                                                    | 73.9        | 62.0        | 52.9        | 54.1        | 63.5        | 63.6        |
| <b>Vehicle Noise:</b>                                            | <b>76.2</b> | <b>71.9</b> | <b>69.3</b> | <b>64.0</b> | <b>72.6</b> | <b>73.1</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |      |
|--------------------------|------|
| Unmitigated              |      |
| 60 dBA                   | 2439 |
| 65 dBA                   | 771  |
| 70 dBA                   | 244  |
| Mitigated                |      |
| 60 dBA                   |      |
| 65 dBA                   |      |
| 70 dBA                   |      |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

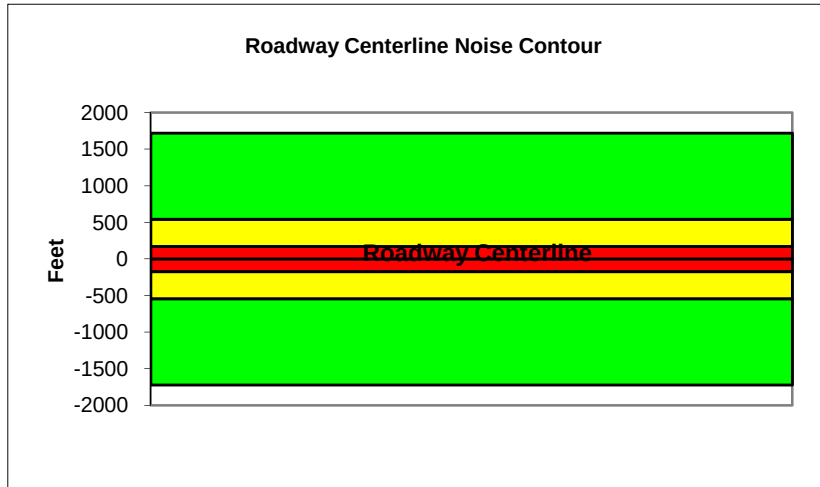
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Cherry Avenue  
Road Segment: Between Slover Ave. and Jurupa St.

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 55,289 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 5528.9 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 45     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 43     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 60.3        | 69.1        | 67.3        | 61.2        | 69.8        | 70.4        |
| Medium Trucks:                                                   | 68.6        | 60.5        | 54.1        | 52.5        | 61.0        | 61.3        |
| Heavy Trucks:                                                    | 73.1        | 61.1        | 52.1        | 53.3        | 62.8        | 63.0        |
| <b>Vehicle Noise:</b>                                            | <b>75.4</b> | <b>70.4</b> | <b>67.6</b> | <b>62.5</b> | <b>71.1</b> | <b>71.6</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |      |
|--------------------------|------|
| Unmitigated              |      |
| 60 dBA                   | 1721 |
| 65 dBA                   | 544  |
| 70 dBA                   | 172  |
| Mitigated                |      |
| 60 dBA                   |      |
| 65 dBA                   |      |
| 70 dBA                   |      |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

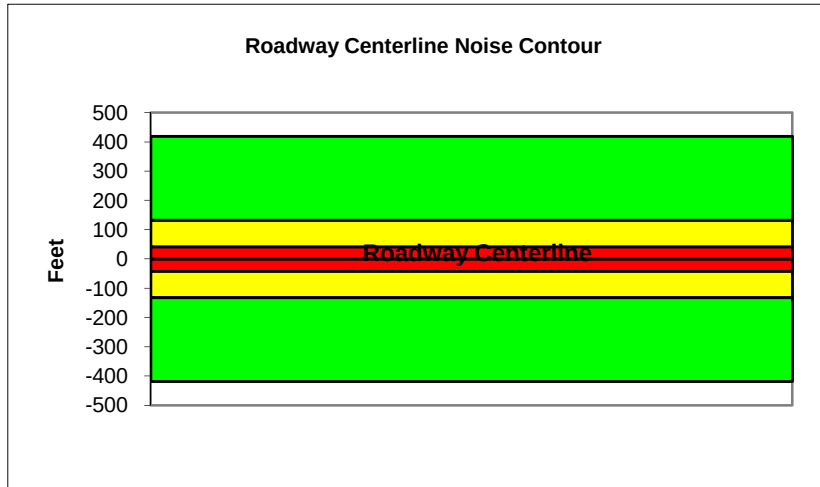
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Citrus Avenue  
Road Segment: Between I-10 and Santa Ana Avenue

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 24,301 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 2430.1 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 35     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 23     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 53.9        | 62.7        | 60.9        | 54.8        | 63.4        | 64.1        |
| Medium Trucks:                                                   | 63.6        | 55.5        | 49.2        | 47.6        | 56.1        | 56.3        |
| Heavy Trucks:                                                    | 68.8        | 56.9        | 47.8        | 49.1        | 59.0        | 59.1        |
| <b>Vehicle Noise:</b>                                            | <b>71.3</b> | <b>64.6</b> | <b>61.4</b> | <b>56.8</b> | <b>65.3</b> | <b>65.8</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 419 |
| 65 dBA                   | 132 |
| 70 dBA                   | 42  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

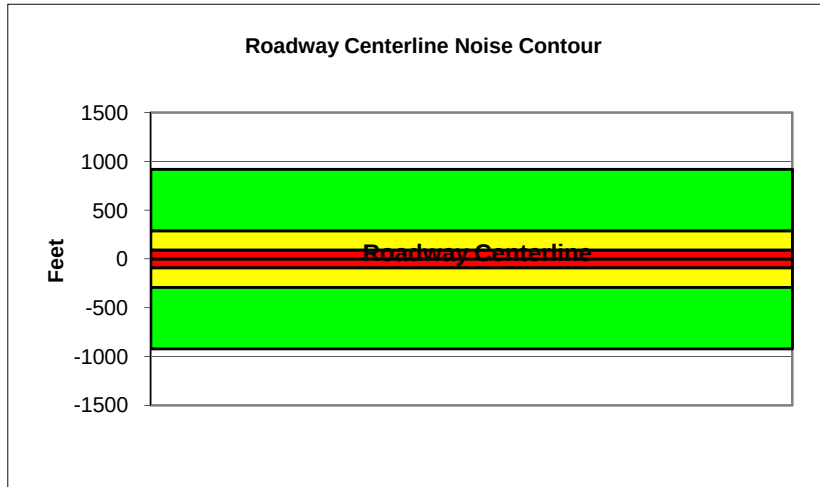
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Citrus Avenue  
Road Segment: Between San Bernardino Ave. and Valley Blvd.

| PROJECT DATA                   |               |  | SITE DATA                 |        |         |       |        |  |
|--------------------------------|---------------|--|---------------------------|--------|---------|-------|--------|--|
| Centerline Dist to Barrier     | 0             |  | Road Grade:               | 0      |         |       |        |  |
| Barrier (0=wall, 1= berm):     | 0             |  | Average Daily Traffic:    | 39,256 |         |       |        |  |
| Receiver Barrier Dist:         | 0             |  | Peak Hour Traffic:        | 3925.6 |         |       |        |  |
| Centerline Dist. To Observer:  | 100           |  | Vehicle Speed:            | 40     |         |       |        |  |
| Barrier Near Lane CL Dist:     | 0             |  | Centerline Separation:    | 23     |         |       |        |  |
| Barrier Far lane CL Dist:      | 0             |  | NOISE INPUTS              |        |         |       |        |  |
| Pad Elevation:                 | 0.5           |  | Site conditions HARD SITE |        |         |       |        |  |
| Road Elevation:                | 0             |  | FLEET MIX                 |        |         |       |        |  |
| Observer Height (above grade): | 0             |  | Type                      | Day    | Evening | Night | Daily  |  |
| Barrier Height:                | 0             |  | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |  |
| Rt View: 90                    | Lft View: -90 |  | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |  |
| NOISE SOURCE ELEVATIONS (Feet) |               |  | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |  |
| Autos:                         | 0             |  |                           |        |         |       |        |  |
| Medium Trucks:                 | 2.3           |  |                           |        |         |       |        |  |
| Heavy Trucks:                  | 8             |  |                           |        |         |       |        |  |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 57.6        | 66.4        | 64.6        | 58.6        | 67.2        | 67.8        |
| Medium Trucks:                                                   | 66.6        | 58.5        | 52.1        | 50.6        | 59.1        | 59.3        |
| Heavy Trucks:                                                    | 71.4        | 59.5        | 50.4        | 51.7        | 61.4        | 61.5        |
| <b>Vehicle Noise:</b>                                            | <b>73.8</b> | <b>68.0</b> | <b>65.1</b> | <b>60.1</b> | <b>68.7</b> | <b>69.2</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 920 |
| 65 dBA                   | 291 |
| 70 dBA                   | 92  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

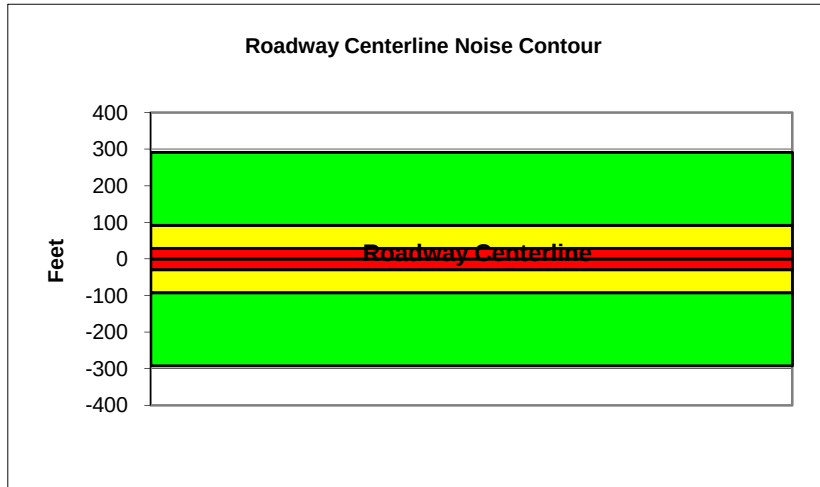
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Citrus Avenue  
Road Segment: Between Santa Ana Ave. and Jurupa St.

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 16,917 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 1691.7 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 35     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 23     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 52.3        | 61.1        | 59.3        | 53.2        | 61.9        | 62.5        |
| Medium Trucks:                                                   | 62.0        | 54.0        | 47.6        | 46.0        | 54.5        | 54.7        |
| Heavy Trucks:                                                    | 67.3        | 55.3        | 46.3        | 47.5        | 57.4        | 57.5        |
| <b>Vehicle Noise:</b>                                            | <b>69.7</b> | <b>63.1</b> | <b>59.9</b> | <b>55.2</b> | <b>63.7</b> | <b>64.2</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 292 |
| 65 dBA                   | 92  |
| 70 dBA                   | 29  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

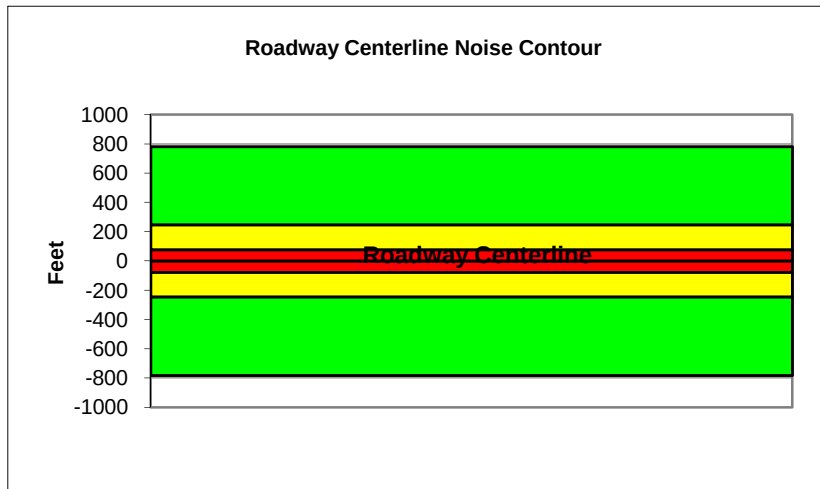
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: East Airport Drive  
Road Segment: Between I-15 and Etiwanda Ave.

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 25,157 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 2515.7 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 45     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 23     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 57.2        | 66.0        | 64.2        | 58.1        | 66.7        | 67.4        |
| Medium Trucks:                                                   | 65.5        | 57.4        | 51.0        | 49.4        | 57.9        | 58.2        |
| Heavy Trucks:                                                    | 70.0        | 58.0        | 49.0        | 50.2        | 59.8        | 59.9        |
| <b>Vehicle Noise:</b>                                            | <b>72.3</b> | <b>67.3</b> | <b>64.5</b> | <b>59.4</b> | <b>68.0</b> | <b>68.5</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 782 |
| 65 dBA                   | 247 |
| 70 dBA                   | 78  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |





**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

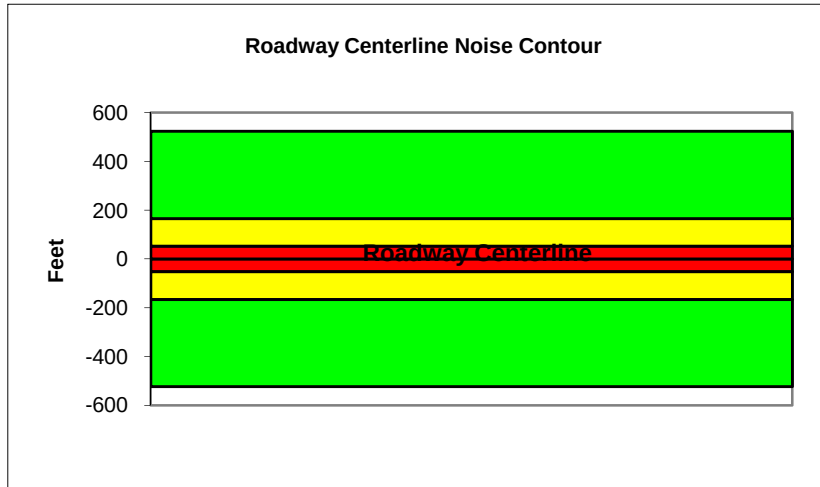
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Etiwanda Avenue  
Road Segment: Between Jurupa St. and Philadelphia Ave.

| PROJECT DATA                   |               |  | SITE DATA                 |        |         |       |        |  |
|--------------------------------|---------------|--|---------------------------|--------|---------|-------|--------|--|
| Centerline Dist to Barrier     | 0             |  | Road Grade:               | 0      |         |       |        |  |
| Barrier (0=wall, 1= berm):     | 0             |  | Average Daily Traffic:    | 16,855 |         |       |        |  |
| Receiver Barrier Dist:         | 0             |  | Peak Hour Traffic:        | 1685.5 |         |       |        |  |
| Centerline Dist. To Observer:  | 100           |  | Vehicle Speed:            | 45     |         |       |        |  |
| Barrier Near Lane CL Dist:     | 0             |  | Centerline Separation:    | 42     |         |       |        |  |
| Barrier Far lane CL Dist:      | 0             |  | NOISE INPUTS              |        |         |       |        |  |
| Pad Elevation:                 | 0.5           |  | Site conditions HARD SITE |        |         |       |        |  |
| Road Elevation:                | 0             |  | FLEET MIX                 |        |         |       |        |  |
| Observer Height (above grade): | 0             |  | Type                      | Day    | Evening | Night | Daily  |  |
| Barrier Height:                | 0             |  | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |  |
| Rt View: 90                    | Lft View: -90 |  | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |  |
| NOISE SOURCE ELEVATIONS (Feet) |               |  | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |  |
| Autos:                         | 0             |  |                           |        |         |       |        |  |
| Medium Trucks:                 | 2.3           |  |                           |        |         |       |        |  |
| Heavy Trucks:                  | 8             |  |                           |        |         |       |        |  |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 55.1        | 63.9        | 62.1        | 56.0        | 64.7        | 65.3        |
| Medium Trucks:                                                   | 63.4        | 55.3        | 49.0        | 47.4        | 55.9        | 56.1        |
| Heavy Trucks:                                                    | 67.9        | 56.0        | 46.9        | 48.2        | 57.7        | 57.8        |
| <b>Vehicle Noise:</b>                                            | <b>70.3</b> | <b>65.2</b> | <b>62.5</b> | <b>57.3</b> | <b>65.9</b> | <b>66.4</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 524 |
| 65 dBA                   | 166 |
| 70 dBA                   | 52  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

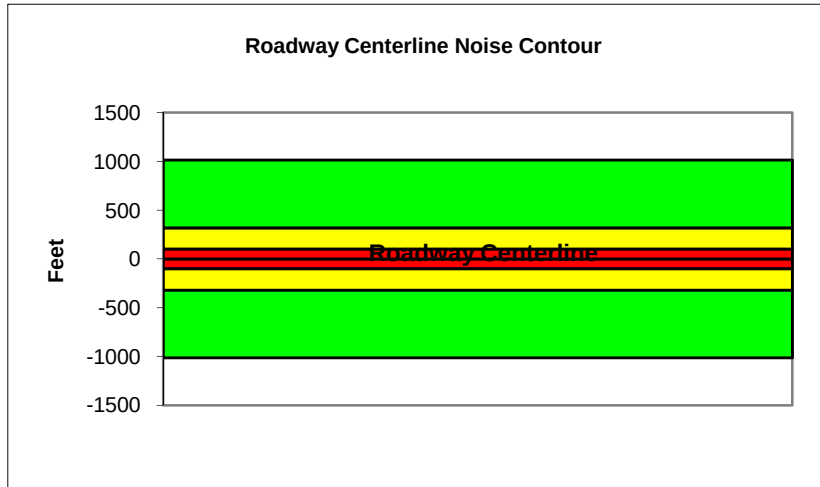
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Etiwanda Avenue  
Road Segment: Between Philadelphia Ave. and SR-60

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 19,693 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 1969.3 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 55     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 45     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 58.3        | 67.1        | 65.3        | 59.2        | 67.8        | 68.4        |
| Medium Trucks:                                                   | 65.4        | 57.3        | 51.0        | 49.4        | 57.9        | 58.1        |
| Heavy Trucks:                                                    | 69.4        | 57.4        | 48.4        | 49.6        | 58.8        | 59.0        |
| <b>Vehicle Noise:</b>                                            | <b>71.7</b> | <b>68.0</b> | <b>65.5</b> | <b>60.1</b> | <b>68.7</b> | <b>69.3</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |      |
|--------------------------|------|
| Unmitigated              |      |
| 60 dBA                   | 1013 |
| 65 dBA                   | 320  |
| 70 dBA                   | 101  |
| Mitigated                |      |
| 60 dBA                   |      |
| 65 dBA                   |      |
| 70 dBA                   |      |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

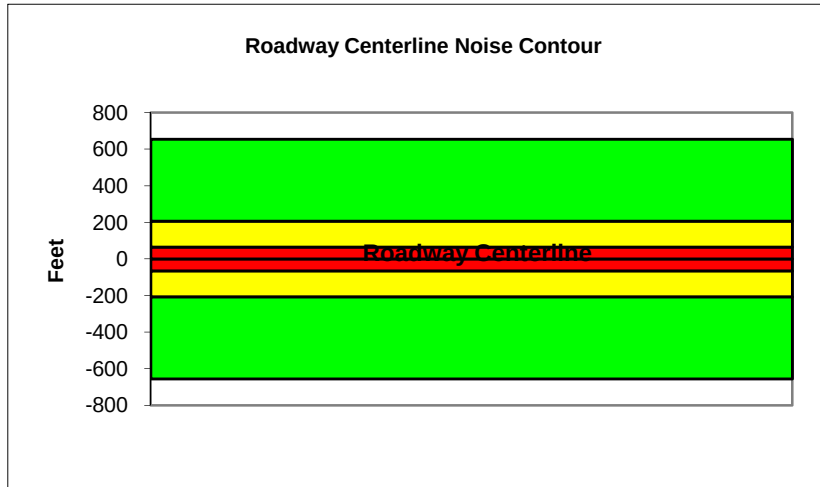
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Etiwanda Avenue  
Road Segment: Between San Bernardino Ave and Valley Blvd

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 21,099 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 2109.9 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 45     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 24     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 56.4        | 65.2        | 63.4        | 57.3        | 66.0        | 66.6        |
| Medium Trucks:                                                   | 64.7        | 56.6        | 50.2        | 48.7        | 57.1        | 57.4        |
| Heavy Trucks:                                                    | 69.2        | 57.3        | 48.2        | 49.4        | 59.0        | 59.1        |
| <b>Vehicle Noise:</b>                                            | <b>71.5</b> | <b>66.5</b> | <b>63.8</b> | <b>58.6</b> | <b>67.2</b> | <b>67.7</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 656 |
| 65 dBA                   | 207 |
| 70 dBA                   | 66  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

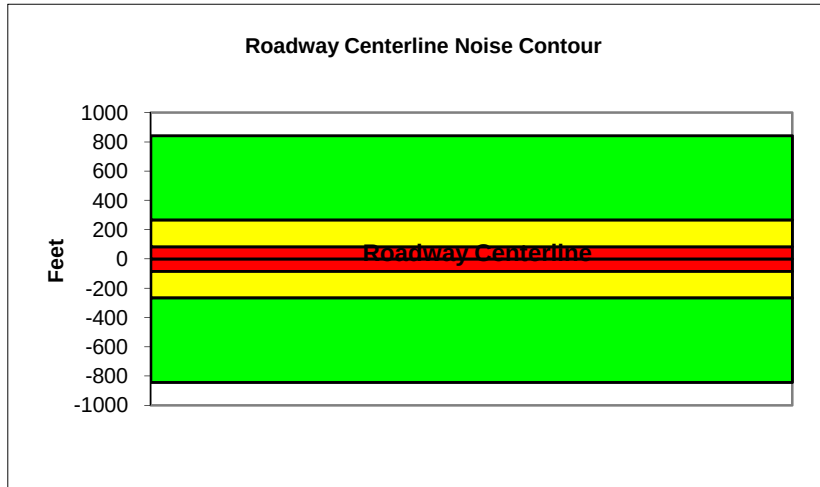
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Etiwanda Avenue  
Road Segment: Between Slover Ave. and Jurupa St.

| PROJECT DATA                   |               | SITE DATA                        |        |         |       |        |
|--------------------------------|---------------|----------------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:                      | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:           | 27,141 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:               | 2714.1 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:                   | 45     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:           | 38     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS                     |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions <b>HARD SITE</b> |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                        |        |         |       |        |
| Observer Height (above grade): | 0             | Type                             | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                             | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                       | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck                      | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                                  |        |         |       |        |
| Medium Trucks:                 | 2.3           |                                  |        |         |       |        |
| Heavy Trucks:                  | 8             |                                  |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |          |         |             |           |      |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|------|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn  | CNEL |
| Autos:                                                           | 57.3     | 66.0    | 64.3        | 58.2      | 66.8 | 67.4 |
| Medium Trucks:                                                   | 65.5     | 57.5    | 51.1        | 49.5      | 58.0 | 58.2 |
| Heavy Trucks:                                                    | 70.1     | 58.1    | 49.1        | 50.3      | 59.8 | 60.0 |
| Vehicle Noise:                                                   | 72.4     | 67.3    | 64.6        | 59.5      | 68.1 | 68.6 |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 843 |
| 65 dBA                   | 267 |
| 70 dBA                   | 84  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

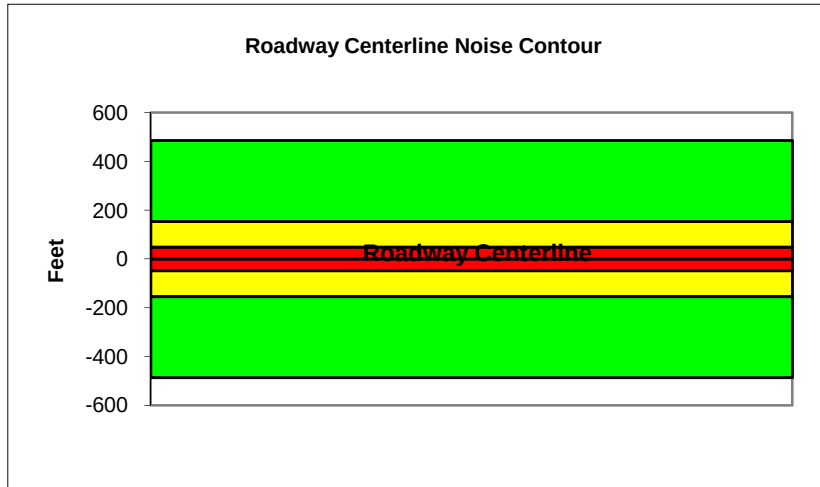
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Fourth Street  
Road Segment: Between I-15 and Etiwanda Ave

| PROJECT DATA                   |               | SITE DATA                        |        |         |       |        |
|--------------------------------|---------------|----------------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:                      | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:           | 12,060 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:               | 1206   |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:                   | 50     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:           | 30     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS                     |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions <b>HARD SITE</b> |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                        |        |         |       |        |
| Observer Height (above grade): | 0             | Type                             | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                             | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                       | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck                      | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                                  |        |         |       |        |
| Medium Trucks:                 | 2.3           |                                  |        |         |       |        |
| Heavy Trucks:                  | 8             |                                  |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 55.2        | 64.0        | 62.2        | 56.1        | 64.7        | 65.4        |
| Medium Trucks:                                                   | 62.9        | 54.8        | 48.4        | 46.8        | 55.3        | 55.6        |
| Heavy Trucks:                                                    | 67.1        | 55.2        | 46.1        | 47.3        | 56.7        | 56.8        |
| <b>Vehicle Noise:</b>                                            | <b>69.4</b> | <b>65.1</b> | <b>62.5</b> | <b>57.2</b> | <b>65.8</b> | <b>66.3</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 486 |
| 65 dBA                   | 154 |
| 70 dBA                   | 49  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

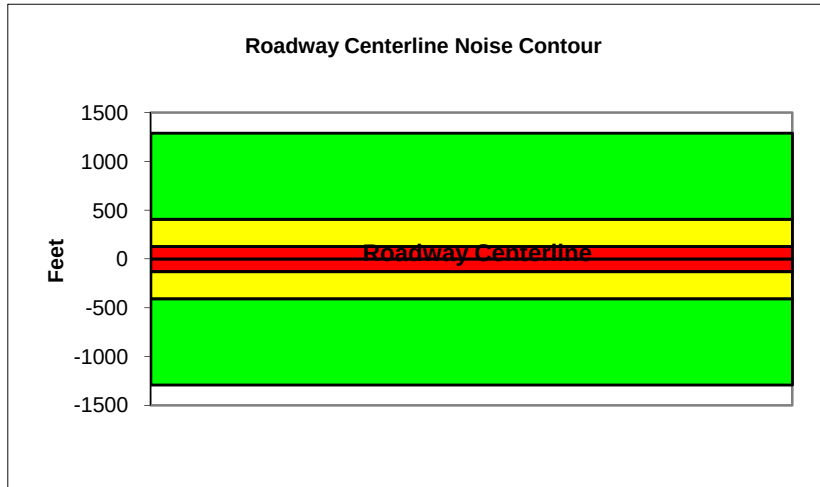
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Jurupa Street  
Road Segment: Between Cherry Ave. and Citrus Ave.

| PROJECT DATA                   |               | SITE DATA                        |        |         |       |        |
|--------------------------------|---------------|----------------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:                      | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:           | 41,518 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:               | 4151.8 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:                   | 45     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:           | 48     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS                     |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions <b>HARD SITE</b> |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                        |        |         |       |        |
| Observer Height (above grade): | 0             | Type                             | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                             | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                       | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck                      | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                                  |        |         |       |        |
| Medium Trucks:                 | 2.3           |                                  |        |         |       |        |
| Heavy Trucks:                  | 8             |                                  |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |          |         |             |           |      |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|------|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn  | CNEL |
| Autos:                                                           | 59.0     | 67.7    | 66.0        | 59.9      | 68.5 | 69.1 |
| Medium Trucks:                                                   | 67.2     | 59.2    | 52.8        | 51.2      | 59.7 | 59.9 |
| Heavy Trucks:                                                    | 71.8     | 59.8    | 50.8        | 52.0      | 61.5 | 61.7 |
| Vehicle Noise:                                                   | 74.1     | 69.0    | 66.3        | 61.2      | 69.8 | 70.3 |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |      |
|--------------------------|------|
| Unmitigated              |      |
| 60 dBA                   | 1292 |
| 65 dBA                   | 408  |
| 70 dBA                   | 129  |
| Mitigated                |      |
| 60 dBA                   |      |
| 65 dBA                   |      |
| 70 dBA                   |      |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

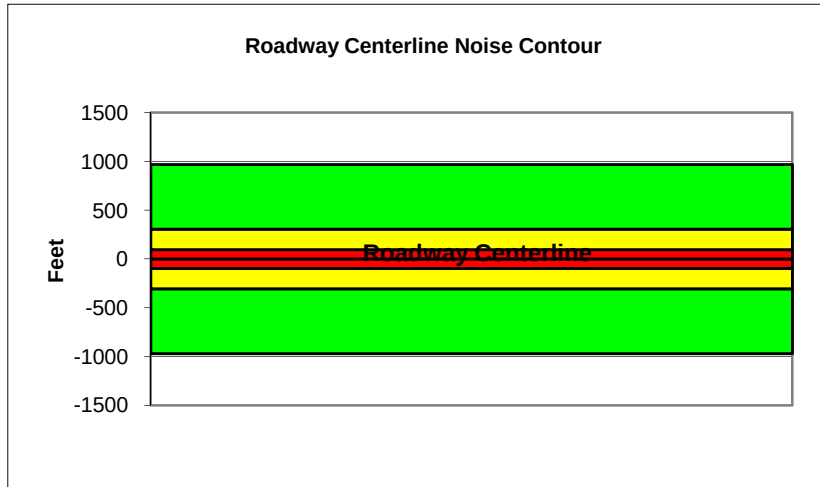
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Jurupa Street  
Road Segment: Between Citrus Ave. and Sierra Ave.

| PROJECT DATA                   |               |  | SITE DATA                        |        |         |       |        |  |
|--------------------------------|---------------|--|----------------------------------|--------|---------|-------|--------|--|
| Centerline Dist to Barrier     | 0             |  | Road Grade:                      | 0      |         |       |        |  |
| Barrier (0=wall, 1= berm):     | 0             |  | Average Daily Traffic:           | 31,178 |         |       |        |  |
| Receiver Barrier Dist:         | 0             |  | Peak Hour Traffic:               | 3117.8 |         |       |        |  |
| Centerline Dist. To Observer:  | 100           |  | Vehicle Speed:                   | 45     |         |       |        |  |
| Barrier Near Lane CL Dist:     | 0             |  | Centerline Separation:           | 45     |         |       |        |  |
| Barrier Far lane CL Dist:      | 0             |  | NOISE INPUTS                     |        |         |       |        |  |
| Pad Elevation:                 | 0.5           |  | Site conditions <b>HARD SITE</b> |        |         |       |        |  |
| Road Elevation:                | 0             |  | FLEET MIX                        |        |         |       |        |  |
| Observer Height (above grade): | 0             |  | Type                             | Day    | Evening | Night | Daily  |  |
| Barrier Height:                | 0             |  | Auto                             | 0.775  | 0.129   | 0.096 | 0.9742 |  |
| Rt View: 90                    | Lft View: -90 |  | Med. Truck                       | 0.848  | 0.049   | 0.103 | 0.0184 |  |
| NOISE SOURCE ELEVATIONS (Feet) |               |  | Heavy Truck                      | 0.865  | 0.027   | 0.108 | 0.0074 |  |
| Autos:                         | 0             |  |                                  |        |         |       |        |  |
| Medium Trucks:                 | 2.3           |  |                                  |        |         |       |        |  |
| Heavy Trucks:                  | 8             |  |                                  |        |         |       |        |  |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |          |         |             |           |      |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|------|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn  | CNEL |
| Autos:                                                           | 57.8     | 66.5    | 64.8        | 58.7      | 67.3 | 67.9 |
| Medium Trucks:                                                   | 66.0     | 58.0    | 51.6        | 50.0      | 58.5 | 58.7 |
| Heavy Trucks:                                                    | 70.6     | 58.6    | 49.6        | 50.8      | 60.3 | 60.5 |
| Vehicle Noise:                                                   | 72.9     | 67.8    | 65.1        | 60.0      | 68.6 | 69.1 |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 970 |
| 65 dBA                   | 307 |
| 70 dBA                   | 97  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

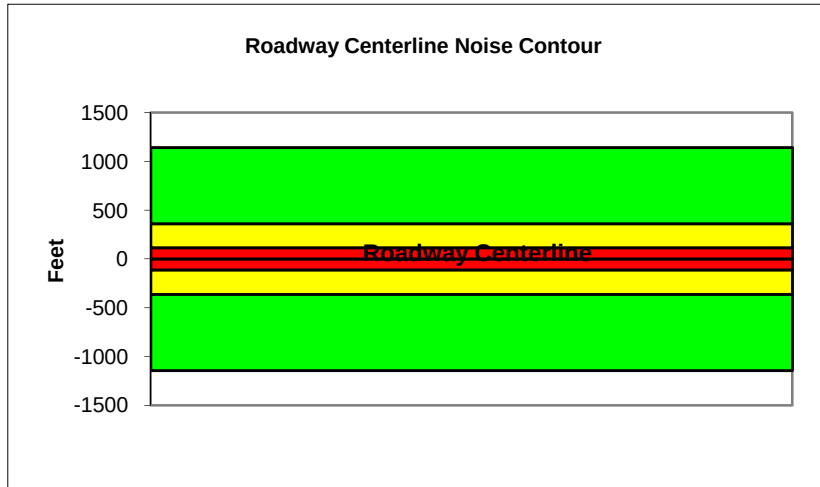
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Jurupa Street  
Road Segment: Between Etiwanda Ave. and Mulberry Ave.

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 36,817 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 3681.7 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 45     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 35     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 58.6        | 67.4        | 65.6        | 59.5        | 68.2        | 68.8        |
| Medium Trucks:                                                   | 66.9        | 58.8        | 52.5        | 50.9        | 59.4        | 59.6        |
| Heavy Trucks:                                                    | 71.4        | 59.5        | 50.4        | 51.7        | 61.2        | 61.3        |
| <b>Vehicle Noise:</b>                                            | <b>73.8</b> | <b>68.7</b> | <b>66.0</b> | <b>60.8</b> | <b>69.4</b> | <b>69.9</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |      |
|--------------------------|------|
| Unmitigated              |      |
| 60 dBA                   | 1143 |
| 65 dBA                   | 362  |
| 70 dBA                   | 114  |
| Mitigated                |      |
| 60 dBA                   |      |
| 65 dBA                   |      |
| 70 dBA                   |      |





**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

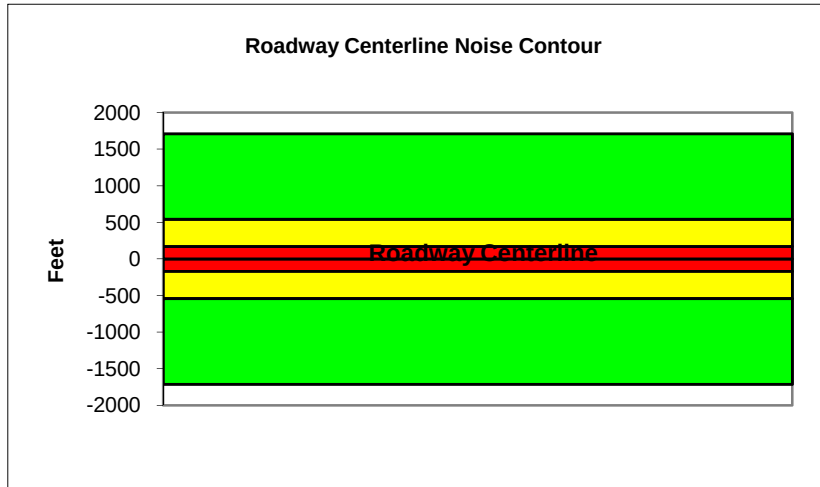
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Jurupa Street  
Road Segment: Between I-15 and Etiwanda Ave.

| PROJECT DATA                   |               |  | SITE DATA                        |        |         |       |        |  |
|--------------------------------|---------------|--|----------------------------------|--------|---------|-------|--------|--|
| Centerline Dist to Barrier     | 0             |  | Road Grade:                      | 0      |         |       |        |  |
| Barrier (0=wall, 1= berm):     | 0             |  | Average Daily Traffic:           | 42,439 |         |       |        |  |
| Receiver Barrier Dist:         | 0             |  | Peak Hour Traffic:               | 4243.9 |         |       |        |  |
| Centerline Dist. To Observer:  | 100           |  | Vehicle Speed:                   | 50     |         |       |        |  |
| Barrier Near Lane CL Dist:     | 0             |  | Centerline Separation:           | 45     |         |       |        |  |
| Barrier Far lane CL Dist:      | 0             |  | NOISE INPUTS                     |        |         |       |        |  |
| Pad Elevation:                 | 0.5           |  | Site conditions <b>HARD SITE</b> |        |         |       |        |  |
| Road Elevation:                | 0             |  | FLEET MIX                        |        |         |       |        |  |
| Observer Height (above grade): | 0             |  | Type                             | Day    | Evening | Night | Daily  |  |
| Barrier Height:                | 0             |  | Auto                             | 0.775  | 0.129   | 0.096 | 0.9742 |  |
| Rt View: 90                    | Lft View: -90 |  | Med. Truck                       | 0.848  | 0.049   | 0.103 | 0.0184 |  |
| NOISE SOURCE ELEVATIONS (Feet) |               |  | Heavy Truck                      | 0.865  | 0.027   | 0.108 | 0.0074 |  |
| Autos:                         | 0             |  |                                  |        |         |       |        |  |
| Medium Trucks:                 | 2.3           |  |                                  |        |         |       |        |  |
| Heavy Trucks:                  | 8             |  |                                  |        |         |       |        |  |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |          |         |             |           |      |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|------|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn  | CNEL |
| Autos:                                                           | 60.4     | 69.2    | 67.4        | 61.3      | 70.0 | 70.6 |
| Medium Trucks:                                                   | 68.1     | 60.0    | 53.6        | 52.1      | 60.6 | 60.8 |
| Heavy Trucks:                                                    | 72.3     | 60.4    | 51.3        | 52.5      | 61.9 | 62.1 |
| Vehicle Noise:                                                   | 74.6     | 70.3    | 67.7        | 62.4      | 71.0 | 71.5 |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |      |
|--------------------------|------|
| Unmitigated              |      |
| 60 dBA                   | 1713 |
| 65 dBA                   | 542  |
| 70 dBA                   | 171  |
| Mitigated                |      |
| 60 dBA                   |      |
| 65 dBA                   |      |
| 70 dBA                   |      |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

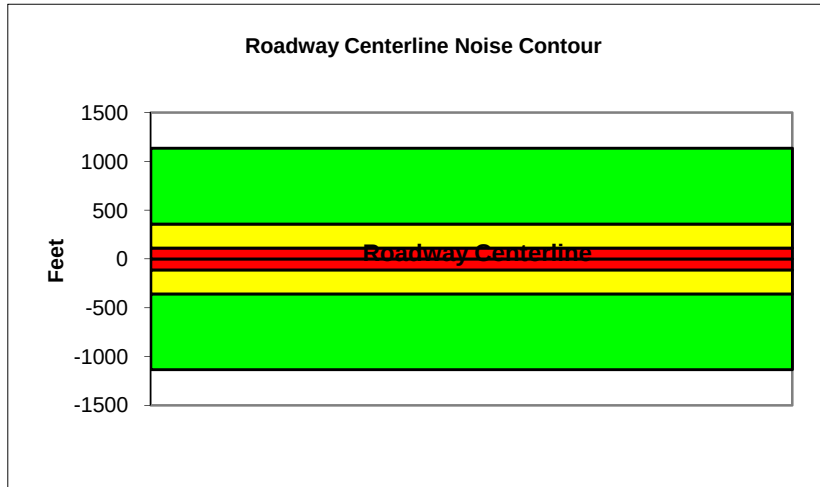
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Jurupa Street  
Road Segment: Between Mulberry Ave. and Cherry Ave.

| PROJECT DATA                   |           |     | SITE DATA                 |       |         |       |        |
|--------------------------------|-----------|-----|---------------------------|-------|---------|-------|--------|
| Centerline Dist to Barrier     | 0         |     | Road Grade:               |       | 0       |       |        |
| Barrier (0=wall, 1= berm):     | 0         |     | Average Daily Traffic:    |       | 36,535  |       |        |
| Receiver Barrier Dist:         | 0         |     | Peak Hour Traffic:        |       | 3653.5  |       |        |
| Centerline Dist. To Observer:  | 100       |     | Vehicle Speed:            |       | 45      |       |        |
| Barrier Near Lane CL Dist:     | 0         |     | Centerline Separation:    |       | 40      |       |        |
| Barrier Far lane CL Dist:      | 0         |     | NOISE INPUTS              |       |         |       |        |
| Pad Elevation:                 | 0.5       |     | Site conditions HARD SITE |       |         |       |        |
| Road Elevation:                | 0         |     | FLEET MIX                 |       |         |       |        |
| Observer Height (above grade): | 0         |     | Type                      | Day   | Evening | Night | Daily  |
| Barrier Height:                | 0         |     | Auto                      | 0.775 | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: | -90 | Med. Truck                | 0.848 | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |           |     | Heavy Truck               | 0.865 | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0         |     |                           |       |         |       |        |
| Medium Trucks:                 | 2.3       |     |                           |       |         |       |        |
| Heavy Trucks:                  | 8         |     |                           |       |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 58.5        | 67.3        | 65.5        | 59.4        | 68.1        | 68.7        |
| Medium Trucks:                                                   | 66.8        | 58.7        | 52.4        | 50.8        | 59.3        | 59.5        |
| Heavy Trucks:                                                    | 71.3        | 59.4        | 50.3        | 51.5        | 61.1        | 61.2        |
| <b>Vehicle Noise:</b>                                            | <b>73.7</b> | <b>68.6</b> | <b>65.9</b> | <b>60.7</b> | <b>69.3</b> | <b>69.8</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |      |
|--------------------------|------|
| Unmitigated              |      |
| 60 dBA                   | 1135 |
| 65 dBA                   | 359  |
| 70 dBA                   | 114  |
| Mitigated                |      |
| 60 dBA                   |      |
| 65 dBA                   |      |
| 70 dBA                   |      |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

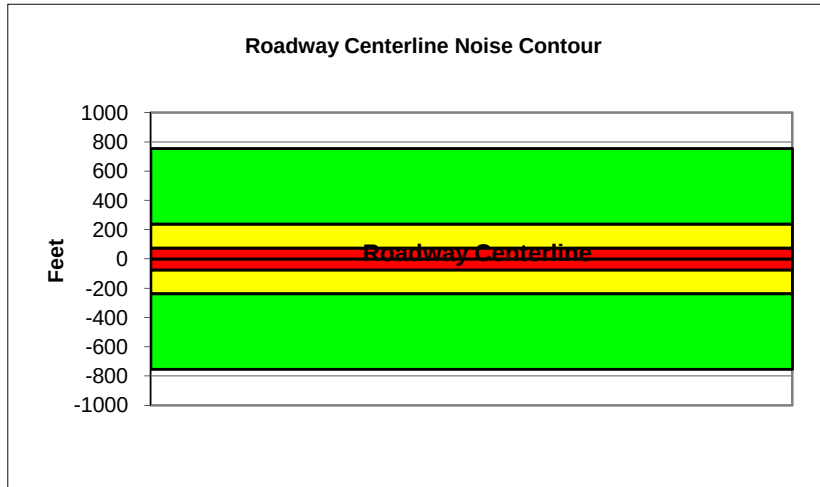
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Mulberry Avenue  
Road Segment: Between Jurupa St. and Philadelphia Ave.

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 18,679 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 1867.9 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 50     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 45     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 56.9        | 65.6        | 63.8        | 57.8        | 66.4        | 67.0        |
| Medium Trucks:                                                   | 64.5        | 56.5        | 50.1        | 48.5        | 57.0        | 57.2        |
| Heavy Trucks:                                                    | 68.8        | 56.8        | 47.8        | 49.0        | 58.4        | 58.5        |
| <b>Vehicle Noise:</b>                                            | <b>71.1</b> | <b>66.7</b> | <b>64.2</b> | <b>58.9</b> | <b>67.5</b> | <b>68.0</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 755 |
| 65 dBA                   | 239 |
| 70 dBA                   | 75  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

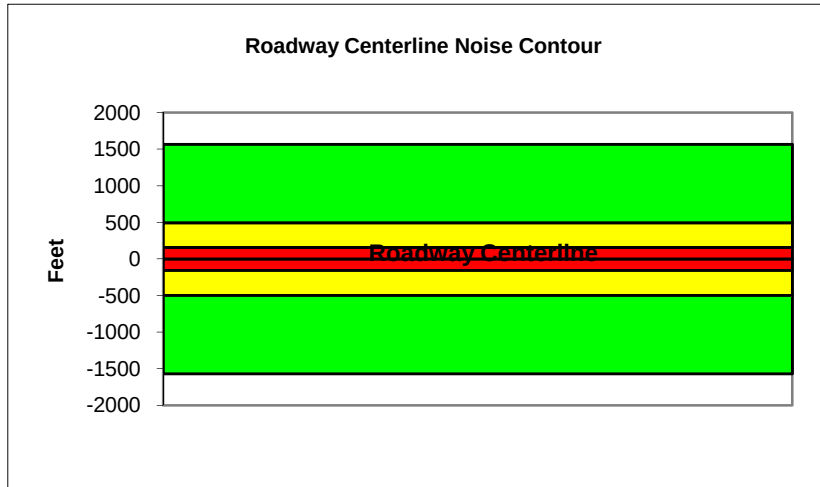
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Mulberry Avenue  
Road Segment: Between Philadelphia Ave. and SR-60

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 30,505 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 3050.5 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 55     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 45     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 60.2        | 69.0        | 67.2        | 61.1        | 69.7        | 70.3        |
| Medium Trucks:                                                   | 67.3        | 59.2        | 52.9        | 51.3        | 59.8        | 60.0        |
| Heavy Trucks:                                                    | 71.3        | 59.3        | 50.3        | 51.5        | 60.7        | 60.9        |
| <b>Vehicle Noise:</b>                                            | <b>73.6</b> | <b>69.9</b> | <b>67.4</b> | <b>62.0</b> | <b>70.6</b> | <b>71.2</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |      |
|--------------------------|------|
| Unmitigated              |      |
| 60 dBA                   | 1569 |
| 65 dBA                   | 496  |
| 70 dBA                   | 157  |
| Mitigated                |      |
| 60 dBA                   |      |
| 65 dBA                   |      |
| 70 dBA                   |      |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

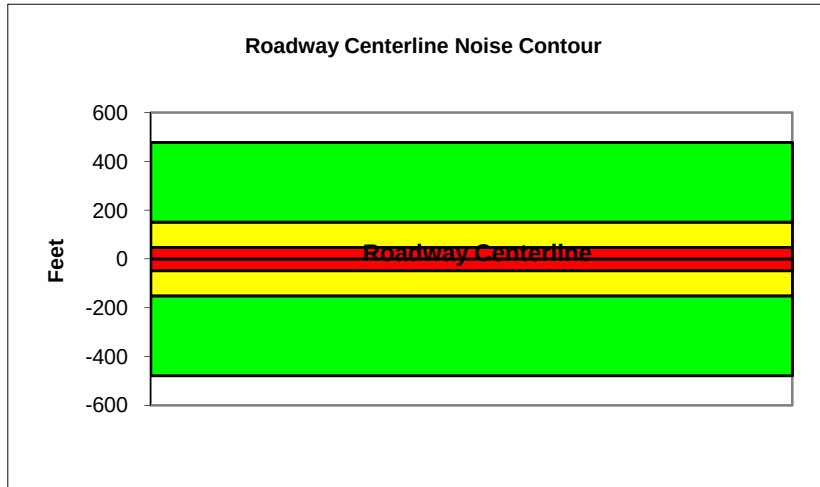
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Mulberry Avenue  
Road Segment: Between Slover Ave. and Jurupa St.

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 11,860 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 1186   |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 50     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 34     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 55.1        | 63.8        | 62.0        | 56.0        | 64.6        | 65.2        |
| Medium Trucks:                                                   | 62.7        | 54.7        | 48.3        | 46.7        | 55.2        | 55.4        |
| Heavy Trucks:                                                    | 67.0        | 55.0        | 46.0        | 47.2        | 56.6        | 56.7        |
| <b>Vehicle Noise:</b>                                            | <b>69.3</b> | <b>64.9</b> | <b>62.3</b> | <b>57.1</b> | <b>65.7</b> | <b>66.2</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 478 |
| 65 dBA                   | 151 |
| 70 dBA                   | 48  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

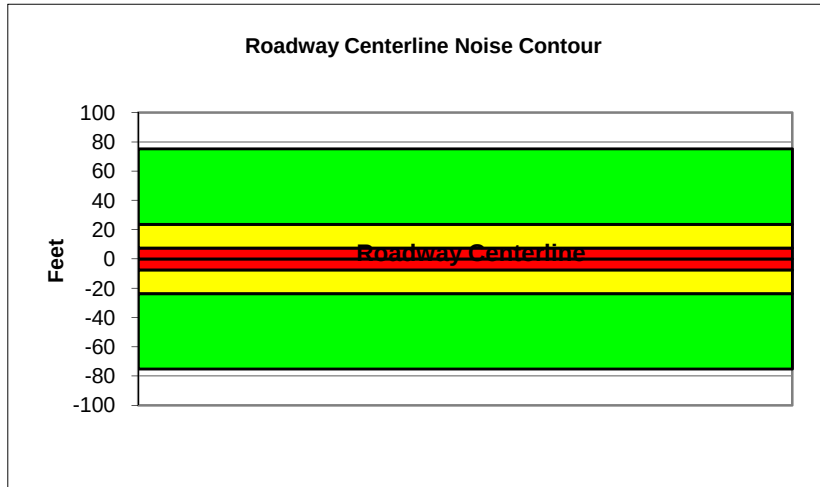
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Philadelphia Avenue  
Road Segment: Between Etiwanda Ave. and Country Village Rd.

| PROJECT DATA                   |               | SITE DATA                 |       |         |       |        |
|--------------------------------|---------------|---------------------------|-------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0     |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 3,212 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 321.2 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 40    |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 35    |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |       |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |       |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |       |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day   | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775 | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848 | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865 | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |       |         |       |        |
| Medium Trucks:                 | 2.3           |                           |       |         |       |        |
| Heavy Trucks:                  | 8             |                           |       |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 46.6        | 55.4        | 53.6        | 47.5        | 56.1        | 56.7        |
| Medium Trucks:                                                   | 55.5        | 47.5        | 41.1        | 39.5        | 48.0        | 48.2        |
| Heavy Trucks:                                                    | 60.4        | 48.4        | 39.4        | 40.6        | 50.3        | 50.4        |
| <b>Vehicle Noise:</b>                                            | <b>62.7</b> | <b>56.9</b> | <b>54.0</b> | <b>49.1</b> | <b>57.6</b> | <b>58.1</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |    |
|--------------------------|----|
| Unmitigated              |    |
| 60 dBA                   | 75 |
| 65 dBA                   | 24 |
| 70 dBA                   | 8  |
| Mitigated                |    |
| 60 dBA                   |    |
| 65 dBA                   |    |
| 70 dBA                   |    |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

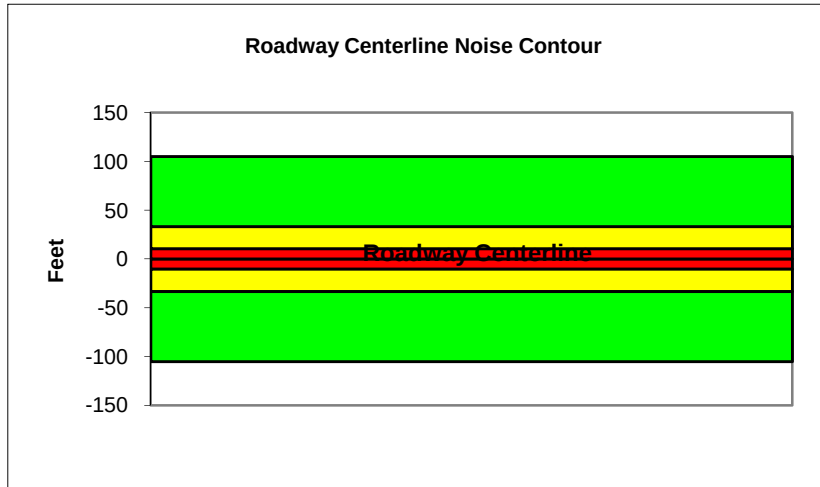
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Philadelphia Avenue  
Road Segment: Between I-15 and Etiwanda Ave.

| PROJECT DATA                   |               | SITE DATA                        |       |         |       |        |
|--------------------------------|---------------|----------------------------------|-------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:                      | 0     |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:           | 3,381 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:               | 338.1 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:                   | 45    |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:           | 30    |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS                     |       |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions <b>HARD SITE</b> |       |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                        |       |         |       |        |
| Observer Height (above grade): | 0             | Type                             | Day   | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                             | 0.775 | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                       | 0.848 | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck                      | 0.865 | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                                  |       |         |       |        |
| Medium Trucks:                 | 2.3           |                                  |       |         |       |        |
| Heavy Trucks:                  | 8             |                                  |       |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |          |         |             |           |      |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|------|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn  | CNEL |
| Autos:                                                           | 48.3     | 57.1    | 55.3        | 49.3      | 57.9 | 58.5 |
| Medium Trucks:                                                   | 56.6     | 48.6    | 42.2        | 40.6      | 49.1 | 49.3 |
| Heavy Trucks:                                                    | 61.1     | 49.2    | 40.2        | 41.4      | 50.9 | 51.0 |
| Vehicle Noise:                                                   | 63.5     | 58.4    | 55.7        | 50.6      | 59.2 | 59.7 |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 105 |
| 65 dBA                   | 33  |
| 70 dBA                   | 11  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

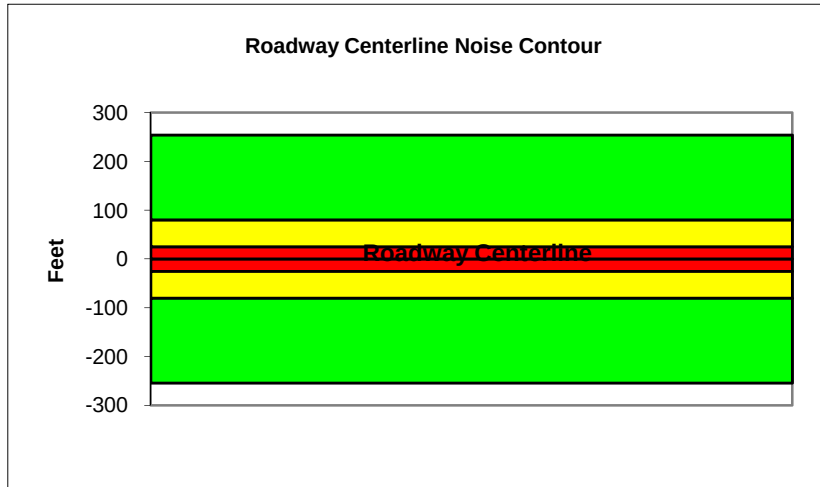
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: San Bernardino Avenue  
Road Segment: Between Cherry Ave. and Fontana Ave.

| PROJECT DATA                   |               | SITE DATA                 |       |         |       |        |
|--------------------------------|---------------|---------------------------|-------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0     |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 8,177 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 817.7 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 45    |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 23    |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |       |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |       |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |       |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day   | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775 | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848 | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865 | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |       |         |       |        |
| Medium Trucks:                 | 2.3           |                           |       |         |       |        |
| Heavy Trucks:                  | 8             |                           |       |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 52.3        | 61.1        | 59.3        | 53.2        | 61.9        | 62.5        |
| Medium Trucks:                                                   | 60.6        | 52.5        | 46.1        | 44.6        | 53.0        | 53.3        |
| Heavy Trucks:                                                    | 65.1        | 53.2        | 44.1        | 45.3        | 54.9        | 55.0        |
| <b>Vehicle Noise:</b>                                            | <b>67.4</b> | <b>62.4</b> | <b>59.7</b> | <b>54.5</b> | <b>63.1</b> | <b>63.6</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 254 |
| 65 dBA                   | 80  |
| 70 dBA                   | 25  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |





**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

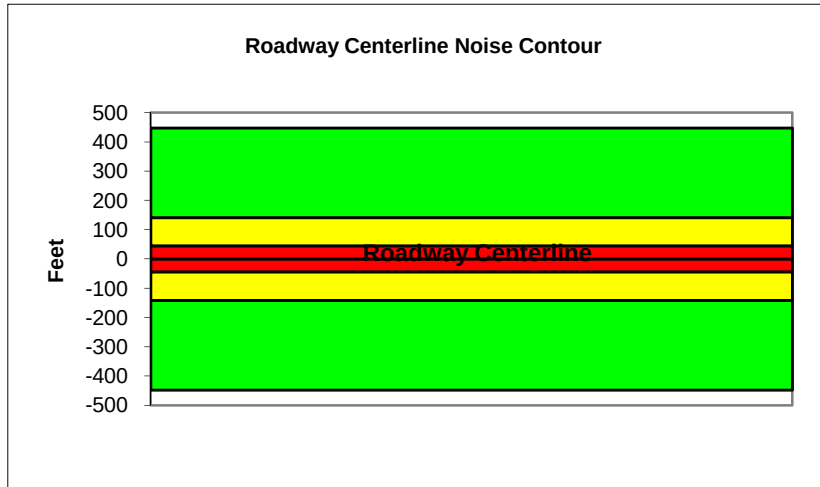
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: San Bernardino Avenue  
Road Segment: Between Etiwanda Ave and Cherry Ave

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 11,093 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 1109.3 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 50     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 23     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 54.9        | 63.7        | 61.9        | 55.9        | 64.5        | 65.1        |
| Medium Trucks:                                                   | 62.6        | 54.6        | 48.2        | 46.6        | 55.1        | 55.3        |
| Heavy Trucks:                                                    | 66.8        | 54.9        | 45.9        | 47.1        | 56.5        | 56.6        |
| <b>Vehicle Noise:</b>                                            | <b>69.2</b> | <b>64.8</b> | <b>62.2</b> | <b>56.9</b> | <b>65.5</b> | <b>66.1</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 448 |
| 65 dBA                   | 142 |
| 70 dBA                   | 45  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

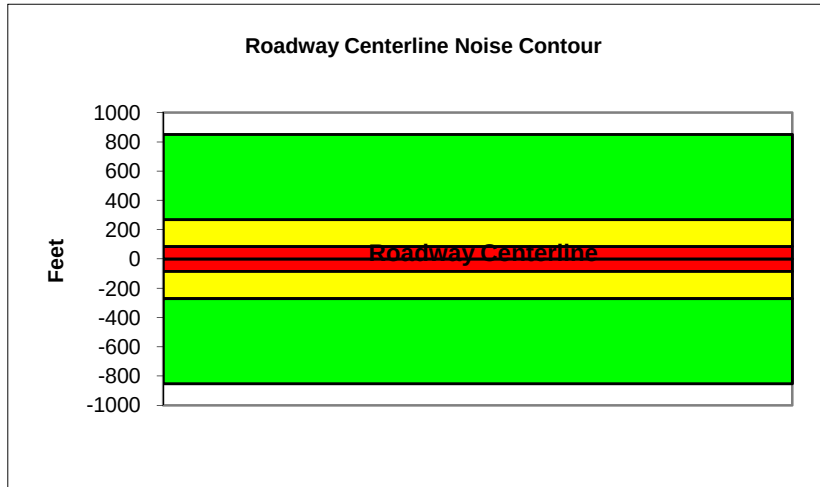
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Sierra Avenue  
Road Segment: Between Jurupa St. and Armstrong Rd.

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 21,144 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 2114.4 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 50     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 45     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 57.4        | 66.2        | 64.4        | 58.3        | 66.9        | 67.6        |
| Medium Trucks:                                                   | 65.1        | 57.0        | 50.6        | 49.0        | 57.5        | 57.8        |
| Heavy Trucks:                                                    | 69.3        | 57.4        | 48.3        | 49.5        | 58.9        | 59.0        |
| <b>Vehicle Noise:</b>                                            | <b>71.6</b> | <b>67.3</b> | <b>64.7</b> | <b>59.4</b> | <b>68.0</b> | <b>68.5</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 853 |
| 65 dBA                   | 270 |
| 70 dBA                   | 85  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

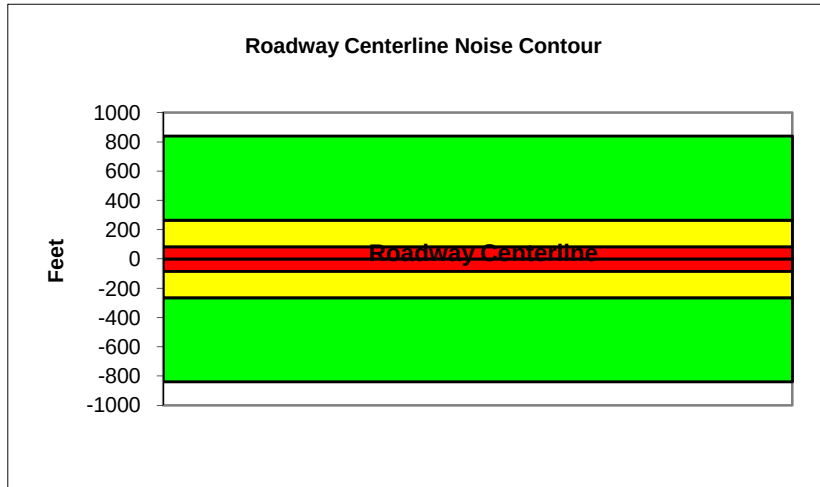
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Sierra Avenue  
Road Segment: Between Slover Ave. and Jurupa St.

| PROJECT DATA                   |               | SITE DATA                        |        |         |       |        |
|--------------------------------|---------------|----------------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:                      | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:           | 20,789 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:               | 2078.9 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:                   | 50     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:           | 50     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS                     |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions <b>HARD SITE</b> |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                        |        |         |       |        |
| Observer Height (above grade): | 0             | Type                             | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                             | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                       | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck                      | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                                  |        |         |       |        |
| Medium Trucks:                 | 2.3           |                                  |        |         |       |        |
| Heavy Trucks:                  | 8             |                                  |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |          |         |             |           |      |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|------|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn  | CNEL |
| Autos:                                                           | 57.2     | 66.0    | 64.2        | 58.2      | 66.8 | 67.4 |
| Medium Trucks:                                                   | 64.9     | 56.8    | 50.5        | 48.9      | 57.4 | 57.6 |
| Heavy Trucks:                                                    | 69.1     | 57.2    | 48.1        | 49.4      | 58.8 | 58.9 |
| Vehicle Noise:                                                   | 71.5     | 67.1    | 64.5        | 59.2      | 67.8 | 68.4 |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 840 |
| 65 dBA                   | 265 |
| 70 dBA                   | 84  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

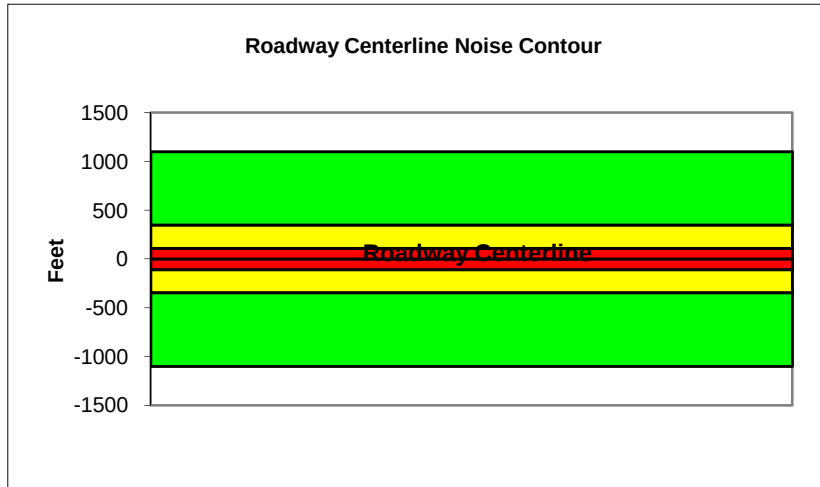
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Slover Avenue  
Road Segment: Between Cherry Ave. and Citrus Ave.

| PROJECT DATA                   |               | SITE DATA                        |        |         |       |        |
|--------------------------------|---------------|----------------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:                      | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:           | 27,299 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:               | 2729.9 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:                   | 50     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:           | 30     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS                     |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions <b>HARD SITE</b> |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                        |        |         |       |        |
| Observer Height (above grade): | 0             | Type                             | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                             | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                       | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck                      | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                                  |        |         |       |        |
| Medium Trucks:                 | 2.3           |                                  |        |         |       |        |
| Heavy Trucks:                  | 8             |                                  |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |          |         |             |           |      |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|------|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn  | CNEL |
| Autos:                                                           | 58.7     | 67.5    | 65.7        | 59.6      | 68.3 | 68.9 |
| Medium Trucks:                                                   | 66.4     | 58.3    | 52.0        | 50.4      | 58.9 | 59.1 |
| Heavy Trucks:                                                    | 70.6     | 58.7    | 49.6        | 50.9      | 60.3 | 60.4 |
| Vehicle Noise:                                                   | 73.0     | 68.6    | 66.0        | 60.7      | 69.3 | 69.9 |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |      |
|--------------------------|------|
| Unmitigated              |      |
| 60 dBA                   | 1102 |
| 65 dBA                   | 348  |
| 70 dBA                   | 110  |
| Mitigated                |      |
| 60 dBA                   |      |
| 65 dBA                   |      |
| 70 dBA                   |      |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

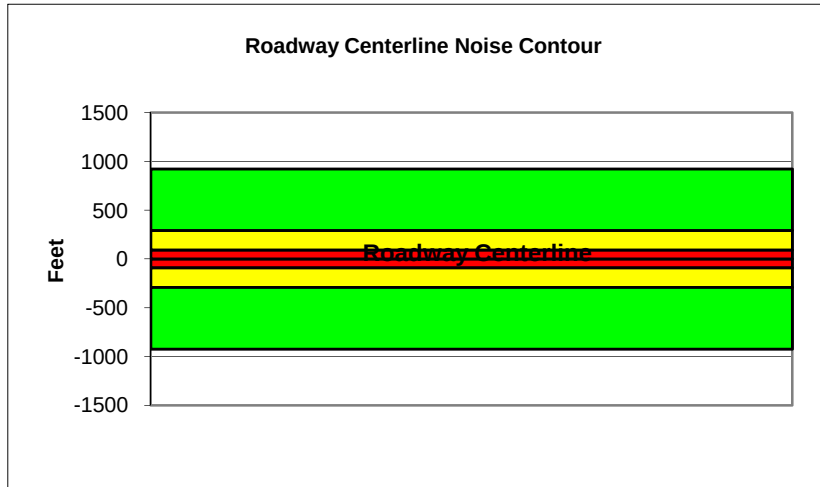
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Slover Avenue  
Road Segment: Between Citrus Ave. and Sierra Ave.

| PROJECT DATA                   |               |  | SITE DATA                 |        |         |       |        |  |
|--------------------------------|---------------|--|---------------------------|--------|---------|-------|--------|--|
| Centerline Dist to Barrier     | 0             |  | Road Grade:               | 0      |         |       |        |  |
| Barrier (0=wall, 1= berm):     | 0             |  | Average Daily Traffic:    | 29,659 |         |       |        |  |
| Receiver Barrier Dist:         | 0             |  | Peak Hour Traffic:        | 2965.9 |         |       |        |  |
| Centerline Dist. To Observer:  | 100           |  | Vehicle Speed:            | 45     |         |       |        |  |
| Barrier Near Lane CL Dist:     | 0             |  | Centerline Separation:    | 30     |         |       |        |  |
| Barrier Far lane CL Dist:      | 0             |  | NOISE INPUTS              |        |         |       |        |  |
| Pad Elevation:                 | 0.5           |  | Site conditions HARD SITE |        |         |       |        |  |
| Road Elevation:                | 0             |  | FLEET MIX                 |        |         |       |        |  |
| Observer Height (above grade): | 0             |  | Type                      | Day    | Evening | Night | Daily  |  |
| Barrier Height:                | 0             |  | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |  |
| Rt View: 90                    | Lft View: -90 |  | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |  |
| NOISE SOURCE ELEVATIONS (Feet) |               |  | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |  |
| Autos:                         | 0             |  |                           |        |         |       |        |  |
| Medium Trucks:                 | 2.3           |  |                           |        |         |       |        |  |
| Heavy Trucks:                  | 8             |  |                           |        |         |       |        |  |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 57.8        | 66.6        | 64.8        | 58.7        | 67.3        | 67.9        |
| Medium Trucks:                                                   | 66.1        | 58.0        | 51.6        | 50.0        | 58.5        | 58.8        |
| Heavy Trucks:                                                    | 70.6        | 58.6        | 49.6        | 50.8        | 60.3        | 60.5        |
| <b>Vehicle Noise:</b>                                            | <b>72.9</b> | <b>67.9</b> | <b>65.1</b> | <b>60.0</b> | <b>68.6</b> | <b>69.1</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 923 |
| 65 dBA                   | 292 |
| 70 dBA                   | 92  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

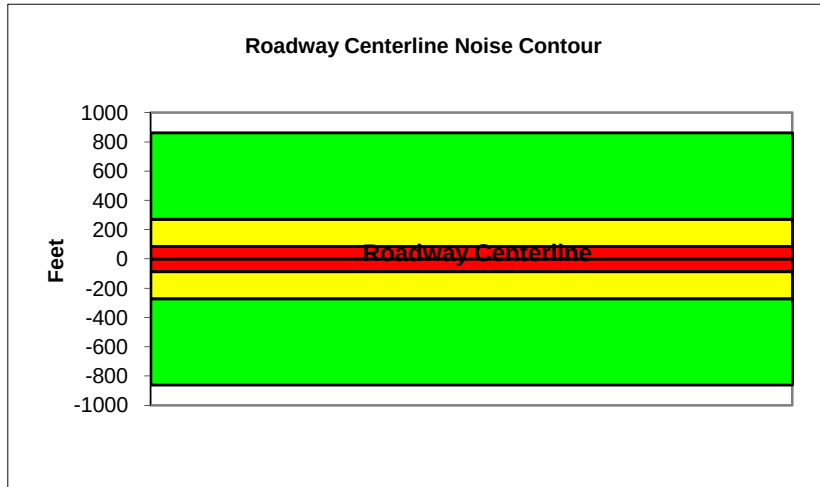
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Slover Avenue  
Road Segment: Between Etiwanda Ave. and Mulberry Ave.

| PROJECT DATA                   |               | SITE DATA                        |        |         |       |        |
|--------------------------------|---------------|----------------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:                      | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:           | 27,689 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:               | 2768.9 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:                   | 45     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:           | 35     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS                     |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions <b>HARD SITE</b> |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                        |        |         |       |        |
| Observer Height (above grade): | 0             | Type                             | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                             | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                       | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck                      | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                                  |        |         |       |        |
| Medium Trucks:                 | 2.3           |                                  |        |         |       |        |
| Heavy Trucks:                  | 8             |                                  |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |          |         |             |           |      |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|------|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn  | CNEL |
| Autos:                                                           | 57.4     | 66.2    | 64.4        | 58.3      | 67.0 | 67.6 |
| Medium Trucks:                                                   | 65.7     | 57.6    | 51.2        | 49.7      | 58.1 | 58.4 |
| Heavy Trucks:                                                    | 70.2     | 58.3    | 49.2        | 50.4      | 60.0 | 60.1 |
| Vehicle Noise:                                                   | 72.5     | 67.5    | 64.8        | 59.6      | 68.2 | 68.7 |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 861 |
| 65 dBA                   | 272 |
| 70 dBA                   | 86  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

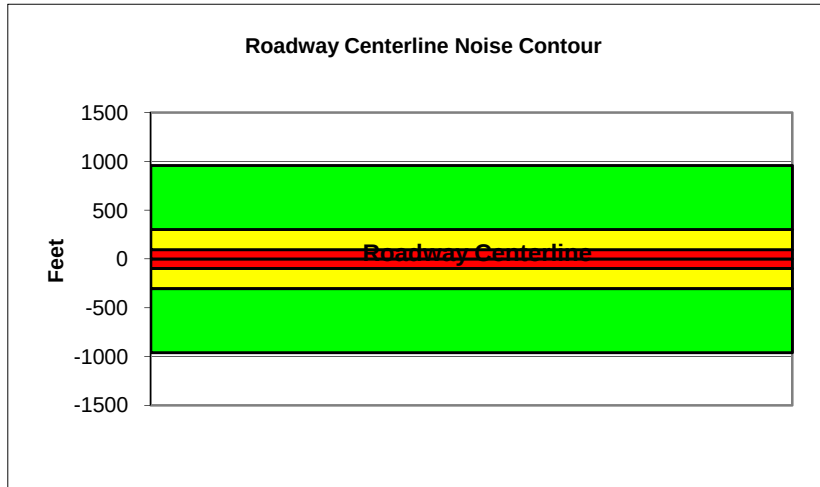
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Slover Avenue  
Road Segment: Between Mulberry Ave. and Cherry Ave.

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 23,749 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 2374.9 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 50     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 30     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 58.1        | 66.9        | 65.1        | 59.0        | 67.7        | 68.3        |
| Medium Trucks:                                                   | 65.8        | 57.7        | 51.4        | 49.8        | 58.3        | 58.5        |
| Heavy Trucks:                                                    | 70.0        | 58.1        | 49.0        | 50.3        | 59.7        | 59.8        |
| <b>Vehicle Noise:</b>                                            | <b>72.3</b> | <b>68.0</b> | <b>65.4</b> | <b>60.1</b> | <b>68.7</b> | <b>69.3</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 959 |
| 65 dBA                   | 303 |
| 70 dBA                   | 96  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

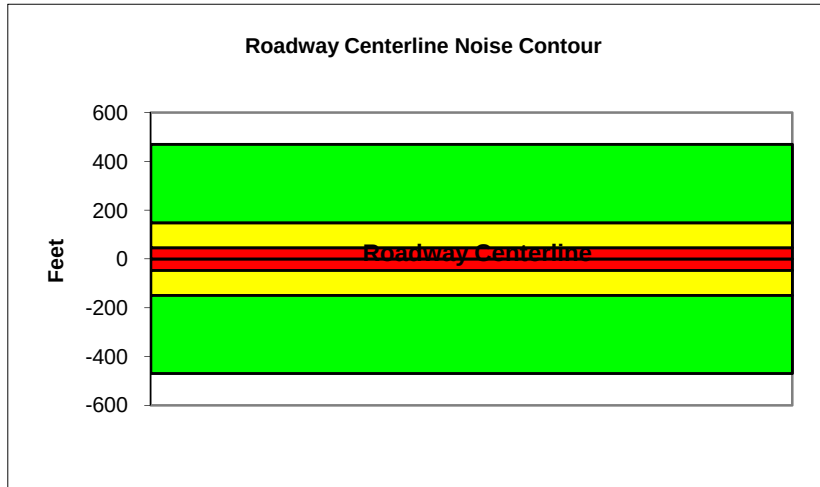
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Valley Boulevard  
Road Segment: Between Cherry Ave. and Fontana (Beech).

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 15,111 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 1511.1 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 45     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 30     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 54.9        | 63.6        | 61.8        | 55.8        | 64.4        | 65.0        |
| Medium Trucks:                                                   | 63.1        | 55.1        | 48.7        | 47.1        | 55.6        | 55.8        |
| Heavy Trucks:                                                    | 67.6        | 55.7        | 46.7        | 47.9        | 57.4        | 57.5        |
| <b>Vehicle Noise:</b>                                            | <b>70.0</b> | <b>64.9</b> | <b>62.2</b> | <b>57.1</b> | <b>65.7</b> | <b>66.2</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 470 |
| 65 dBA                   | 149 |
| 70 dBA                   | 47  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |





**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

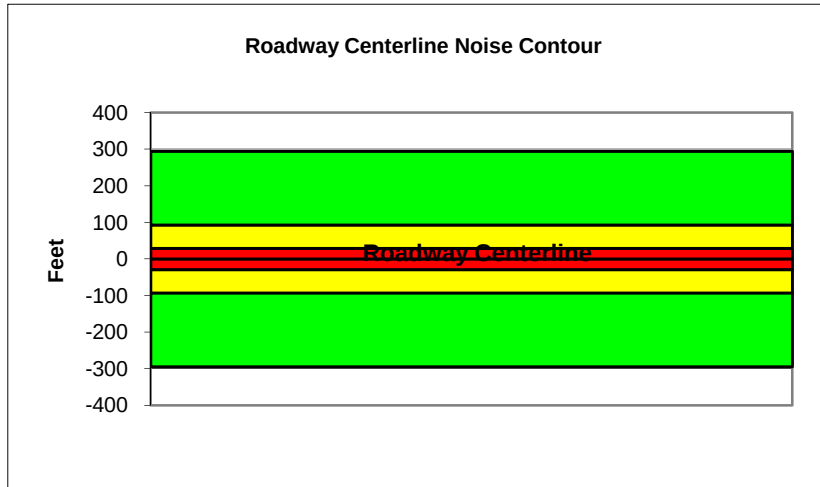
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Valley Boulevard  
Road Segment: Between Citrus Ave. and Sierra Ave.

| PROJECT DATA                   |               |  | SITE DATA                 |        |         |       |        |  |
|--------------------------------|---------------|--|---------------------------|--------|---------|-------|--------|--|
| Centerline Dist to Barrier     | 0             |  | Road Grade:               | 0      |         |       |        |  |
| Barrier (0=wall, 1= berm):     | 0             |  | Average Daily Traffic:    | 12,558 |         |       |        |  |
| Receiver Barrier Dist:         | 0             |  | Peak Hour Traffic:        | 1255.8 |         |       |        |  |
| Centerline Dist. To Observer:  | 100           |  | Vehicle Speed:            | 40     |         |       |        |  |
| Barrier Near Lane CL Dist:     | 0             |  | Centerline Separation:    | 30     |         |       |        |  |
| Barrier Far lane CL Dist:      | 0             |  | NOISE INPUTS              |        |         |       |        |  |
| Pad Elevation:                 | 0.5           |  | Site conditions HARD SITE |        |         |       |        |  |
| Road Elevation:                | 0             |  | FLEET MIX                 |        |         |       |        |  |
| Observer Height (above grade): | 0             |  | Type                      | Day    | Evening | Night | Daily  |  |
| Barrier Height:                | 0             |  | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |  |
| Rt View: 90                    | Lft View: -90 |  | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |  |
| NOISE SOURCE ELEVATIONS (Feet) |               |  | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |  |
| Autos:                         | 0             |  |                           |        |         |       |        |  |
| Medium Trucks:                 | 2.3           |  |                           |        |         |       |        |  |
| Heavy Trucks:                  | 8             |  |                           |        |         |       |        |  |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 52.6        | 61.4        | 59.6        | 53.5        | 62.1        | 62.7        |
| Medium Trucks:                                                   | 61.5        | 53.5        | 47.1        | 45.5        | 54.0        | 54.2        |
| Heavy Trucks:                                                    | 66.4        | 54.4        | 45.4        | 46.6        | 56.3        | 56.4        |
| <b>Vehicle Noise:</b>                                            | <b>68.7</b> | <b>62.9</b> | <b>60.0</b> | <b>55.1</b> | <b>63.6</b> | <b>64.1</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 294 |
| 65 dBA                   | 93  |
| 70 dBA                   | 29  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

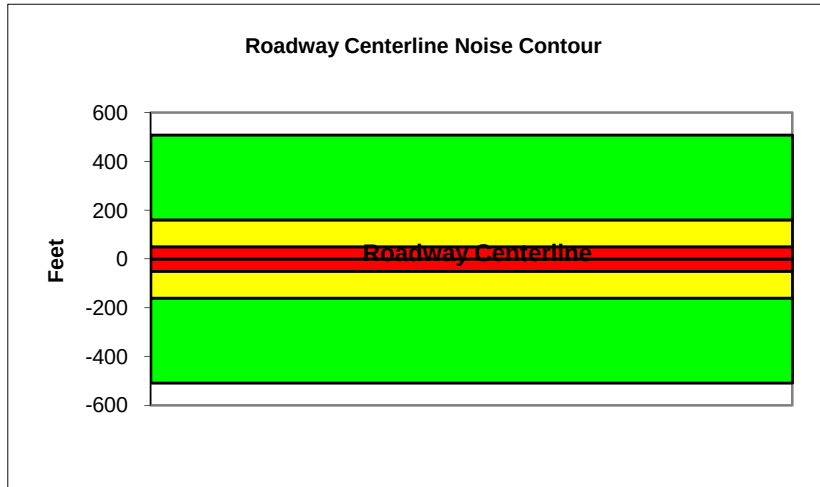
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Existing Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Valley Boulevard  
Road Segment: Between Etiwanda Ave. and Cherry Ave.

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 16,337 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 1633.7 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 45     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 30     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 55.2        | 64.0        | 62.2        | 56.1        | 64.7        | 65.4        |
| Medium Trucks:                                                   | 63.5        | 55.4        | 49.0        | 47.4        | 55.9        | 56.2        |
| Heavy Trucks:                                                    | 68.0        | 56.0        | 47.0        | 48.2        | 57.8        | 57.9        |
| <b>Vehicle Noise:</b>                                            | <b>70.3</b> | <b>65.3</b> | <b>62.5</b> | <b>57.4</b> | <b>66.0</b> | <b>66.5</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 508 |
| 65 dBA                   | 161 |
| 70 dBA                   | 51  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

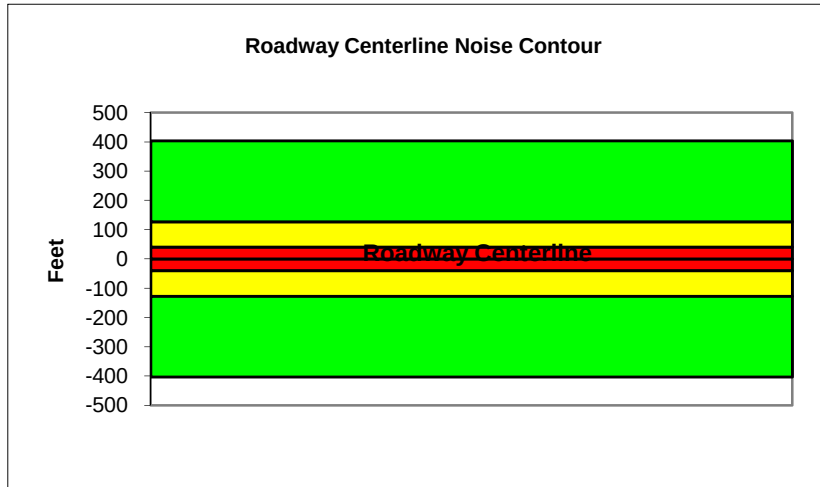
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Valley Boulevard  
Road Segment: Between Cherry Ave. and Fontana Ave.

| PROJECT DATA                   |               | SITE DATA                        |        |         |       |        |
|--------------------------------|---------------|----------------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:                      | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:           | 12,983 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:               | 1298.3 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:                   | 45     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:           | 30     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS                     |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions <b>HARD SITE</b> |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                        |        |         |       |        |
| Observer Height (above grade): | 0             | Type                             | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                             | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                       | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck                      | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                                  |        |         |       |        |
| Medium Trucks:                 | 2.3           |                                  |        |         |       |        |
| Heavy Trucks:                  | 8             |                                  |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |          |         |             |           |      |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|------|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn  | CNEL |
| Autos:                                                           | 54.2     | 63.0    | 61.2        | 55.1      | 63.8 | 64.4 |
| Medium Trucks:                                                   | 62.5     | 54.4    | 48.0        | 46.4      | 54.9 | 55.2 |
| Heavy Trucks:                                                    | 67.0     | 55.1    | 46.0        | 47.2      | 56.8 | 56.9 |
| Vehicle Noise:                                                   | 69.3     | 64.3    | 61.5        | 56.4      | 65.0 | 65.5 |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 404 |
| 65 dBA                   | 128 |
| 70 dBA                   | 40  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

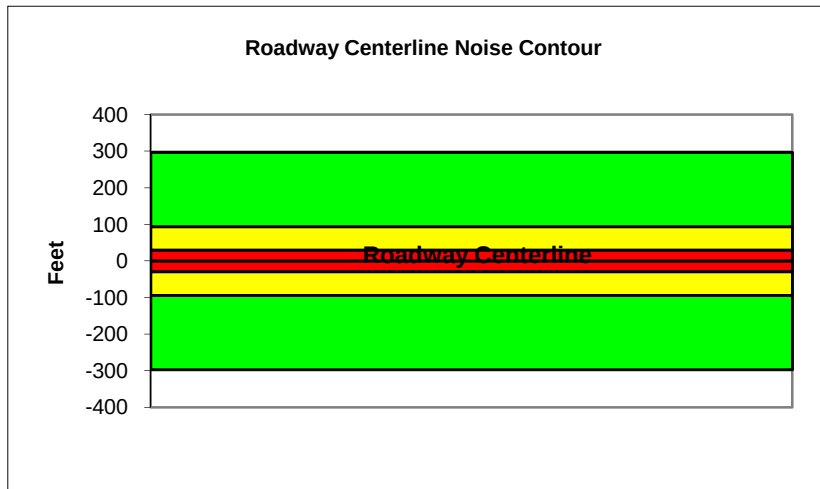
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Valley Boulevard  
Road Segment: Between Citrus Ave. and Sierra Ave.

| PROJECT DATA                   |               | SITE DATA                        |        |         |       |        |
|--------------------------------|---------------|----------------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:                      | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:           | 12,684 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:               | 1268.4 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:                   | 40     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:           | 30     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS                     |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions <b>HARD SITE</b> |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                        |        |         |       |        |
| Observer Height (above grade): | 0             | Type                             | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                             | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                       | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck                      | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                                  |        |         |       |        |
| Medium Trucks:                 | 2.3           |                                  |        |         |       |        |
| Heavy Trucks:                  | 8             |                                  |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |          |         |             |           |      |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|------|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn  | CNEL |
| Autos:                                                           | 52.6     | 61.4    | 59.6        | 53.5      | 62.2 | 62.8 |
| Medium Trucks:                                                   | 61.6     | 53.5    | 47.1        | 45.5      | 54.0 | 54.3 |
| Heavy Trucks:                                                    | 66.4     | 54.5    | 45.4        | 46.6      | 56.4 | 56.5 |
| Vehicle Noise:                                                   | 68.8     | 63.0    | 60.1        | 55.1      | 63.7 | 64.2 |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 297 |
| 65 dBA                   | 94  |
| 70 dBA                   | 30  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

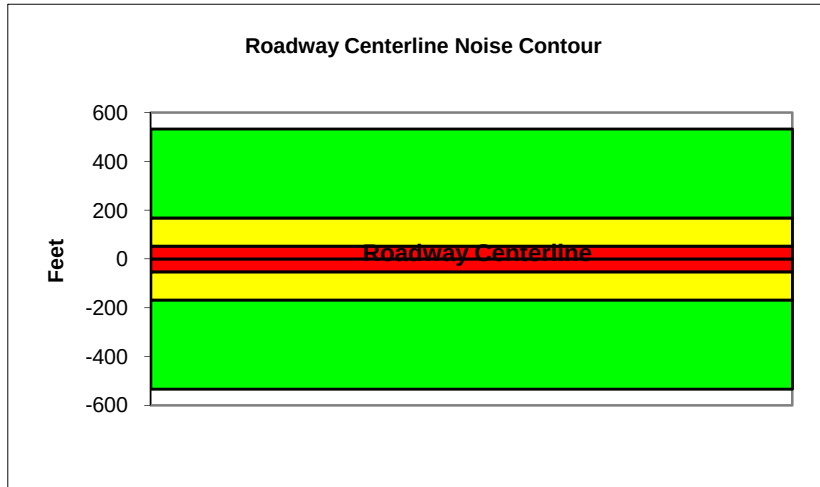
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Valley Boulevard  
Road Segment: Between Etiwanda Ave. and Cherry Ave.

| PROJECT DATA                   |               | SITE DATA                        |        |         |       |        |
|--------------------------------|---------------|----------------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:                      | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:           | 17,151 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:               | 1715.1 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:                   | 45     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:           | 30     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS                     |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions <b>HARD SITE</b> |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                        |        |         |       |        |
| Observer Height (above grade): | 0             | Type                             | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                             | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                       | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck                      | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                                  |        |         |       |        |
| Medium Trucks:                 | 2.3           |                                  |        |         |       |        |
| Heavy Trucks:                  | 8             |                                  |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |          |         |             |           |      |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|------|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn  | CNEL |
| Autos:                                                           | 55.4     | 64.2    | 62.4        | 56.3      | 65.0 | 65.6 |
| Medium Trucks:                                                   | 63.7     | 55.6    | 49.2        | 47.7      | 56.1 | 56.4 |
| Heavy Trucks:                                                    | 68.2     | 56.3    | 47.2        | 48.4      | 58.0 | 58.1 |
| Vehicle Noise:                                                   | 70.5     | 65.5    | 62.8        | 57.6      | 66.2 | 66.7 |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 533 |
| 65 dBA                   | 169 |
| 70 dBA                   | 53  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

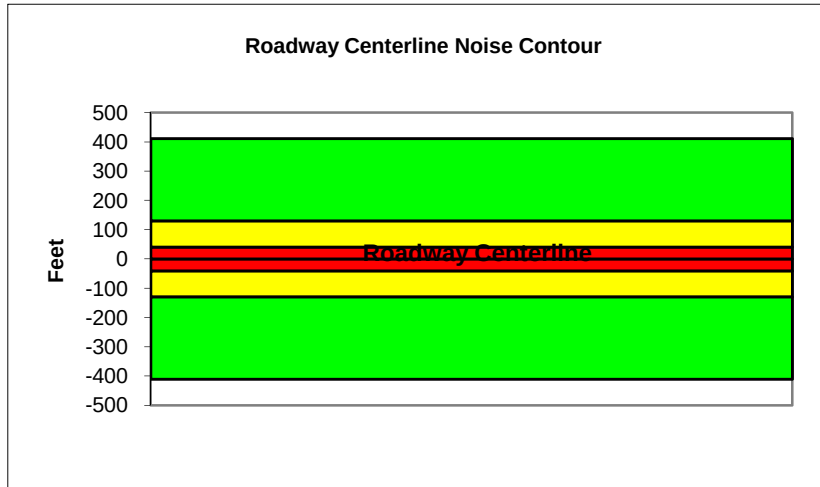
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Valley Boulevard  
Road Segment: Between Fontana Ave. and Citrus Ave.

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 13,226 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 1322.6 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 45     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 23     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 54.4        | 63.2        | 61.4        | 55.3        | 64.0        | 64.6        |
| Medium Trucks:                                                   | 62.7        | 54.6        | 48.2        | 46.6        | 55.1        | 55.4        |
| Heavy Trucks:                                                    | 67.2        | 55.3        | 46.2        | 47.4        | 57.0        | 57.1        |
| <b>Vehicle Noise:</b>                                            | <b>69.5</b> | <b>64.5</b> | <b>61.8</b> | <b>56.6</b> | <b>65.2</b> | <b>65.7</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 411 |
| 65 dBA                   | 130 |
| 70 dBA                   | 41  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

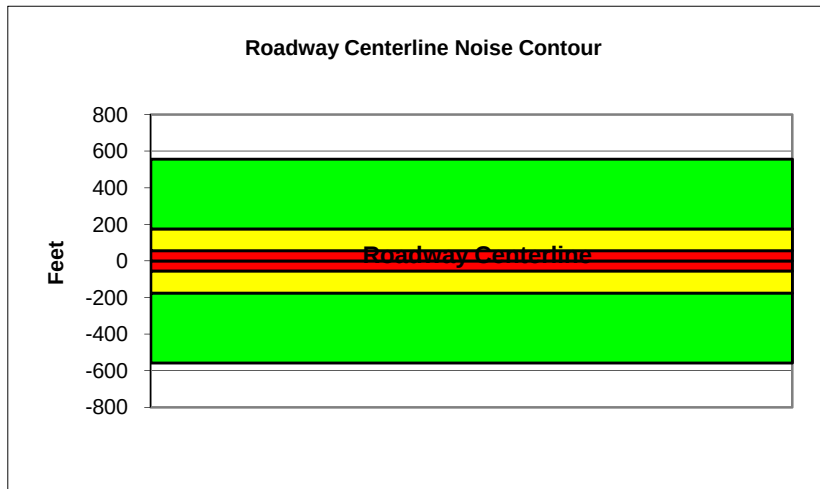
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Armstrong Road  
Road Segment: Between SR-60 and Sierra Ave.

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 23,784 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 2378.4 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 40     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 35     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 55.3        | 64.0        | 62.3        | 56.2        | 64.8        | 65.4        |
| Medium Trucks:                                                   | 64.2        | 56.2        | 49.8        | 48.2        | 56.7        | 56.9        |
| Heavy Trucks:                                                    | 69.1        | 57.1        | 48.1        | 49.3        | 59.0        | 59.1        |
| <b>Vehicle Noise:</b>                                            | <b>71.4</b> | <b>65.6</b> | <b>62.7</b> | <b>57.8</b> | <b>66.3</b> | <b>66.8</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 557 |
| 65 dBA                   | 176 |
| 70 dBA                   | 56  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

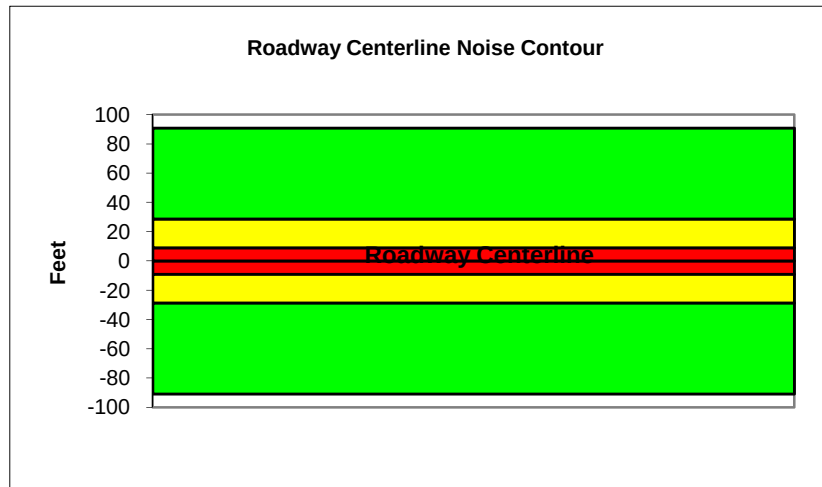
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Beech Avenue  
Road Segment: Between Slover Ave. and Jurupa St.

| PROJECT DATA                   |               | SITE DATA                        |       |         |       |        |
|--------------------------------|---------------|----------------------------------|-------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:                      | 0     |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:           | 5,270 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:               | 527   |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:                   | 35    |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:           | 22    |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS                     |       |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions <b>HARD SITE</b> |       |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                        |       |         |       |        |
| Observer Height (above grade): | 0             | Type                             | Day   | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                             | 0.775 | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                       | 0.848 | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck                      | 0.865 | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                                  |       |         |       |        |
| Medium Trucks:                 | 2.3           |                                  |       |         |       |        |
| Heavy Trucks:                  | 8             |                                  |       |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |          |         |             |           |      |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|------|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn  | CNEL |
| Autos:                                                           | 47.3     | 56.1    | 54.3        | 48.2      | 56.8 | 57.4 |
| Medium Trucks:                                                   | 57.0     | 48.9    | 42.5        | 41.0      | 49.5 | 49.7 |
| Heavy Trucks:                                                    | 62.2     | 50.3    | 41.2        | 42.4      | 52.3 | 52.5 |
| Vehicle Noise:                                                   | 64.6     | 58.0    | 54.8        | 50.1      | 58.7 | 59.2 |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |    |
|--------------------------|----|
| Unmitigated              |    |
| 60 dBA                   | 91 |
| 65 dBA                   | 29 |
| 70 dBA                   | 9  |
| Mitigated                |    |
| 60 dBA                   |    |
| 65 dBA                   |    |
| 70 dBA                   |    |





**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

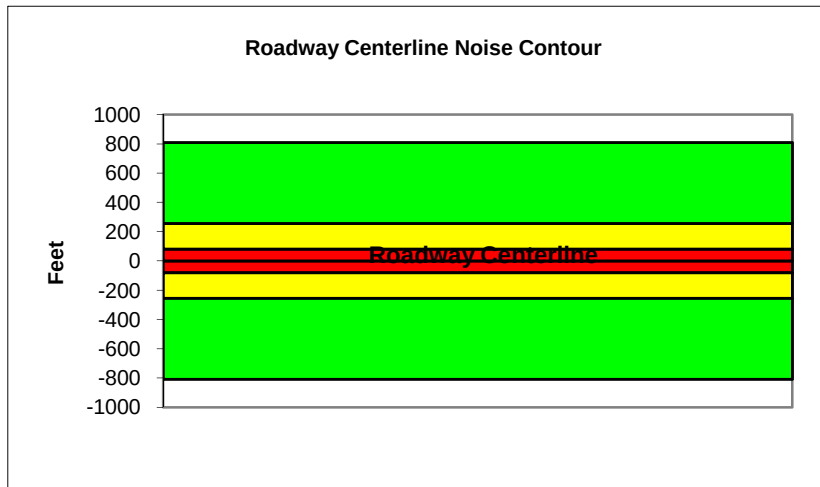
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Cherry Avenue  
Road Segment: Between San Bernardino Ave. and Valley Blvd.

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 20,036 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 2003.6 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 50     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 42     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 57.2        | 66.0        | 64.2        | 58.1        | 66.8        | 67.4        |
| Medium Trucks:                                                   | 64.9        | 56.8        | 50.4        | 48.9        | 57.3        | 57.6        |
| Heavy Trucks:                                                    | 69.1        | 57.2        | 48.1        | 49.3        | 58.7        | 58.8        |
| <b>Vehicle Noise:</b>                                            | <b>71.4</b> | <b>67.1</b> | <b>64.5</b> | <b>59.2</b> | <b>67.8</b> | <b>68.3</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 809 |
| 65 dBA                   | 256 |
| 70 dBA                   | 81  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

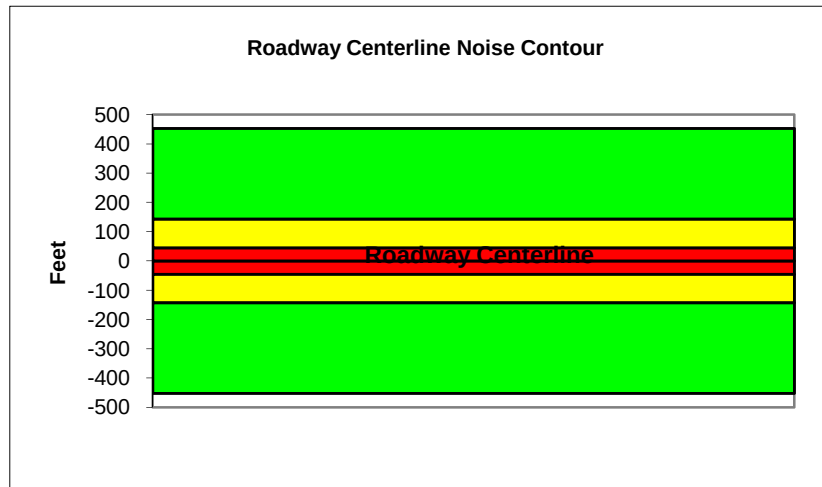
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Cherry Avenue  
Road Segment: Between Slover Ave. and Jurupa St.

| PROJECT DATA                   |               | SITE DATA                        |        |         |       |        |
|--------------------------------|---------------|----------------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:                      | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:           | 14,555 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:               | 1455.5 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:                   | 45     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:           | 43     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS                     |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions <b>HARD SITE</b> |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                        |        |         |       |        |
| Observer Height (above grade): | 0             | Type                             | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                             | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                       | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck                      | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                                  |        |         |       |        |
| Medium Trucks:                 | 2.3           |                                  |        |         |       |        |
| Heavy Trucks:                  | 8             |                                  |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |          |         |             |           |      |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|------|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn  | CNEL |
| Autos:                                                           | 54.5     | 63.3    | 61.5        | 55.4      | 64.0 | 64.6 |
| Medium Trucks:                                                   | 62.8     | 54.7    | 48.3        | 46.7      | 55.2 | 55.5 |
| Heavy Trucks:                                                    | 67.3     | 55.3    | 46.3        | 47.5      | 57.0 | 57.2 |
| Vehicle Noise:                                                   | 69.6     | 64.6    | 61.8        | 56.7      | 65.3 | 65.8 |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 453 |
| 65 dBA                   | 143 |
| 70 dBA                   | 45  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

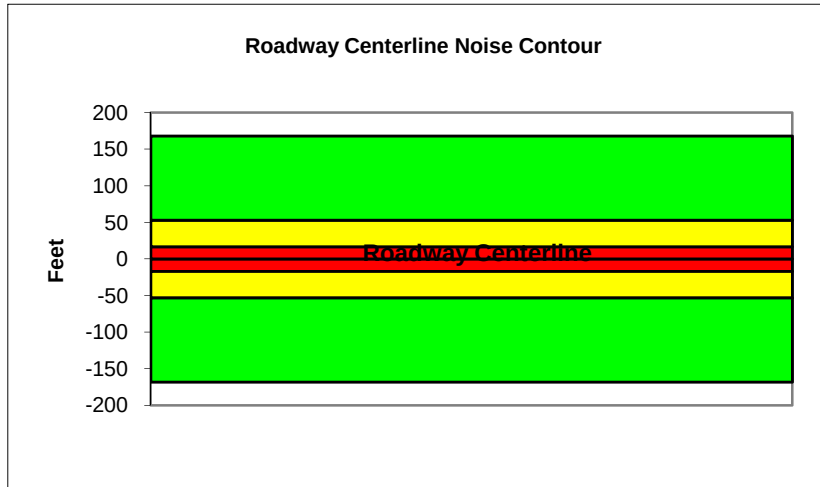
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Citrus Avenue  
Road Segment: Between I-10 and Santa Ana Avenue

| PROJECT DATA                   |               | SITE DATA                        |       |         |       |        |
|--------------------------------|---------------|----------------------------------|-------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:                      | 0     |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:           | 9,756 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:               | 975.6 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:                   | 35    |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:           | 23    |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS                     |       |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions <b>HARD SITE</b> |       |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                        |       |         |       |        |
| Observer Height (above grade): | 0             | Type                             | Day   | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                             | 0.775 | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                       | 0.848 | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck                      | 0.865 | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                                  |       |         |       |        |
| Medium Trucks:                 | 2.3           |                                  |       |         |       |        |
| Heavy Trucks:                  | 8             |                                  |       |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |          |         |             |           |      |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|------|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn  | CNEL |
| Autos:                                                           | 49.9     | 58.7    | 56.9        | 50.8      | 59.5 | 60.1 |
| Medium Trucks:                                                   | 59.6     | 51.6    | 45.2        | 43.6      | 52.1 | 52.3 |
| Heavy Trucks:                                                    | 64.9     | 52.9    | 43.9        | 45.1      | 55.0 | 55.1 |
| Vehicle Noise:                                                   | 67.3     | 60.7    | 57.5        | 52.8      | 61.4 | 61.8 |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 168 |
| 65 dBA                   | 53  |
| 70 dBA                   | 17  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

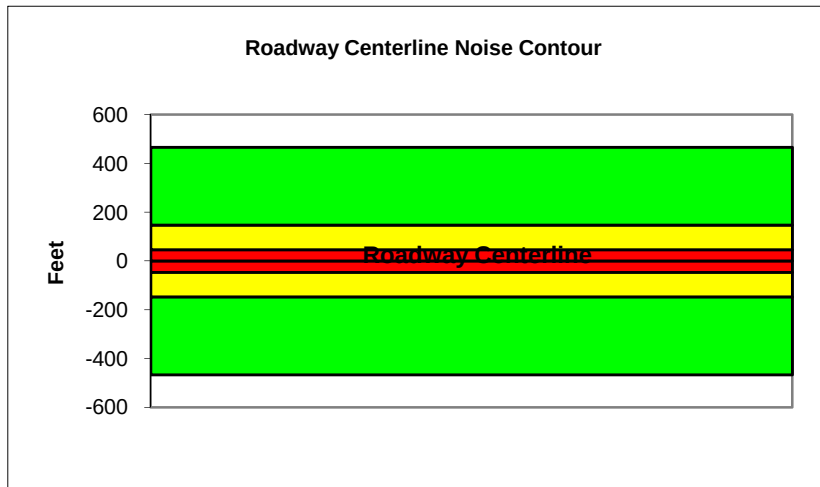
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Citrus Avenue  
Road Segment: Between San Bernardino Ave. and Valley Blvd.

| PROJECT DATA                   |               | SITE DATA                        |        |         |       |        |
|--------------------------------|---------------|----------------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:                      | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:           | 19,888 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:               | 1988.8 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:                   | 40     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:           | 23     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS                     |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions <b>HARD SITE</b> |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                        |        |         |       |        |
| Observer Height (above grade): | 0             | Type                             | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                             | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                       | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck                      | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                                  |        |         |       |        |
| Medium Trucks:                 | 2.3           |                                  |        |         |       |        |
| Heavy Trucks:                  | 8             |                                  |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |          |         |             |           |      |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|------|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn  | CNEL |
| Autos:                                                           | 54.7     | 63.5    | 61.7        | 55.6      | 64.2 | 64.9 |
| Medium Trucks:                                                   | 63.6     | 55.6    | 49.2        | 47.6      | 56.1 | 56.3 |
| Heavy Trucks:                                                    | 68.5     | 56.6    | 47.5        | 48.7      | 58.4 | 58.6 |
| Vehicle Noise:                                                   | 70.9     | 65.1    | 62.1        | 57.2      | 65.8 | 66.2 |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 467 |
| 65 dBA                   | 148 |
| 70 dBA                   | 47  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

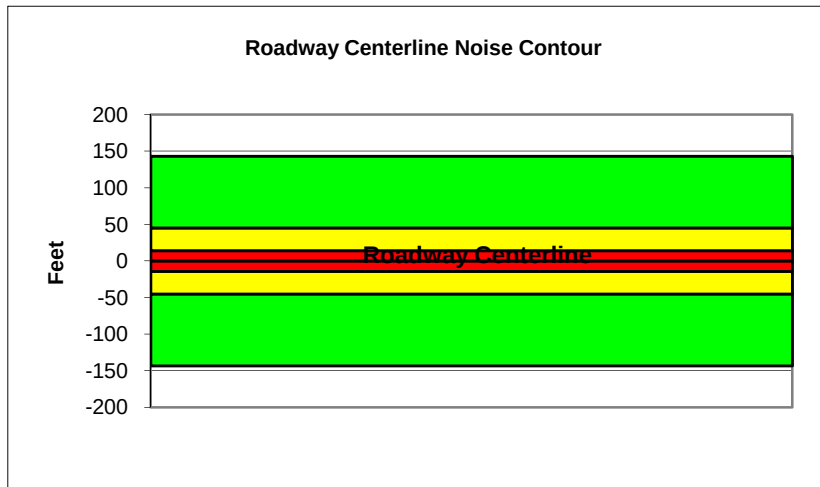
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Citrus Avenue  
Road Segment: Between Santa Ana Ave. and Jurupa St.

| PROJECT DATA                   |               | SITE DATA                 |       |         |       |        |
|--------------------------------|---------------|---------------------------|-------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0     |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 8,306 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 830.6 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 35    |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 23    |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |       |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |       |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |       |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day   | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775 | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848 | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865 | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |       |         |       |        |
| Medium Trucks:                 | 2.3           |                           |       |         |       |        |
| Heavy Trucks:                  | 8             |                           |       |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 49.2        | 58.0        | 56.2        | 50.1        | 58.8        | 59.4        |
| Medium Trucks:                                                   | 58.9        | 50.9        | 44.5        | 42.9        | 51.4        | 51.6        |
| Heavy Trucks:                                                    | 64.2        | 52.2        | 43.2        | 44.4        | 54.3        | 54.4        |
| <b>Vehicle Noise:</b>                                            | <b>66.6</b> | <b>60.0</b> | <b>56.8</b> | <b>52.1</b> | <b>60.7</b> | <b>61.1</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 143 |
| 65 dBA                   | 45  |
| 70 dBA                   | 14  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

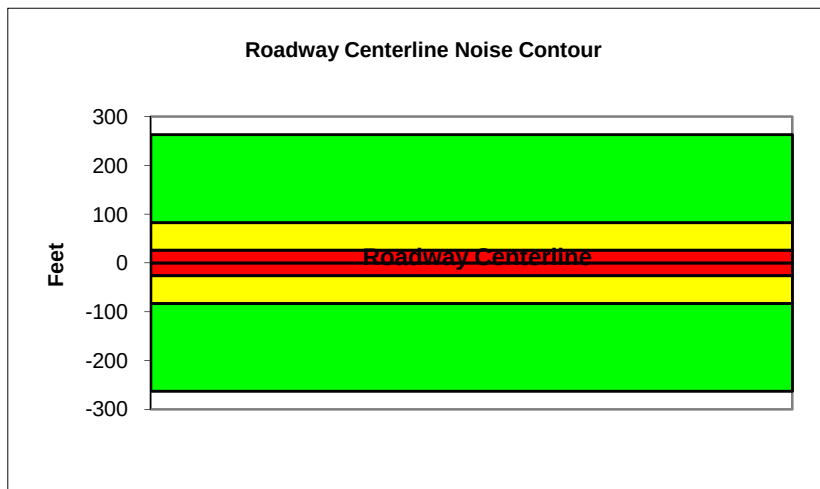
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future  
Analyst: Brian Allee      Job #: 65100340  
Roadway: East Airport Drive  
Road Segment: Between I-15 and Etiwanda Ave.

| PROJECT DATA                   |               | SITE DATA                 |       |         |       |        |
|--------------------------------|---------------|---------------------------|-------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0     |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 8,463 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 846.3 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 45    |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 23    |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |       |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |       |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |       |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day   | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775 | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848 | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865 | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |       |         |       |        |
| Medium Trucks:                 | 2.3           |                           |       |         |       |        |
| Heavy Trucks:                  | 8             |                           |       |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 52.5        | 61.2        | 59.4        | 53.4        | 62.0        | 62.6        |
| Medium Trucks:                                                   | 60.7        | 52.7        | 46.3        | 44.7        | 53.2        | 53.4        |
| Heavy Trucks:                                                    | 65.3        | 53.3        | 44.3        | 45.5        | 55.0        | 55.1        |
| <b>Vehicle Noise:</b>                                            | <b>67.6</b> | <b>62.5</b> | <b>59.8</b> | <b>54.7</b> | <b>63.3</b> | <b>63.8</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 263 |
| 65 dBA                   | 83  |
| 70 dBA                   | 26  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

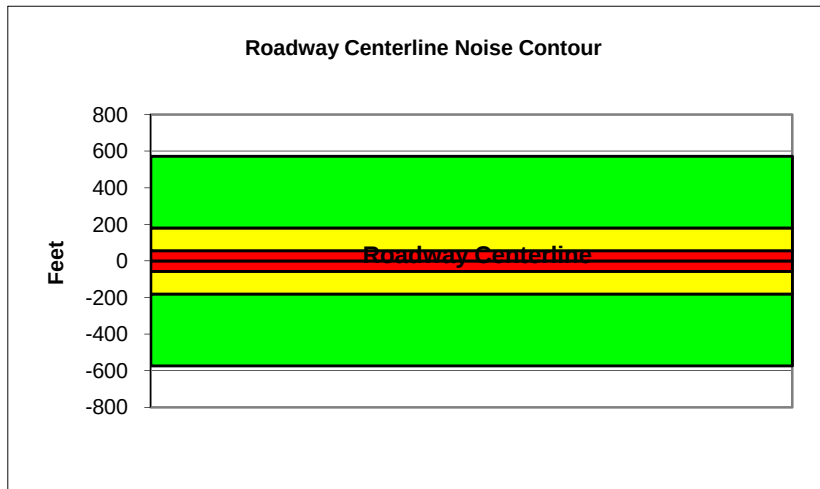
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Etiwanda Avenue  
Road Segment: Between Jurupa St. and Philadelphia Ave.

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 18,413 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 1841.3 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 45     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 42     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 55.5        | 64.3        | 62.5        | 56.4        | 65.1        | 65.7        |
| Medium Trucks:                                                   | 63.8        | 55.7        | 49.3        | 47.8        | 56.3        | 56.5        |
| Heavy Trucks:                                                    | 68.3        | 56.4        | 47.3        | 48.5        | 58.1        | 58.2        |
| <b>Vehicle Noise:</b>                                            | <b>70.7</b> | <b>65.6</b> | <b>62.9</b> | <b>57.7</b> | <b>66.3</b> | <b>66.8</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 573 |
| 65 dBA                   | 181 |
| 70 dBA                   | 57  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

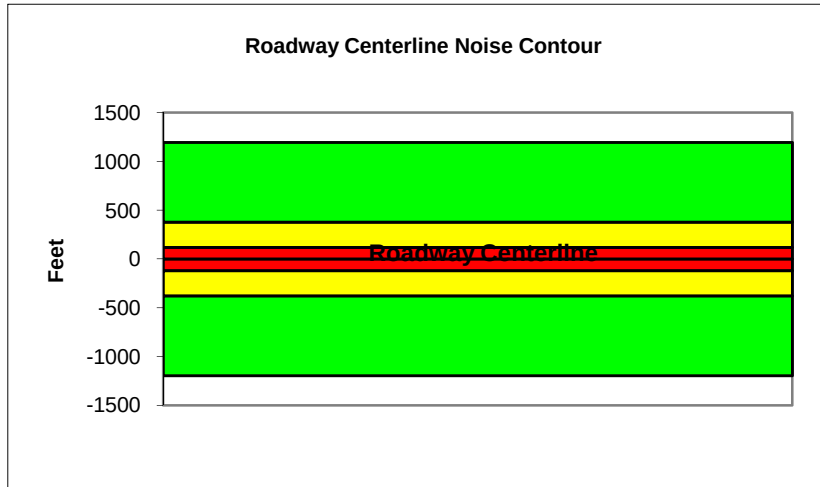
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Etiwanda Avenue  
Road Segment: Between Philadelphia Ave. and SR-60

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 23,259 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 2325.9 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 55     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 45     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 59.0        | 67.8        | 66.0        | 59.9        | 68.6        | 69.2        |
| Medium Trucks:                                                   | 66.1        | 58.1        | 51.7        | 50.1        | 58.6        | 58.8        |
| Heavy Trucks:                                                    | 70.1        | 58.1        | 49.1        | 50.3        | 59.6        | 59.7        |
| <b>Vehicle Noise:</b>                                            | <b>72.4</b> | <b>68.7</b> | <b>66.3</b> | <b>60.8</b> | <b>69.4</b> | <b>70.0</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |      |
|--------------------------|------|
| Unmitigated              |      |
| 60 dBA                   | 1196 |
| 65 dBA                   | 378  |
| 70 dBA                   | 120  |
| Mitigated                |      |
| 60 dBA                   |      |
| 65 dBA                   |      |
| 70 dBA                   |      |





**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

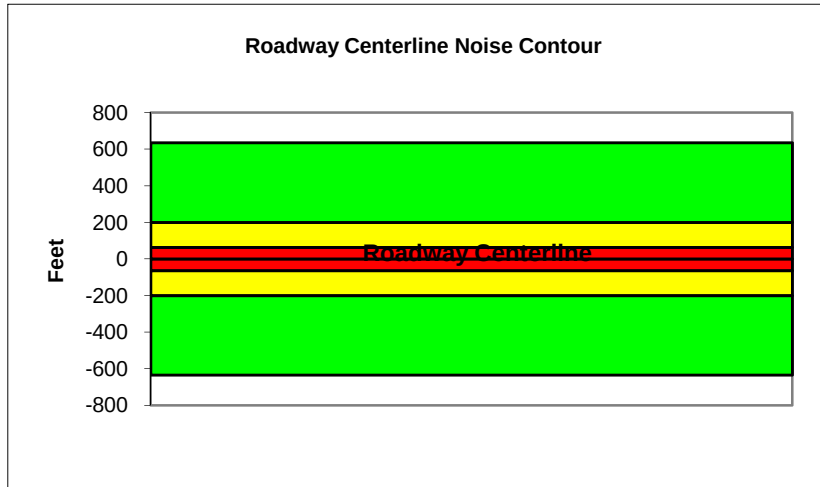
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Etiwanda Avenue  
Road Segment: Between San Bernardino Ave and Valley Blvd

| PROJECT DATA                   |           |     | SITE DATA                        |        |         |       |        |  |
|--------------------------------|-----------|-----|----------------------------------|--------|---------|-------|--------|--|
| Centerline Dist to Barrier     | 0         |     | Road Grade:                      | 0      |         |       |        |  |
| Barrier (0=wall, 1= berm):     | 0         |     | Average Daily Traffic:           | 20,422 |         |       |        |  |
| Receiver Barrier Dist:         | 0         |     | Peak Hour Traffic:               | 2042.2 |         |       |        |  |
| Centerline Dist. To Observer:  | 100       |     | Vehicle Speed:                   | 45     |         |       |        |  |
| Barrier Near Lane CL Dist:     | 0         |     | Centerline Separation:           | 24     |         |       |        |  |
| Barrier Far lane CL Dist:      | 0         |     | NOISE INPUTS                     |        |         |       |        |  |
| Pad Elevation:                 | 0.5       |     | Site conditions <b>HARD SITE</b> |        |         |       |        |  |
| Road Elevation:                | 0         |     | FLEET MIX                        |        |         |       |        |  |
| Observer Height (above grade): | 0         |     | Type                             | Day    | Evening | Night | Daily  |  |
| Barrier Height:                | 0         |     | Auto                             | 0.775  | 0.129   | 0.096 | 0.9742 |  |
| Rt View: 90                    | Lft View: | -90 | Med. Truck                       | 0.848  | 0.049   | 0.103 | 0.0184 |  |
| NOISE SOURCE ELEVATIONS (Feet) |           |     | Heavy Truck                      | 0.865  | 0.027   | 0.108 | 0.0074 |  |
| Autos:                         | 0         |     |                                  |        |         |       |        |  |
| Medium Trucks:                 | 2.3       |     |                                  |        |         |       |        |  |
| Heavy Trucks:                  | 8         |     |                                  |        |         |       |        |  |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |          |         |             |           |      |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|------|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn  | CNEL |
| Autos:                                                           | 56.3     | 65.0    | 63.3        | 57.2      | 65.8 | 66.4 |
| Medium Trucks:                                                   | 64.5     | 56.5    | 50.1        | 48.5      | 57.0 | 57.2 |
| Heavy Trucks:                                                    | 69.1     | 57.1    | 48.1        | 49.3      | 58.8 | 59.0 |
| Vehicle Noise:                                                   | 71.4     | 66.3    | 63.6        | 58.5      | 67.1 | 67.6 |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 635 |
| 65 dBA                   | 201 |
| 70 dBA                   | 63  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

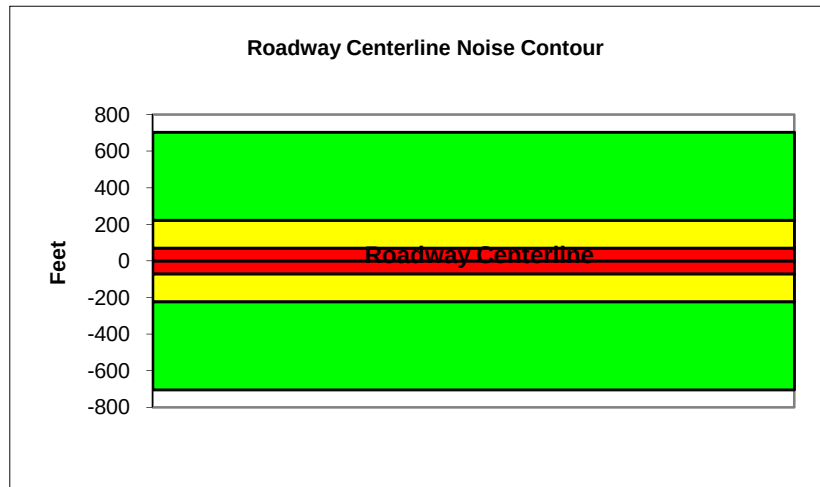
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Etiwanda Avenue  
Road Segment: Between Slover Ave. and Jurupa St.

| PROJECT DATA                   |           |     | SITE DATA                        |        |         |       |        |  |
|--------------------------------|-----------|-----|----------------------------------|--------|---------|-------|--------|--|
| Centerline Dist to Barrier     | 0         |     | Road Grade:                      | 0      |         |       |        |  |
| Barrier (0=wall, 1= berm):     | 0         |     | Average Daily Traffic:           | 22,667 |         |       |        |  |
| Receiver Barrier Dist:         | 0         |     | Peak Hour Traffic:               | 2266.7 |         |       |        |  |
| Centerline Dist. To Observer:  | 100       |     | Vehicle Speed:                   | 45     |         |       |        |  |
| Barrier Near Lane CL Dist:     | 0         |     | Centerline Separation:           | 38     |         |       |        |  |
| Barrier Far lane CL Dist:      | 0         |     | NOISE INPUTS                     |        |         |       |        |  |
| Pad Elevation:                 | 0.5       |     | Site conditions <b>HARD SITE</b> |        |         |       |        |  |
| Road Elevation:                | 0         |     | FLEET MIX                        |        |         |       |        |  |
| Observer Height (above grade): | 0         |     | Type                             | Day    | Evening | Night | Daily  |  |
| Barrier Height:                | 0         |     | Auto                             | 0.775  | 0.129   | 0.096 | 0.9742 |  |
| Rt View: 90                    | Lft View: | -90 | Med. Truck                       | 0.848  | 0.049   | 0.103 | 0.0184 |  |
| NOISE SOURCE ELEVATIONS (Feet) |           |     | Heavy Truck                      | 0.865  | 0.027   | 0.108 | 0.0074 |  |
| Autos:                         | 0         |     |                                  |        |         |       |        |  |
| Medium Trucks:                 | 2.3       |     |                                  |        |         |       |        |  |
| Heavy Trucks:                  | 8         |     |                                  |        |         |       |        |  |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |          |         |             |           |      |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|------|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn  | CNEL |
| Autos:                                                           | 56.5     | 65.3    | 63.5        | 57.4      | 66.0 | 66.6 |
| Medium Trucks:                                                   | 64.8     | 56.7    | 50.3        | 48.7      | 57.2 | 57.5 |
| Heavy Trucks:                                                    | 69.3     | 57.3    | 48.3        | 49.5      | 59.1 | 59.2 |
| Vehicle Noise:                                                   | 71.6     | 66.6    | 63.8        | 58.7      | 67.3 | 67.8 |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 705 |
| 65 dBA                   | 223 |
| 70 dBA                   | 70  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

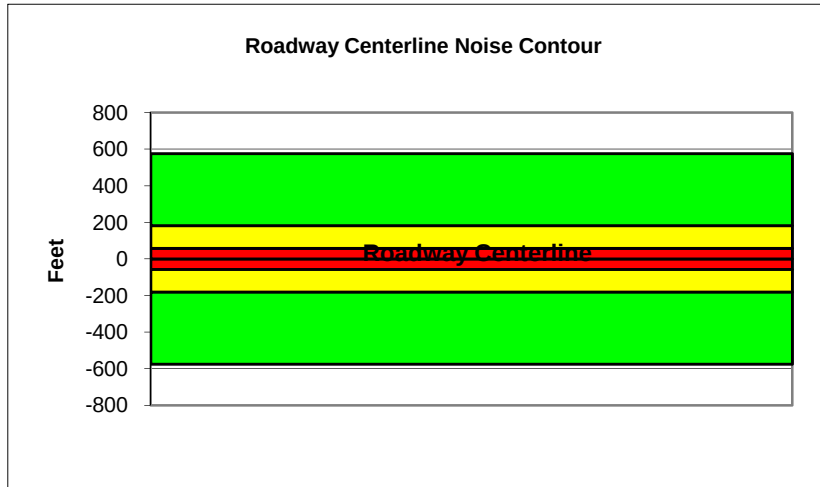
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Fourth Street  
Road Segment: Between I-15 and Etiwanda Ave

| PROJECT DATA                   |               | SITE DATA                        |        |         |       |        |
|--------------------------------|---------------|----------------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:                      | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:           | 14,244 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:               | 1424.4 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:                   | 50     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:           | 30     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS                     |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions <b>HARD SITE</b> |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                        |        |         |       |        |
| Observer Height (above grade): | 0             | Type                             | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                             | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                       | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck                      | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                                  |        |         |       |        |
| Medium Trucks:                 | 2.3           |                                  |        |         |       |        |
| Heavy Trucks:                  | 8             |                                  |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |          |         |             |           |      |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|------|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn  | CNEL |
| Autos:                                                           | 55.9     | 64.7    | 62.9        | 56.8      | 65.5 | 66.1 |
| Medium Trucks:                                                   | 63.6     | 55.5    | 49.1        | 47.6      | 56.1 | 56.3 |
| Heavy Trucks:                                                    | 67.8     | 55.9    | 46.8        | 48.0      | 57.4 | 57.6 |
| Vehicle Noise:                                                   | 70.1     | 65.8    | 63.2        | 57.9      | 66.5 | 67.0 |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 575 |
| 65 dBA                   | 182 |
| 70 dBA                   | 58  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

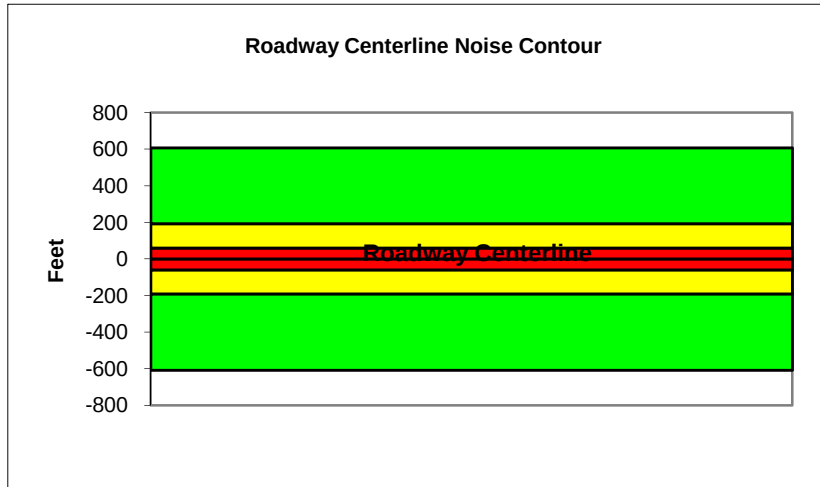
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Jurupa Street  
Road Segment: Between Cherry Ave. and Citrus Ave.

| PROJECT DATA                   |               |  | SITE DATA                        |        |         |       |        |  |
|--------------------------------|---------------|--|----------------------------------|--------|---------|-------|--------|--|
| Centerline Dist to Barrier     | 0             |  | Road Grade:                      | 0      |         |       |        |  |
| Barrier (0=wall, 1= berm):     | 0             |  | Average Daily Traffic:           | 19,584 |         |       |        |  |
| Receiver Barrier Dist:         | 0             |  | Peak Hour Traffic:               | 1958.4 |         |       |        |  |
| Centerline Dist. To Observer:  | 100           |  | Vehicle Speed:                   | 45     |         |       |        |  |
| Barrier Near Lane CL Dist:     | 0             |  | Centerline Separation:           | 48     |         |       |        |  |
| Barrier Far lane CL Dist:      | 0             |  | NOISE INPUTS                     |        |         |       |        |  |
| Pad Elevation:                 | 0.5           |  | Site conditions <b>HARD SITE</b> |        |         |       |        |  |
| Road Elevation:                | 0             |  | FLEET MIX                        |        |         |       |        |  |
| Observer Height (above grade): | 0             |  | Type                             | Day    | Evening | Night | Daily  |  |
| Barrier Height:                | 0             |  | Auto                             | 0.775  | 0.129   | 0.096 | 0.9742 |  |
| Rt View: 90                    | Lft View: -90 |  | Med. Truck                       | 0.848  | 0.049   | 0.103 | 0.0184 |  |
| NOISE SOURCE ELEVATIONS (Feet) |               |  | Heavy Truck                      | 0.865  | 0.027   | 0.108 | 0.0074 |  |
| Autos:                         | 0             |  |                                  |        |         |       |        |  |
| Medium Trucks:                 | 2.3           |  |                                  |        |         |       |        |  |
| Heavy Trucks:                  | 8             |  |                                  |        |         |       |        |  |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |          |         |             |           |      |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|------|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn  | CNEL |
| Autos:                                                           | 55.7     | 64.5    | 62.7        | 56.6      | 65.3 | 65.9 |
| Medium Trucks:                                                   | 64.0     | 55.9    | 49.5        | 47.9      | 56.4 | 56.7 |
| Heavy Trucks:                                                    | 68.5     | 56.6    | 47.5        | 48.7      | 58.3 | 58.4 |
| Vehicle Noise:                                                   | 70.8     | 65.8    | 63.1        | 57.9      | 66.5 | 67.0 |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 608 |
| 65 dBA                   | 192 |
| 70 dBA                   | 61  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

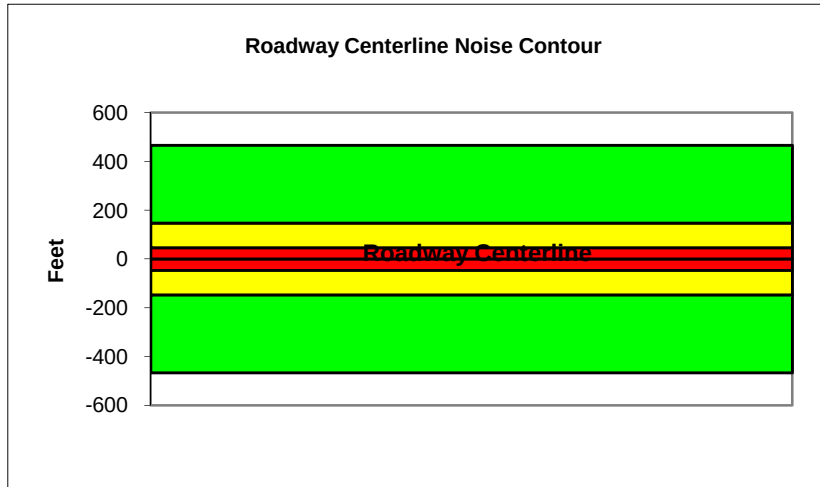
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Jurupa Street  
Road Segment: Between Citrus Ave. and Sierra Ave.

| PROJECT DATA                   |               | SITE DATA                        |        |         |       |        |
|--------------------------------|---------------|----------------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:                      | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:           | 15,013 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:               | 1501.3 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:                   | 45     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:           | 45     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS                     |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions <b>HARD SITE</b> |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                        |        |         |       |        |
| Observer Height (above grade): | 0             | Type                             | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                             | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                       | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck                      | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                                  |        |         |       |        |
| Medium Trucks:                 | 2.3           |                                  |        |         |       |        |
| Heavy Trucks:                  | 8             |                                  |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |          |         |             |           |      |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|------|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn  | CNEL |
| Autos:                                                           | 54.6     | 63.4    | 61.6        | 55.5      | 64.1 | 64.8 |
| Medium Trucks:                                                   | 62.9     | 54.8    | 48.4        | 46.8      | 55.3 | 55.6 |
| Heavy Trucks:                                                    | 67.4     | 55.4    | 46.4        | 47.6      | 57.2 | 57.3 |
| Vehicle Noise:                                                   | 69.7     | 64.7    | 61.9        | 56.8      | 65.4 | 65.9 |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 466 |
| 65 dBA                   | 147 |
| 70 dBA                   | 47  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

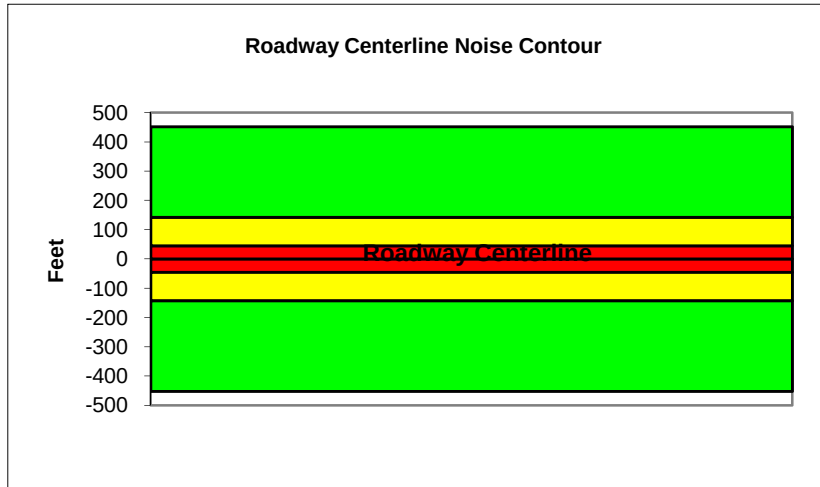
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Jurupa Street  
Road Segment: Between Etiwanda Ave. and Mulberry Ave.

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 14,546 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 1454.6 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 45     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 35     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 54.6        | 63.4        | 61.6        | 55.5        | 64.2        | 64.8        |
| Medium Trucks:                                                   | 62.9        | 54.8        | 48.4        | 46.9        | 55.3        | 55.6        |
| Heavy Trucks:                                                    | 67.4        | 55.5        | 46.4        | 47.6        | 57.2        | 57.3        |
| <b>Vehicle Noise:</b>                                            | <b>69.7</b> | <b>64.7</b> | <b>62.0</b> | <b>56.8</b> | <b>65.4</b> | <b>65.9</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 452 |
| 65 dBA                   | 143 |
| 70 dBA                   | 45  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

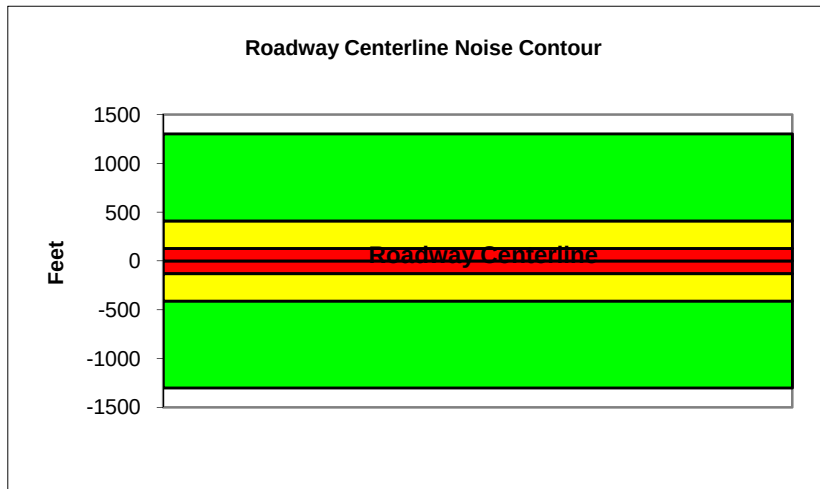
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Jurupa Street  
Road Segment: Between I-15 and Etiwanda Ave.

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 32,297 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 3229.7 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 50     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 45     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 59.2        | 68.0        | 66.2        | 60.1        | 68.8        | 69.4        |
| Medium Trucks:                                                   | 66.9        | 58.8        | 52.5        | 50.9        | 59.4        | 59.6        |
| Heavy Trucks:                                                    | 71.1        | 59.2        | 50.1        | 51.4        | 60.8        | 60.9        |
| <b>Vehicle Noise:</b>                                            | <b>73.4</b> | <b>69.1</b> | <b>66.5</b> | <b>61.2</b> | <b>69.8</b> | <b>70.3</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |      |
|--------------------------|------|
| Unmitigated              |      |
| 60 dBA                   | 1302 |
| 65 dBA                   | 412  |
| 70 dBA                   | 130  |
| Mitigated                |      |
| 60 dBA                   |      |
| 65 dBA                   |      |
| 70 dBA                   |      |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

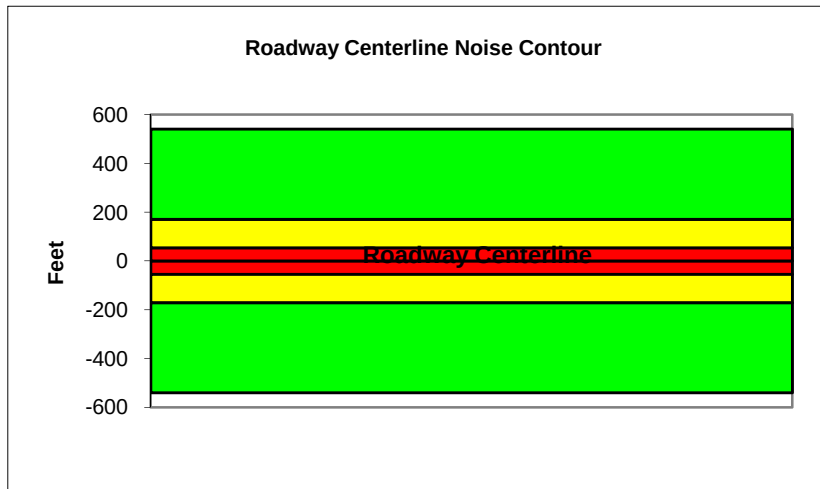
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Jurupa Street  
Road Segment: Between Mulberry Ave. and Cherry Ave.

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 17,399 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 1739.9 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 45     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 40     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 55.3        | 64.1        | 62.3        | 56.2        | 64.9        | 65.5        |
| Medium Trucks:                                                   | 63.6        | 55.5        | 49.1        | 47.6        | 56.0        | 56.3        |
| Heavy Trucks:                                                    | 68.1        | 56.2        | 47.1        | 48.3        | 57.9        | 58.0        |
| <b>Vehicle Noise:</b>                                            | <b>70.4</b> | <b>65.4</b> | <b>62.7</b> | <b>57.5</b> | <b>66.1</b> | <b>66.6</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 541 |
| 65 dBA                   | 171 |
| 70 dBA                   | 54  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |





**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

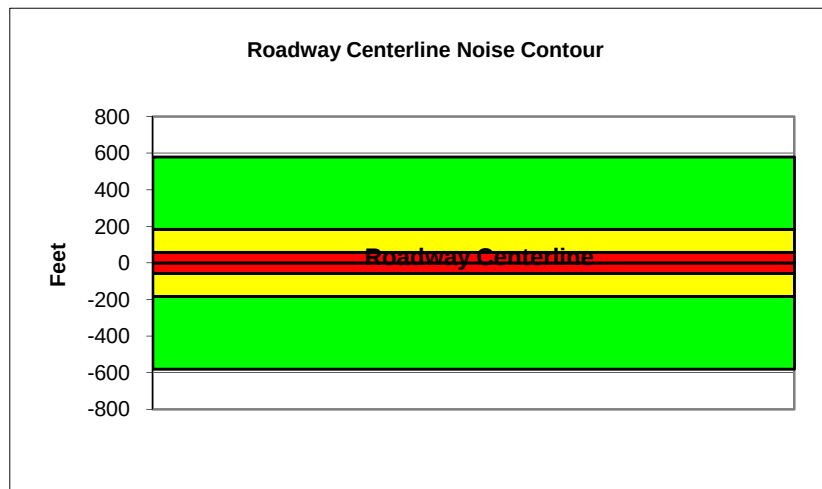
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Mulberry Avenue  
Road Segment: Between Jurupa St. and Philadelphia Ave.

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 14,371 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 1437.1 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 50     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 45     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 55.7        | 64.5        | 62.7        | 56.6        | 65.3        | 65.9        |
| Medium Trucks:                                                   | 63.4        | 55.3        | 48.9        | 47.4        | 55.9        | 56.1        |
| Heavy Trucks:                                                    | 67.6        | 55.7        | 46.6        | 47.8        | 57.2        | 57.4        |
| <b>Vehicle Noise:</b>                                            | <b>69.9</b> | <b>65.6</b> | <b>63.0</b> | <b>57.7</b> | <b>66.3</b> | <b>66.8</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 580 |
| 65 dBA                   | 184 |
| 70 dBA                   | 58  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

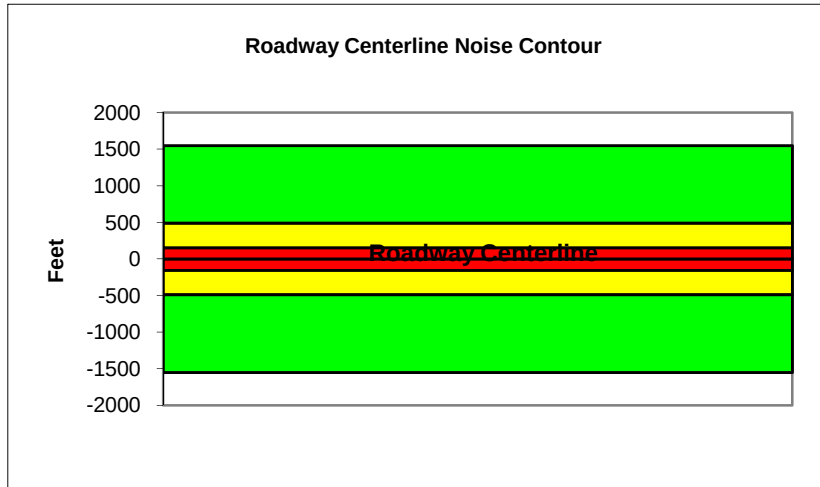
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Mulberry Avenue  
Road Segment: Between Philadelphia Ave. and SR-60

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 30,168 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 3016.8 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 55     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 45     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 60.1        | 68.9        | 67.1        | 61.0        | 69.7        | 70.3        |
| Medium Trucks:                                                   | 67.3        | 59.2        | 52.8        | 51.2        | 59.7        | 60.0        |
| Heavy Trucks:                                                    | 71.2        | 59.3        | 50.2        | 51.4        | 60.7        | 60.8        |
| <b>Vehicle Noise:</b>                                            | <b>73.5</b> | <b>69.8</b> | <b>67.4</b> | <b>62.0</b> | <b>70.6</b> | <b>71.1</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |      |
|--------------------------|------|
| Unmitigated              |      |
| 60 dBA                   | 1551 |
| 65 dBA                   | 491  |
| 70 dBA                   | 155  |
| Mitigated                |      |
| 60 dBA                   |      |
| 65 dBA                   |      |
| 70 dBA                   |      |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

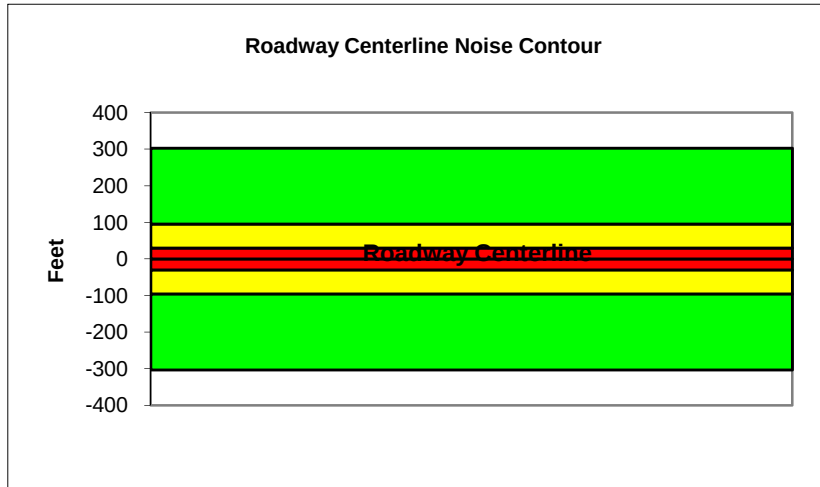
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Mulberry Avenue  
Road Segment: Between Slover Ave. and Jurupa St.

| PROJECT DATA                   |               | SITE DATA                        |       |         |       |        |
|--------------------------------|---------------|----------------------------------|-------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:                      | 0     |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:           | 7,511 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:               | 751.1 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:                   | 50    |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:           | 34    |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS                     |       |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions <b>HARD SITE</b> |       |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                        |       |         |       |        |
| Observer Height (above grade): | 0             | Type                             | Day   | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                             | 0.775 | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                       | 0.848 | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck                      | 0.865 | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                                  |       |         |       |        |
| Medium Trucks:                 | 2.3           |                                  |       |         |       |        |
| Heavy Trucks:                  | 8             |                                  |       |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |          |         |             |           |      |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|------|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn  | CNEL |
| Autos:                                                           | 53.1     | 61.8    | 60.1        | 54.0      | 62.6 | 63.2 |
| Medium Trucks:                                                   | 60.7     | 52.7    | 46.3        | 44.7      | 53.2 | 53.4 |
| Heavy Trucks:                                                    | 65.0     | 53.0    | 44.0        | 45.2      | 54.6 | 54.7 |
| Vehicle Noise:                                                   | 67.3     | 62.9    | 60.4        | 55.1      | 63.7 | 64.2 |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 303 |
| 65 dBA                   | 96  |
| 70 dBA                   | 30  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

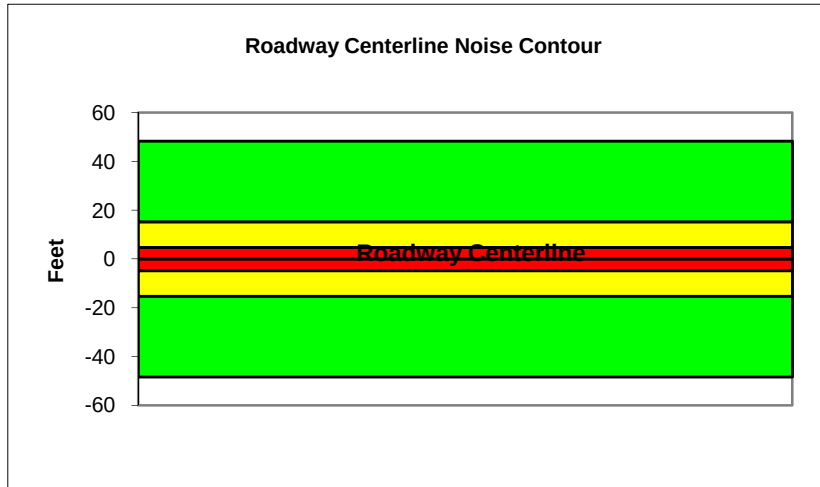
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Philadelphia Avenue  
Road Segment: Between Etiwanda Ave. and Country Village Rd.

| PROJECT DATA                   |               | SITE DATA                        |       |         |       |        |
|--------------------------------|---------------|----------------------------------|-------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:                      | 0     |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:           | 2,063 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:               | 206.3 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:                   | 40    |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:           | 35    |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS                     |       |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions <b>HARD SITE</b> |       |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                        |       |         |       |        |
| Observer Height (above grade): | 0             | Type                             | Day   | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                             | 0.775 | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                       | 0.848 | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck                      | 0.865 | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                                  |       |         |       |        |
| Medium Trucks:                 | 2.3           |                                  |       |         |       |        |
| Heavy Trucks:                  | 8             |                                  |       |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |          |         |             |           |      |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|------|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn  | CNEL |
| Autos:                                                           | 44.6     | 53.4    | 51.6        | 45.6      | 54.2 | 54.8 |
| Medium Trucks:                                                   | 53.6     | 45.5    | 39.2        | 37.6      | 46.1 | 46.3 |
| Heavy Trucks:                                                    | 58.4     | 46.5    | 37.5        | 38.7      | 48.4 | 48.5 |
| Vehicle Noise:                                                   | 60.8     | 55.0    | 52.1        | 47.1      | 55.7 | 56.2 |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |    |
|--------------------------|----|
| Unmitigated              |    |
| 60 dBA                   | 48 |
| 65 dBA                   | 15 |
| 70 dBA                   | 5  |
| Mitigated                |    |
| 60 dBA                   |    |
| 65 dBA                   |    |
| 70 dBA                   |    |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

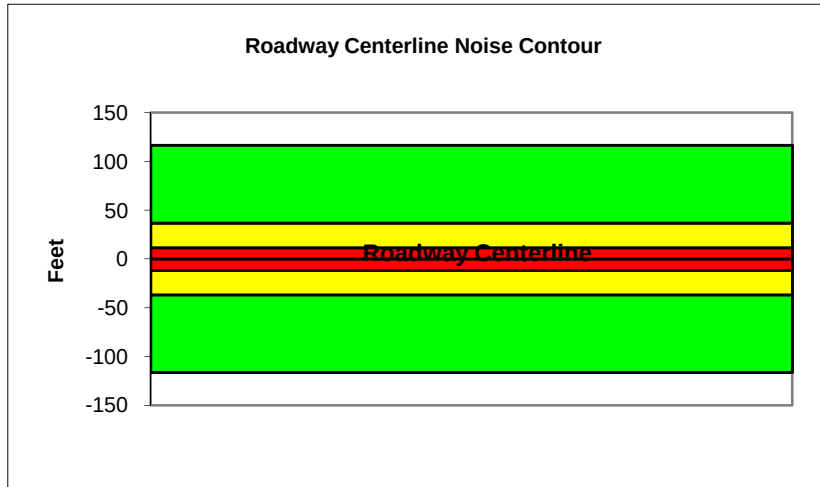
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Philadelphia Avenue  
Road Segment: Between I-15 and Etiwanda Ave.

| PROJECT DATA                   |               |  | SITE DATA                 |       |         |       |        |  |
|--------------------------------|---------------|--|---------------------------|-------|---------|-------|--------|--|
| Centerline Dist to Barrier     | 0             |  | Road Grade:               | 0     |         |       |        |  |
| Barrier (0=wall, 1= berm):     | 0             |  | Average Daily Traffic:    | 3,745 |         |       |        |  |
| Receiver Barrier Dist:         | 0             |  | Peak Hour Traffic:        | 374.5 |         |       |        |  |
| Centerline Dist. To Observer:  | 100           |  | Vehicle Speed:            | 45    |         |       |        |  |
| Barrier Near Lane CL Dist:     | 0             |  | Centerline Separation:    | 30    |         |       |        |  |
| Barrier Far lane CL Dist:      | 0             |  | NOISE INPUTS              |       |         |       |        |  |
| Pad Elevation:                 | 0.5           |  | Site conditions HARD SITE |       |         |       |        |  |
| Road Elevation:                | 0             |  | FLEET MIX                 |       |         |       |        |  |
| Observer Height (above grade): | 0             |  | Type                      | Day   | Evening | Night | Daily  |  |
| Barrier Height:                | 0             |  | Auto                      | 0.775 | 0.129   | 0.096 | 0.9742 |  |
| Rt View: 90                    | Lft View: -90 |  | Med. Truck                | 0.848 | 0.049   | 0.103 | 0.0184 |  |
| NOISE SOURCE ELEVATIONS (Feet) |               |  | Heavy Truck               | 0.865 | 0.027   | 0.108 | 0.0074 |  |
| Autos:                         | 0             |  |                           |       |         |       |        |  |
| Medium Trucks:                 | 2.3           |  |                           |       |         |       |        |  |
| Heavy Trucks:                  | 8             |  |                           |       |         |       |        |  |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 48.8        | 57.6        | 55.8        | 49.7        | 58.4        | 59.0        |
| Medium Trucks:                                                   | 57.1        | 49.0        | 42.6        | 41.0        | 49.5        | 49.8        |
| Heavy Trucks:                                                    | 61.6        | 49.7        | 40.6        | 41.8        | 51.4        | 51.5        |
| <b>Vehicle Noise:</b>                                            | <b>63.9</b> | <b>58.9</b> | <b>56.2</b> | <b>51.0</b> | <b>59.6</b> | <b>60.1</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 116 |
| 65 dBA                   | 37  |
| 70 dBA                   | 12  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

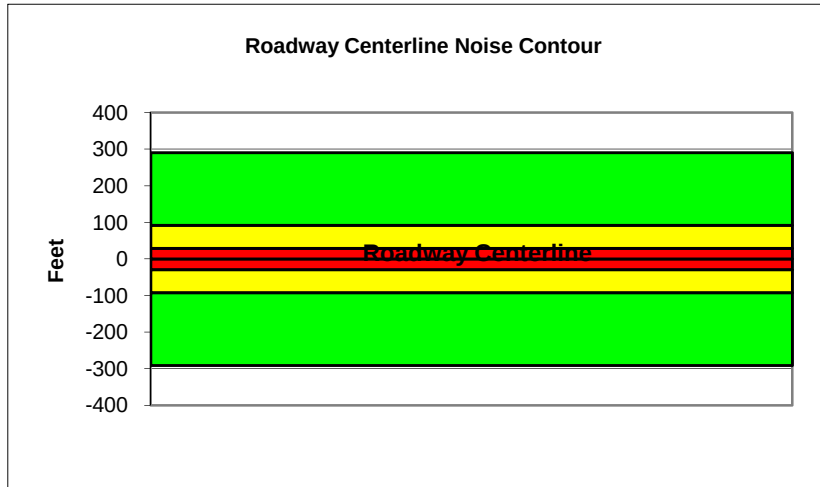
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future  
Analyst: Brian Allee      Job #: 65100340  
Roadway: San Bernardino Avenue  
Road Segment: Between Cherry Ave. and Fontana Ave.

| PROJECT DATA                   |               | SITE DATA                        |       |         |       |        |
|--------------------------------|---------------|----------------------------------|-------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:                      | 0     |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:           | 9,355 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:               | 935.5 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:                   | 45    |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:           | 23    |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS                     |       |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions <b>HARD SITE</b> |       |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                        |       |         |       |        |
| Observer Height (above grade): | 0             | Type                             | Day   | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                             | 0.775 | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                       | 0.848 | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck                      | 0.865 | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                                  |       |         |       |        |
| Medium Trucks:                 | 2.3           |                                  |       |         |       |        |
| Heavy Trucks:                  | 8             |                                  |       |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 52.9        | 61.7        | 59.9        | 53.8        | 62.4        | 63.1        |
| Medium Trucks:                                                   | 61.2        | 53.1        | 46.7        | 45.1        | 53.6        | 53.9        |
| Heavy Trucks:                                                    | 65.7        | 53.7        | 44.7        | 45.9        | 55.5        | 55.6        |
| <b>Vehicle Noise:</b>                                            | <b>68.0</b> | <b>63.0</b> | <b>60.2</b> | <b>55.1</b> | <b>63.7</b> | <b>64.2</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 291 |
| 65 dBA                   | 92  |
| 70 dBA                   | 29  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

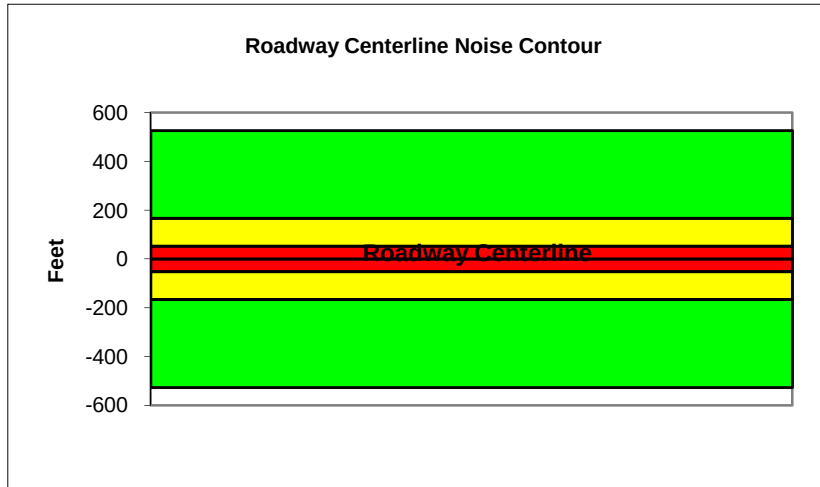
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future  
Analyst: Brian Allee      Job #: 65100340  
Roadway: San Bernardino Avenue  
Road Segment: Between Etiwanda Ave and Cherry Ave

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 13,052 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 1305.2 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 50     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 23     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 55.7        | 64.4        | 62.6        | 56.6        | 65.2        | 65.8        |
| Medium Trucks:                                                   | 63.3        | 55.3        | 48.9        | 47.3        | 55.8        | 56.0        |
| Heavy Trucks:                                                    | 67.6        | 55.6        | 46.6        | 47.8        | 57.2        | 57.3        |
| <b>Vehicle Noise:</b>                                            | <b>69.9</b> | <b>65.5</b> | <b>63.0</b> | <b>57.7</b> | <b>66.3</b> | <b>66.8</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 527 |
| 65 dBA                   | 167 |
| 70 dBA                   | 53  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

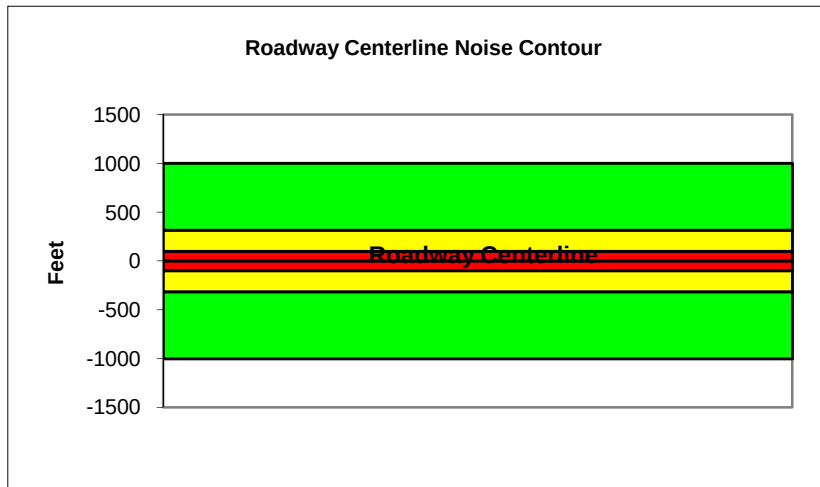
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Sierra Avenue  
Road Segment: Between Jurupa St. and Armstrong Rd.

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 24,796 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 2479.6 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 50     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 45     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 58.1        | 66.9        | 65.1        | 59.0        | 67.6        | 68.2        |
| Medium Trucks:                                                   | 65.8        | 57.7        | 51.3        | 49.7        | 58.2        | 58.5        |
| Heavy Trucks:                                                    | 70.0        | 58.0        | 49.0        | 50.2        | 59.6        | 59.7        |
| <b>Vehicle Noise:</b>                                            | <b>72.3</b> | <b>68.0</b> | <b>65.4</b> | <b>60.1</b> | <b>68.7</b> | <b>69.2</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |      |
|--------------------------|------|
| Unmitigated              |      |
| 60 dBA                   | 1002 |
| 65 dBA                   | 317  |
| 70 dBA                   | 100  |
| Mitigated                |      |
| 60 dBA                   |      |
| 65 dBA                   |      |
| 70 dBA                   |      |





**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

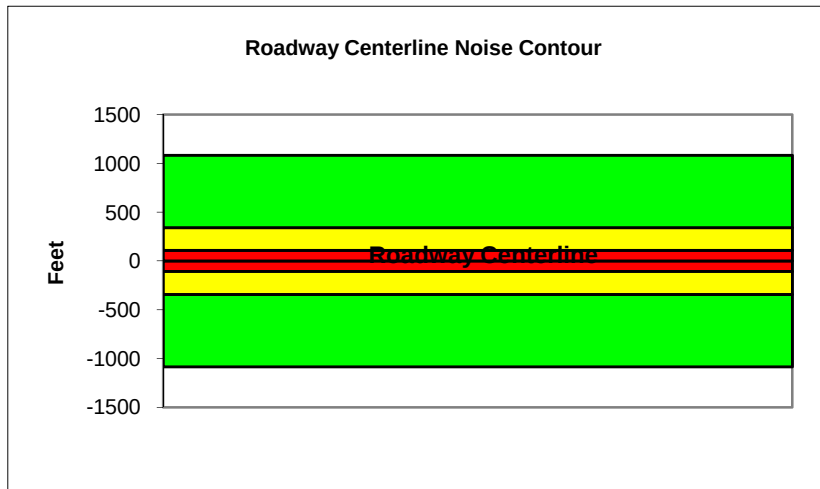
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Sierra Avenue  
Road Segment: Between Slover Ave. and Jurupa St.

| PROJECT DATA                   |               |  | SITE DATA                 |        |         |       |        |  |
|--------------------------------|---------------|--|---------------------------|--------|---------|-------|--------|--|
| Centerline Dist to Barrier     | 0             |  | Road Grade:               | 0      |         |       |        |  |
| Barrier (0=wall, 1= berm):     | 0             |  | Average Daily Traffic:    | 26,853 |         |       |        |  |
| Receiver Barrier Dist:         | 0             |  | Peak Hour Traffic:        | 2685.3 |         |       |        |  |
| Centerline Dist. To Observer:  | 100           |  | Vehicle Speed:            | 50     |         |       |        |  |
| Barrier Near Lane CL Dist:     | 0             |  | Centerline Separation:    | 50     |         |       |        |  |
| Barrier Far lane CL Dist:      | 0             |  | NOISE INPUTS              |        |         |       |        |  |
| Pad Elevation:                 | 0.5           |  | Site conditions HARD SITE |        |         |       |        |  |
| Road Elevation:                | 0             |  | FLEET MIX                 |        |         |       |        |  |
| Observer Height (above grade): | 0             |  | Type                      | Day    | Evening | Night | Daily  |  |
| Barrier Height:                | 0             |  | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |  |
| Rt View: 90                    | Lft View: -90 |  | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |  |
| NOISE SOURCE ELEVATIONS (Feet) |               |  | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |  |
| Autos:                         | 0             |  |                           |        |         |       |        |  |
| Medium Trucks:                 | 2.3           |  |                           |        |         |       |        |  |
| Heavy Trucks:                  | 8             |  |                           |        |         |       |        |  |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |          |         |             |           |      |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|------|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn  | CNEL |
| Autos:                                                           | 58.4     | 67.1    | 65.3        | 59.3      | 67.9 | 68.5 |
| Medium Trucks:                                                   | 66.0     | 58.0    | 51.6        | 50.0      | 58.5 | 58.7 |
| Heavy Trucks:                                                    | 70.3     | 58.3    | 49.3        | 50.5      | 59.9 | 60.0 |
| Vehicle Noise:                                                   | 72.6     | 68.2    | 65.7        | 60.4      | 69.0 | 69.5 |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |      |
|--------------------------|------|
| Unmitigated              |      |
| 60 dBA                   | 1084 |
| 65 dBA                   | 343  |
| 70 dBA                   | 108  |
| Mitigated                |      |
| 60 dBA                   |      |
| 65 dBA                   |      |
| 70 dBA                   |      |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

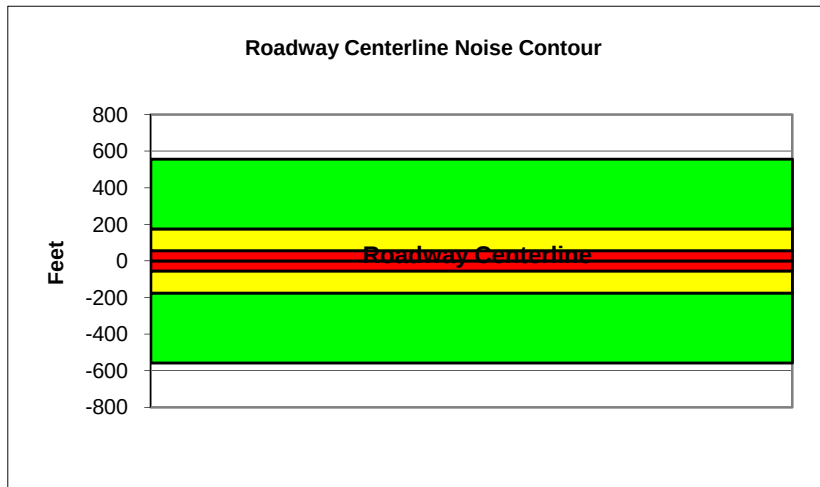
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Slover Avenue  
Road Segment: Between Cherry Ave. and Citrus Ave.

| PROJECT DATA                   |               | SITE DATA                        |        |         |       |        |
|--------------------------------|---------------|----------------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:                      | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:           | 13,811 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:               | 1381.1 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:                   | 50     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:           | 30     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS                     |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions <b>HARD SITE</b> |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                        |        |         |       |        |
| Observer Height (above grade): | 0             | Type                             | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                             | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                       | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck                      | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                                  |        |         |       |        |
| Medium Trucks:                 | 2.3           |                                  |        |         |       |        |
| Heavy Trucks:                  | 8             |                                  |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |          |         |             |           |      |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|------|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn  | CNEL |
| Autos:                                                           | 55.8     | 64.6    | 62.8        | 56.7      | 65.3 | 65.9 |
| Medium Trucks:                                                   | 63.5     | 55.4    | 49.0        | 47.4      | 55.9 | 56.1 |
| Heavy Trucks:                                                    | 67.7     | 55.7    | 46.7        | 47.9      | 57.3 | 57.4 |
| Vehicle Noise:                                                   | 70.0     | 65.7    | 63.1        | 57.8      | 66.4 | 66.9 |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 557 |
| 65 dBA                   | 176 |
| 70 dBA                   | 56  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

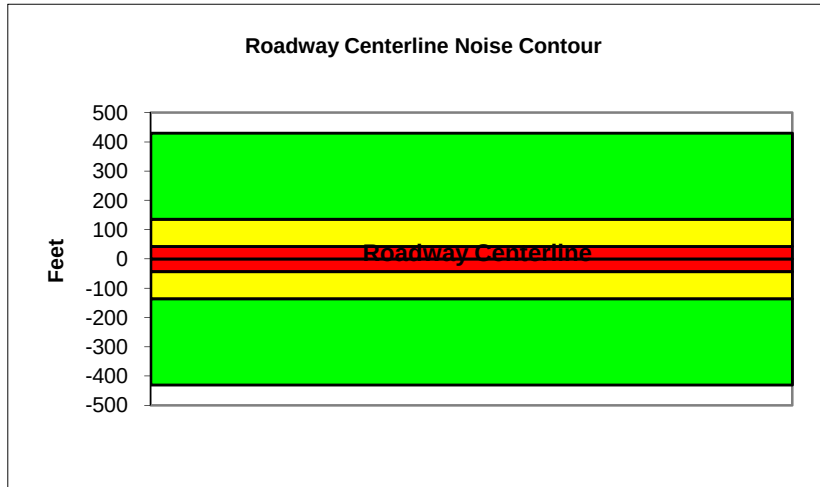
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Slover Avenue  
Road Segment: Between Citrus Ave. and Sierra Ave.

| PROJECT DATA                   |               | SITE DATA                        |        |         |       |        |
|--------------------------------|---------------|----------------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:                      | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:           | 13,856 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:               | 1385.6 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:                   | 45     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:           | 30     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS                     |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions <b>HARD SITE</b> |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                        |        |         |       |        |
| Observer Height (above grade): | 0             | Type                             | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                             | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                       | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck                      | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                                  |        |         |       |        |
| Medium Trucks:                 | 2.3           |                                  |        |         |       |        |
| Heavy Trucks:                  | 8             |                                  |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |          |         |             |           |      |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|------|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn  | CNEL |
| Autos:                                                           | 54.5     | 63.3    | 61.5        | 55.4      | 64.0 | 64.6 |
| Medium Trucks:                                                   | 62.8     | 54.7    | 48.3        | 46.7      | 55.2 | 55.4 |
| Heavy Trucks:                                                    | 67.3     | 55.3    | 46.3        | 47.5      | 57.0 | 57.2 |
| Vehicle Noise:                                                   | 69.6     | 64.6    | 61.8        | 56.7      | 65.3 | 65.8 |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 431 |
| 65 dBA                   | 136 |
| 70 dBA                   | 43  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

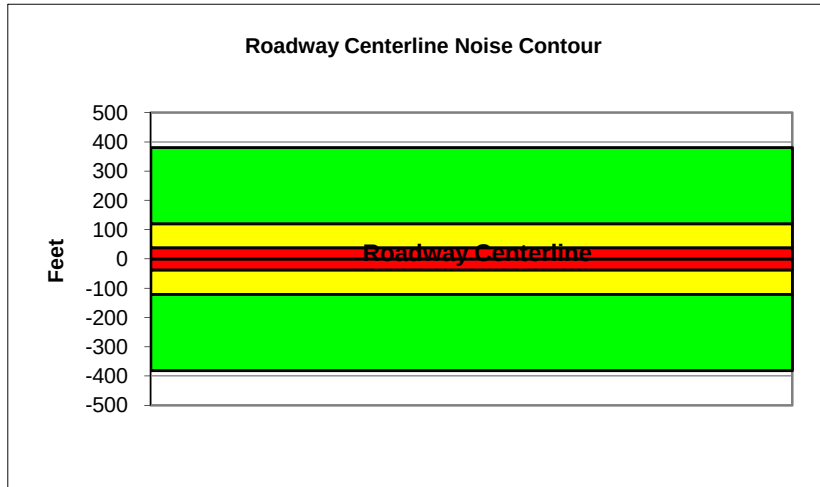
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Slover Avenue  
Road Segment: Between Etiwanda Ave. and Mulberry Ave.

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 12,251 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 1225.1 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 45     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 35     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 53.9        | 62.6        | 60.9        | 54.8        | 63.4        | 64.0        |
| Medium Trucks:                                                   | 62.1        | 54.1        | 47.7        | 46.1        | 54.6        | 54.8        |
| Heavy Trucks:                                                    | 66.7        | 54.7        | 45.7        | 46.9        | 56.4        | 56.6        |
| <b>Vehicle Noise:</b>                                            | <b>69.0</b> | <b>63.9</b> | <b>61.2</b> | <b>56.1</b> | <b>64.7</b> | <b>65.2</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 381 |
| 65 dBA                   | 121 |
| 70 dBA                   | 38  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

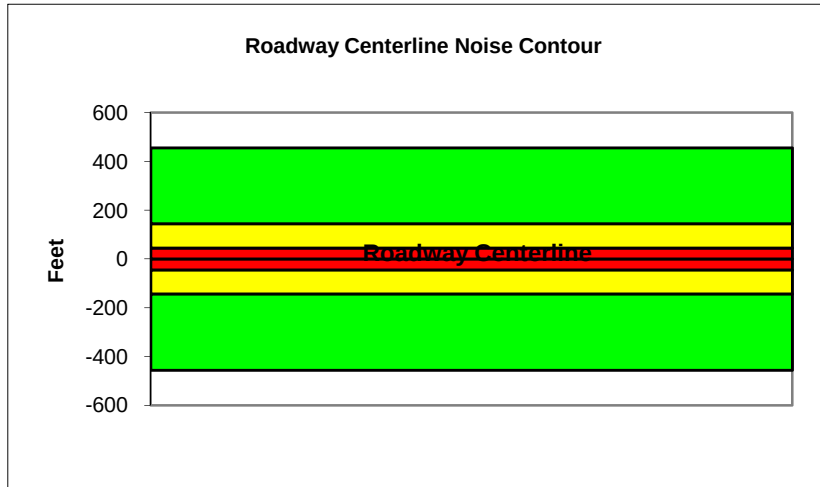
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Slover Avenue  
Road Segment: Between Mulberry Ave. and Cherry Ave.

| PROJECT DATA                   |           |     | SITE DATA                        |        |         |       |        |  |
|--------------------------------|-----------|-----|----------------------------------|--------|---------|-------|--------|--|
| Centerline Dist to Barrier     | 0         |     | Road Grade:                      | 0      |         |       |        |  |
| Barrier (0=wall, 1= berm):     | 0         |     | Average Daily Traffic:           | 11,308 |         |       |        |  |
| Receiver Barrier Dist:         | 0         |     | Peak Hour Traffic:               | 1130.8 |         |       |        |  |
| Centerline Dist. To Observer:  | 100       |     | Vehicle Speed:                   | 50     |         |       |        |  |
| Barrier Near Lane CL Dist:     | 0         |     | Centerline Separation:           | 30     |         |       |        |  |
| Barrier Far lane CL Dist:      | 0         |     | NOISE INPUTS                     |        |         |       |        |  |
| Pad Elevation:                 | 0.5       |     | Site conditions <b>HARD SITE</b> |        |         |       |        |  |
| Road Elevation:                | 0         |     | FLEET MIX                        |        |         |       |        |  |
| Observer Height (above grade): | 0         |     | Type                             | Day    | Evening | Night | Daily  |  |
| Barrier Height:                | 0         |     | Auto                             | 0.775  | 0.129   | 0.096 | 0.9742 |  |
| Rt View: 90                    | Lft View: | -90 | Med. Truck                       | 0.848  | 0.049   | 0.103 | 0.0184 |  |
| NOISE SOURCE ELEVATIONS (Feet) |           |     | Heavy Truck                      | 0.865  | 0.027   | 0.108 | 0.0074 |  |
| Autos:                         | 0         |     |                                  |        |         |       |        |  |
| Medium Trucks:                 | 2.3       |     |                                  |        |         |       |        |  |
| Heavy Trucks:                  | 8         |     |                                  |        |         |       |        |  |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |          |         |             |           |      |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|------|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn  | CNEL |
| Autos:                                                           | 54.9     | 63.7    | 61.9        | 55.8      | 64.5 | 65.1 |
| Medium Trucks:                                                   | 62.6     | 54.5    | 48.1        | 46.6      | 55.0 | 55.3 |
| Heavy Trucks:                                                    | 66.8     | 54.9    | 45.8        | 47.0      | 56.4 | 56.6 |
| Vehicle Noise:                                                   | 69.1     | 64.8    | 62.2        | 56.9      | 65.5 | 66.0 |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 456 |
| 65 dBA                   | 144 |
| 70 dBA                   | 46  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

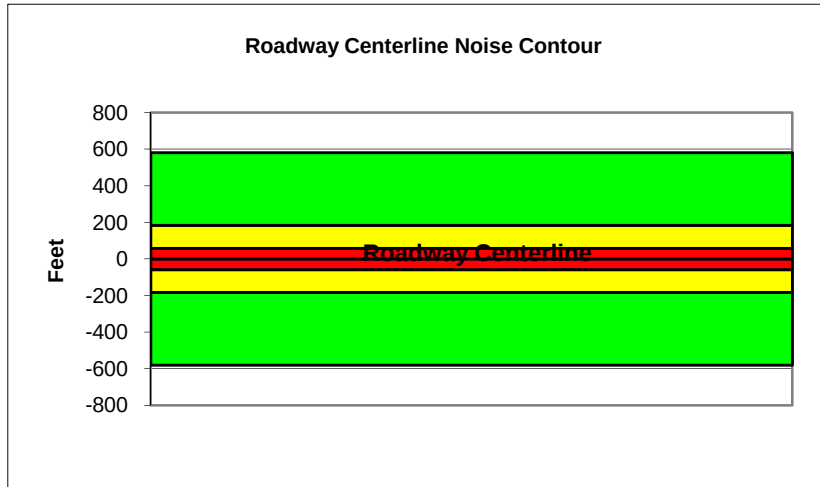
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Armstrong Road  
Road Segment: Between SR-60 and Sierra Ave.

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 24,808 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 2480.8 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 40     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 35     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 55.4        | 64.2        | 62.4        | 56.4        | 65.0        | 65.6        |
| Medium Trucks:                                                   | 64.4        | 56.3        | 50.0        | 48.4        | 56.9        | 57.1        |
| Heavy Trucks:                                                    | 69.2        | 57.3        | 48.3        | 49.5        | 59.2        | 59.3        |
| <b>Vehicle Noise:</b>                                            | <b>71.6</b> | <b>65.8</b> | <b>62.9</b> | <b>57.9</b> | <b>66.5</b> | <b>67.0</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 581 |
| 65 dBA                   | 184 |
| 70 dBA                   | 58  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

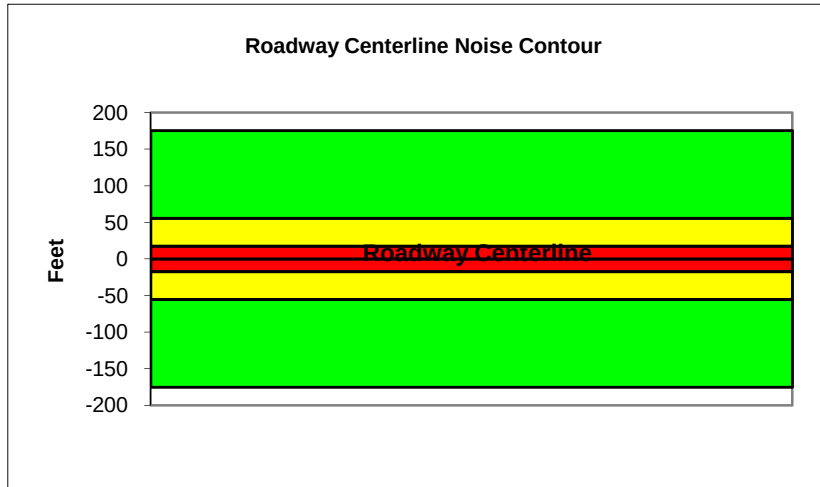
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Beech Avenue  
Road Segment: Between Slover Ave. and Jurupa St.

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 10,171 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 1017.1 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 35     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 22     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 50.1        | 58.9        | 57.1        | 51.0        | 59.7        | 60.3        |
| Medium Trucks:                                                   | 59.8        | 51.8        | 45.4        | 43.8        | 52.3        | 52.5        |
| Heavy Trucks:                                                    | 65.1        | 53.1        | 44.1        | 45.3        | 55.2        | 55.3        |
| <b>Vehicle Noise:</b>                                            | <b>67.5</b> | <b>60.9</b> | <b>57.7</b> | <b>53.0</b> | <b>61.6</b> | <b>62.0</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 175 |
| 65 dBA                   | 55  |
| 70 dBA                   | 18  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

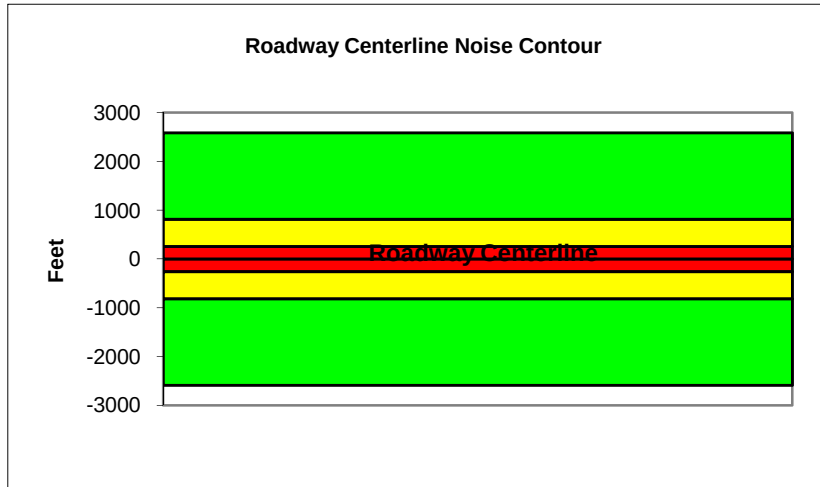
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Cherry Avenue  
Road Segment: Between San Bernardino Ave. and Valley Blvd.

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 64,194 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 6419.4 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 50     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 42     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 62.3        | 71.0        | 69.3        | 63.2        | 71.8        | 72.4        |
| Medium Trucks:                                                   | 69.9        | 61.9        | 55.5        | 53.9        | 62.4        | 62.6        |
| Heavy Trucks:                                                    | 74.2        | 62.2        | 53.2        | 54.4        | 63.8        | 63.9        |
| <b>Vehicle Noise:</b>                                            | <b>76.5</b> | <b>72.1</b> | <b>69.6</b> | <b>64.3</b> | <b>72.9</b> | <b>73.4</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |      |
|--------------------------|------|
| Unmitigated              |      |
| 60 dBA                   | 2589 |
| 65 dBA                   | 819  |
| 70 dBA                   | 259  |
| Mitigated                |      |
| 60 dBA                   |      |
| 65 dBA                   |      |
| 70 dBA                   |      |





**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

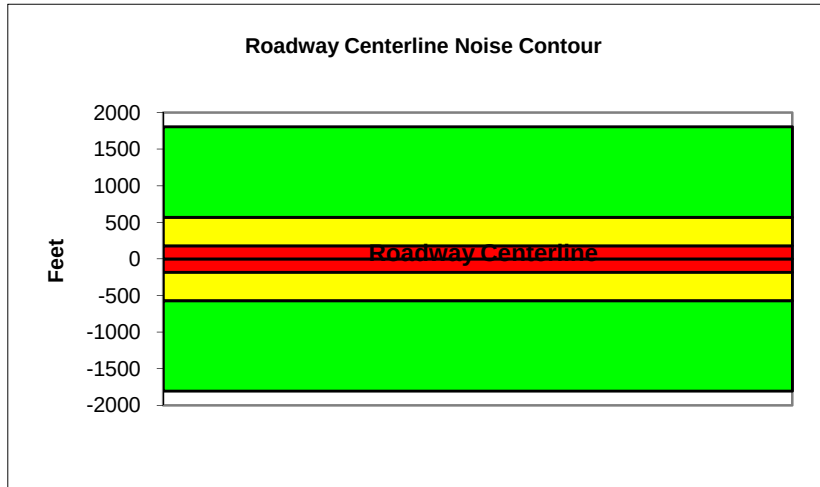
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Cherry Avenue  
Road Segment: Between Slover Ave. and Jurupa St.

| PROJECT DATA                   |               | SITE DATA                        |        |         |       |        |
|--------------------------------|---------------|----------------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:                      | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:           | 58,034 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:               | 5803.4 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:                   | 45     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:           | 43     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS                     |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions <b>HARD SITE</b> |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                        |        |         |       |        |
| Observer Height (above grade): | 0             | Type                             | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                             | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                       | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck                      | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                                  |        |         |       |        |
| Medium Trucks:                 | 2.3           |                                  |        |         |       |        |
| Heavy Trucks:                  | 8             |                                  |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |          |         |             |           |      |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|------|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn  | CNEL |
| Autos:                                                           | 60.5     | 69.3    | 67.5        | 61.4      | 70.0 | 70.7 |
| Medium Trucks:                                                   | 68.8     | 60.7    | 54.3        | 52.7      | 61.2 | 61.5 |
| Heavy Trucks:                                                    | 73.3     | 61.3    | 52.3        | 53.5      | 63.1 | 63.2 |
| Vehicle Noise:                                                   | 75.6     | 70.6    | 67.8        | 62.7      | 71.3 | 71.8 |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |      |
|--------------------------|------|
| Unmitigated              |      |
| 60 dBA                   | 1806 |
| 65 dBA                   | 571  |
| 70 dBA                   | 181  |
| Mitigated                |      |
| 60 dBA                   |      |
| 65 dBA                   |      |
| 70 dBA                   |      |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

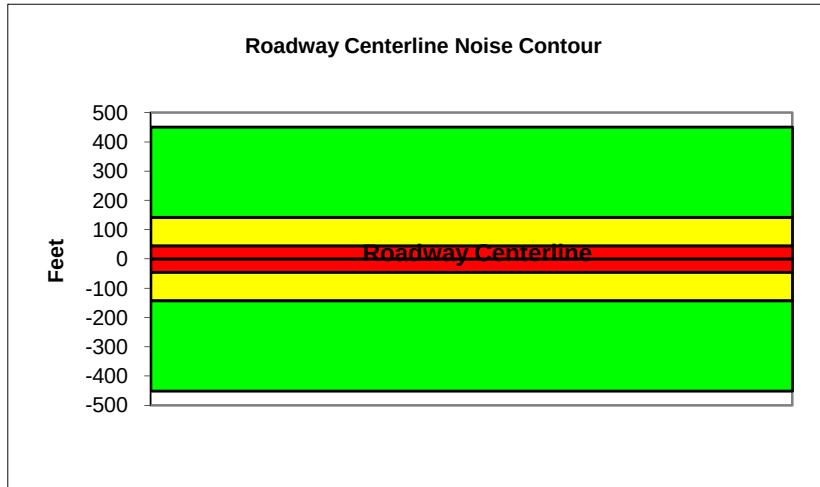
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Citrus Avenue  
Road Segment: Between I-10 and Santa Ana Avenue

| PROJECT DATA                   |           |     | SITE DATA                 |        |         |       |        |  |
|--------------------------------|-----------|-----|---------------------------|--------|---------|-------|--------|--|
| Centerline Dist to Barrier     | 0         |     | Road Grade:               | 0      |         |       |        |  |
| Barrier (0=wall, 1= berm):     | 0         |     | Average Daily Traffic:    | 26,141 |         |       |        |  |
| Receiver Barrier Dist:         | 0         |     | Peak Hour Traffic:        | 2614.1 |         |       |        |  |
| Centerline Dist. To Observer:  | 100       |     | Vehicle Speed:            | 35     |         |       |        |  |
| Barrier Near Lane CL Dist:     | 0         |     | Centerline Separation:    | 23     |         |       |        |  |
| Barrier Far lane CL Dist:      | 0         |     | NOISE INPUTS              |        |         |       |        |  |
| Pad Elevation:                 | 0.5       |     | Site conditions HARD SITE |        |         |       |        |  |
| Road Elevation:                | 0         |     | FLEET MIX                 |        |         |       |        |  |
| Observer Height (above grade): | 0         |     | Type                      | Day    | Evening | Night | Daily  |  |
| Barrier Height:                | 0         |     | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |  |
| Rt View: 90                    | Lft View: | -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |  |
| NOISE SOURCE ELEVATIONS (Feet) |           |     | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |  |
| Autos:                         | 0         |     |                           |        |         |       |        |  |
| Medium Trucks:                 | 2.3       |     |                           |        |         |       |        |  |
| Heavy Trucks:                  | 8         |     |                           |        |         |       |        |  |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 54.2        | 63.0        | 61.2        | 55.1        | 63.8        | 64.4        |
| Medium Trucks:                                                   | 63.9        | 55.9        | 49.5        | 47.9        | 56.4        | 56.6        |
| Heavy Trucks:                                                    | 69.1        | 57.2        | 48.2        | 49.4        | 59.3        | 59.4        |
| <b>Vehicle Noise:</b>                                            | <b>71.6</b> | <b>64.9</b> | <b>61.8</b> | <b>57.1</b> | <b>65.6</b> | <b>66.1</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 451 |
| 65 dBA                   | 143 |
| 70 dBA                   | 45  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

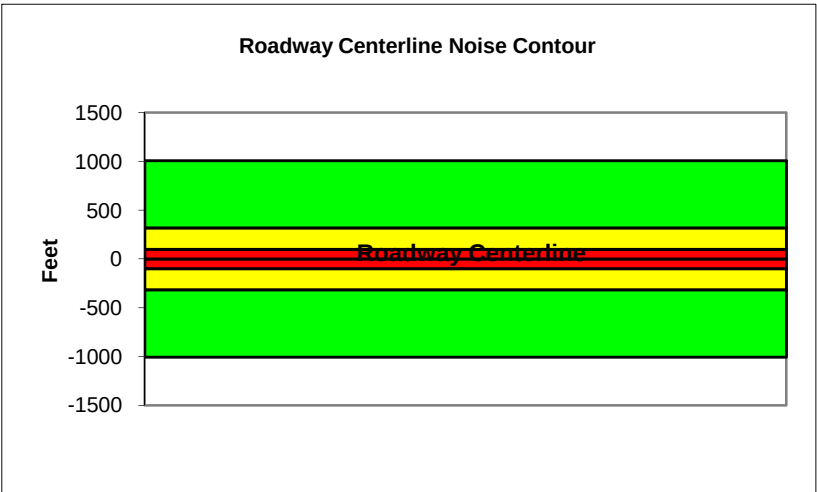
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Citrus Avenue  
Road Segment: Between San Bernardino Ave. and Valley Blvd.

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 43,006 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 4300.6 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 40     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 23     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 58.0        | 66.8        | 65.0        | 58.9        | 67.6        | 68.2        |
| Medium Trucks:                                                   | 67.0        | 58.9        | 52.5        | 51.0        | 59.5        | 59.7        |
| Heavy Trucks:                                                    | 71.8        | 59.9        | 50.8        | 52.1        | 61.8        | 61.9        |
| <b>Vehicle Noise:</b>                                            | <b>74.2</b> | <b>68.4</b> | <b>65.5</b> | <b>60.5</b> | <b>69.1</b> | <b>69.6</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |      |
|--------------------------|------|
| Unmitigated              |      |
| 60 dBA                   | 1007 |
| 65 dBA                   | 318  |
| 70 dBA                   | 101  |
| Mitigated                |      |
| 60 dBA                   |      |
| 65 dBA                   |      |
| 70 dBA                   |      |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

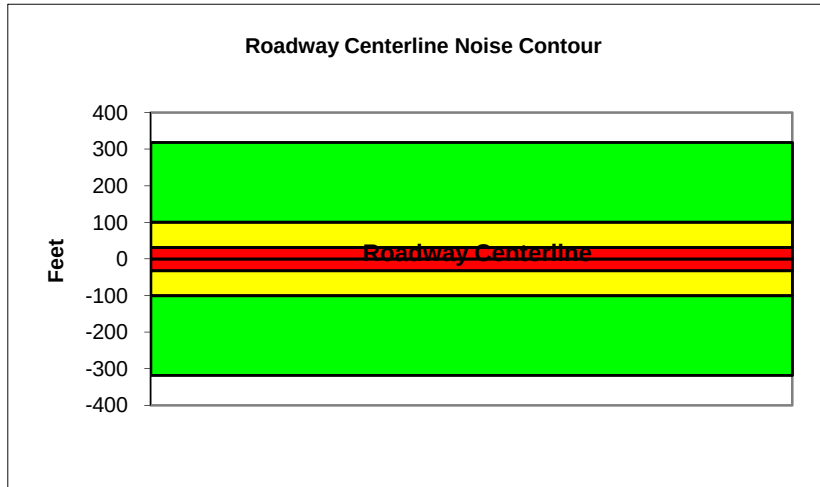
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Citrus Avenue  
Road Segment: Between Santa Ana Ave. and Jurupa St.

| PROJECT DATA                   |           |     | SITE DATA                 |        |         |       |        |  |
|--------------------------------|-----------|-----|---------------------------|--------|---------|-------|--------|--|
| Centerline Dist to Barrier     | 0         |     | Road Grade:               | 0      |         |       |        |  |
| Barrier (0=wall, 1= berm):     | 0         |     | Average Daily Traffic:    | 18,483 |         |       |        |  |
| Receiver Barrier Dist:         | 0         |     | Peak Hour Traffic:        | 1848.3 |         |       |        |  |
| Centerline Dist. To Observer:  | 100       |     | Vehicle Speed:            | 35     |         |       |        |  |
| Barrier Near Lane CL Dist:     | 0         |     | Centerline Separation:    | 23     |         |       |        |  |
| Barrier Far lane CL Dist:      | 0         |     | NOISE INPUTS              |        |         |       |        |  |
| Pad Elevation:                 | 0.5       |     | Site conditions HARD SITE |        |         |       |        |  |
| Road Elevation:                | 0         |     | FLEET MIX                 |        |         |       |        |  |
| Observer Height (above grade): | 0         |     | Type                      | Day    | Evening | Night | Daily  |  |
| Barrier Height:                | 0         |     | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |  |
| Rt View: 90                    | Lft View: | -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |  |
| NOISE SOURCE ELEVATIONS (Feet) |           |     | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |  |
| Autos:                         | 0         |     |                           |        |         |       |        |  |
| Medium Trucks:                 | 2.3       |     |                           |        |         |       |        |  |
| Heavy Trucks:                  | 8         |     |                           |        |         |       |        |  |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 52.7        | 61.5        | 59.7        | 53.6        | 62.3        | 62.9        |
| Medium Trucks:                                                   | 62.4        | 54.4        | 48.0        | 46.4        | 54.9        | 55.1        |
| Heavy Trucks:                                                    | 67.6        | 55.7        | 46.6        | 47.9        | 57.8        | 57.9        |
| <b>Vehicle Noise:</b>                                            | <b>70.1</b> | <b>63.4</b> | <b>60.3</b> | <b>55.6</b> | <b>64.1</b> | <b>64.6</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 318 |
| 65 dBA                   | 101 |
| 70 dBA                   | 32  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

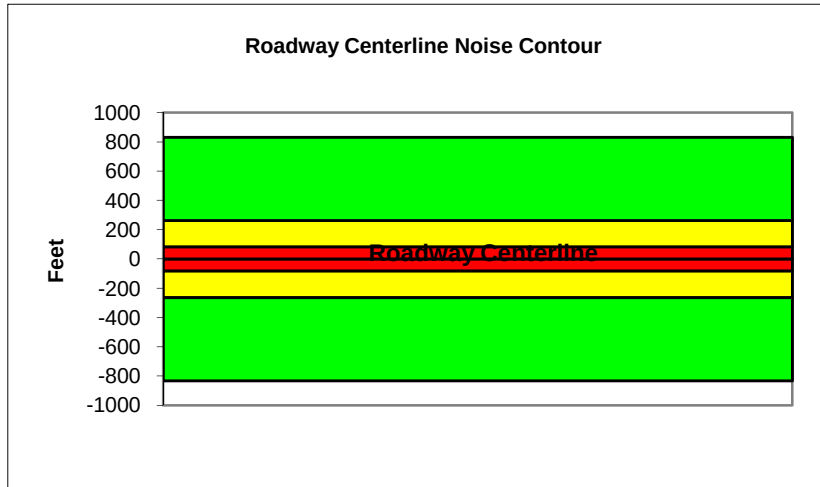
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: East Airport Drive  
Road Segment: Between I-15 and Etiwanda Ave.

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 26,753 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 2675.3 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 45     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 23     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 57.5        | 66.2        | 64.4        | 58.4        | 67.0        | 67.6        |
| Medium Trucks:                                                   | 65.7        | 57.7        | 51.3        | 49.7        | 58.2        | 58.4        |
| Heavy Trucks:                                                    | 70.2        | 58.3        | 49.3        | 50.5        | 60.0        | 60.1        |
| <b>Vehicle Noise:</b>                                            | <b>72.6</b> | <b>67.5</b> | <b>64.8</b> | <b>59.7</b> | <b>68.3</b> | <b>68.8</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 832 |
| 65 dBA                   | 263 |
| 70 dBA                   | 83  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

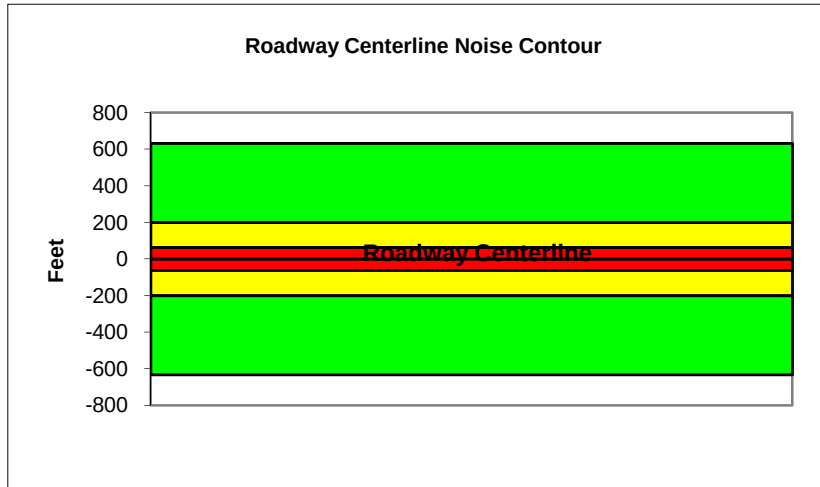
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Etiwanda Avenue  
Road Segment: Between Jurupa St. and Philadelphia Ave.

| PROJECT DATA                   |           |     | SITE DATA                 |        |         |       |        |  |
|--------------------------------|-----------|-----|---------------------------|--------|---------|-------|--------|--|
| Centerline Dist to Barrier     | 0         |     | Road Grade:               | 0      |         |       |        |  |
| Barrier (0=wall, 1= berm):     | 0         |     | Average Daily Traffic:    | 20,327 |         |       |        |  |
| Receiver Barrier Dist:         | 0         |     | Peak Hour Traffic:        | 2032.7 |         |       |        |  |
| Centerline Dist. To Observer:  | 100       |     | Vehicle Speed:            | 45     |         |       |        |  |
| Barrier Near Lane CL Dist:     | 0         |     | Centerline Separation:    | 42     |         |       |        |  |
| Barrier Far lane CL Dist:      | 0         |     | NOISE INPUTS              |        |         |       |        |  |
| Pad Elevation:                 | 0.5       |     | Site conditions HARD SITE |        |         |       |        |  |
| Road Elevation:                | 0         |     | FLEET MIX                 |        |         |       |        |  |
| Observer Height (above grade): | 0         |     | Type                      | Day    | Evening | Night | Daily  |  |
| Barrier Height:                | 0         |     | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |  |
| Rt View: 90                    | Lft View: | -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |  |
| NOISE SOURCE ELEVATIONS (Feet) |           |     | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |  |
| Autos:                         | 0         |     |                           |        |         |       |        |  |
| Medium Trucks:                 | 2.3       |     |                           |        |         |       |        |  |
| Heavy Trucks:                  | 8         |     |                           |        |         |       |        |  |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 55.9        | 64.7        | 62.9        | 56.9        | 65.5        | 66.1        |
| Medium Trucks:                                                   | 64.2        | 56.2        | 49.8        | 48.2        | 56.7        | 56.9        |
| Heavy Trucks:                                                    | 68.7        | 56.8        | 47.8        | 49.0        | 58.5        | 58.6        |
| <b>Vehicle Noise:</b>                                            | <b>71.1</b> | <b>66.0</b> | <b>63.3</b> | <b>58.2</b> | <b>66.7</b> | <b>67.3</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 633 |
| 65 dBA                   | 200 |
| 70 dBA                   | 63  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

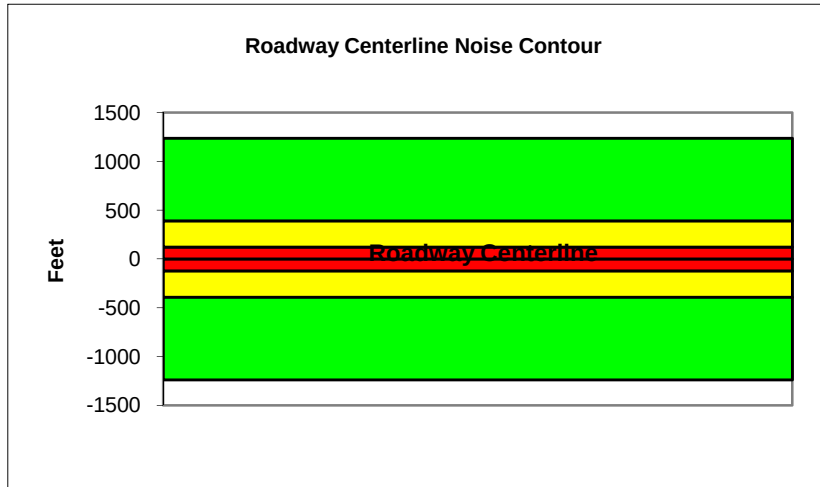
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Etiwanda Avenue  
Road Segment: Between Philadelphia Ave. and SR-60

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 24,079 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 2407.9 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 55     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 45     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 59.1        | 67.9        | 66.1        | 60.1        | 68.7        | 69.3        |
| Medium Trucks:                                                   | 66.3        | 58.2        | 51.8        | 50.3        | 58.7        | 59.0        |
| Heavy Trucks:                                                    | 70.2        | 58.3        | 49.2        | 50.5        | 59.7        | 59.8        |
| <b>Vehicle Noise:</b>                                            | <b>72.5</b> | <b>68.9</b> | <b>66.4</b> | <b>61.0</b> | <b>69.6</b> | <b>70.1</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |      |
|--------------------------|------|
| Unmitigated              |      |
| 60 dBA                   | 1238 |
| 65 dBA                   | 391  |
| 70 dBA                   | 124  |
| Mitigated                |      |
| 60 dBA                   |      |
| 65 dBA                   |      |
| 70 dBA                   |      |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

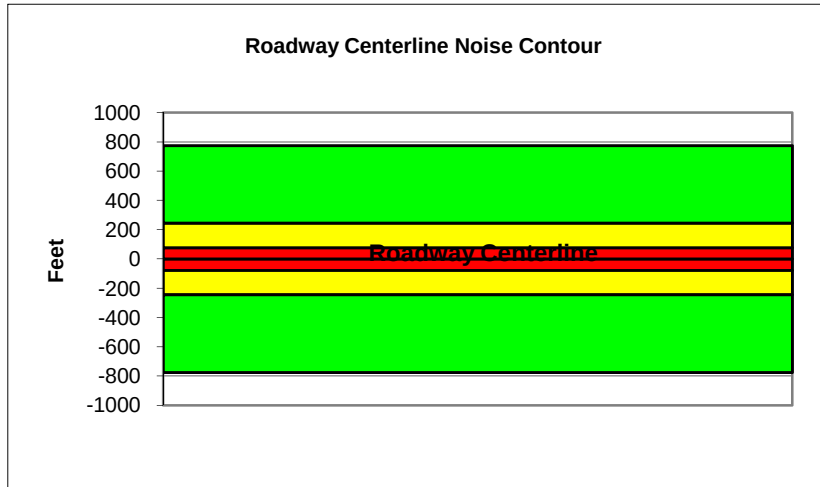
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Etiwanda Avenue  
Road Segment: Between San Bernardino Ave and Valley Blvd

| PROJECT DATA                   |               |  | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|--|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             |  | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             |  | Average Daily Traffic:    | 24,950 |         |       |        |
| Receiver Barrier Dist:         | 0             |  | Peak Hour Traffic:        | 2495   |         |       |        |
| Centerline Dist. To Observer:  | 100           |  | Vehicle Speed:            | 45     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             |  | Centerline Separation:    | 24     |         |       |        |
| Barrier Far lane CL Dist:      | 0             |  | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           |  | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             |  | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             |  | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             |  | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 |  | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               |  | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |  |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |  |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |  |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 57.1        | 65.9        | 64.1        | 58.0        | 66.7        | 67.3        |
| Medium Trucks:                                                   | 65.4        | 57.3        | 51.0        | 49.4        | 57.9        | 58.1        |
| Heavy Trucks:                                                    | 69.9        | 58.0        | 48.9        | 50.2        | 59.7        | 59.8        |
| <b>Vehicle Noise:</b>                                            | <b>72.3</b> | <b>67.2</b> | <b>64.5</b> | <b>59.3</b> | <b>67.9</b> | <b>68.4</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 776 |
| 65 dBA                   | 245 |
| 70 dBA                   | 78  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |





**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

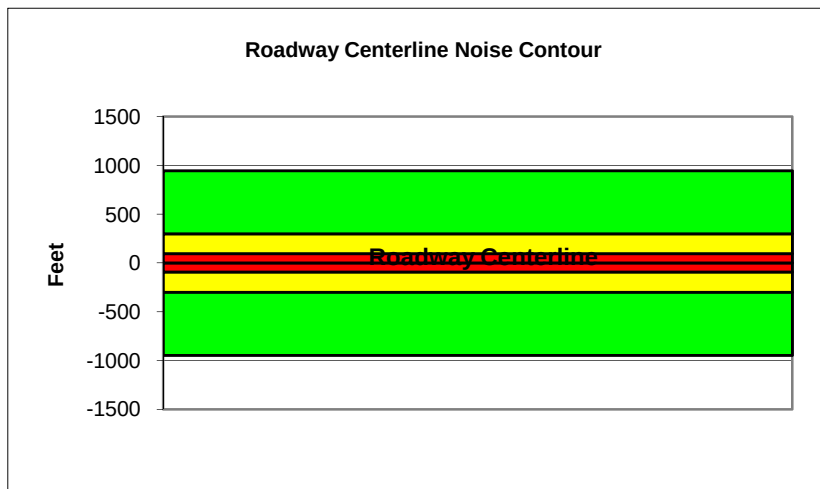
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Etiwanda Avenue  
Road Segment: Between Slover Ave. and Jurupa St.

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 30,415 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 3041.5 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 45     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 38     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 57.8        | 66.5        | 64.8        | 58.7        | 67.3        | 67.9        |
| Medium Trucks:                                                   | 66.0        | 58.0        | 51.6        | 50.0        | 58.5        | 58.7        |
| Heavy Trucks:                                                    | 70.6        | 58.6        | 49.6        | 50.8        | 60.3        | 60.5        |
| <b>Vehicle Noise:</b>                                            | <b>72.9</b> | <b>67.8</b> | <b>65.1</b> | <b>60.0</b> | <b>68.6</b> | <b>69.1</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 946 |
| 65 dBA                   | 299 |
| 70 dBA                   | 95  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

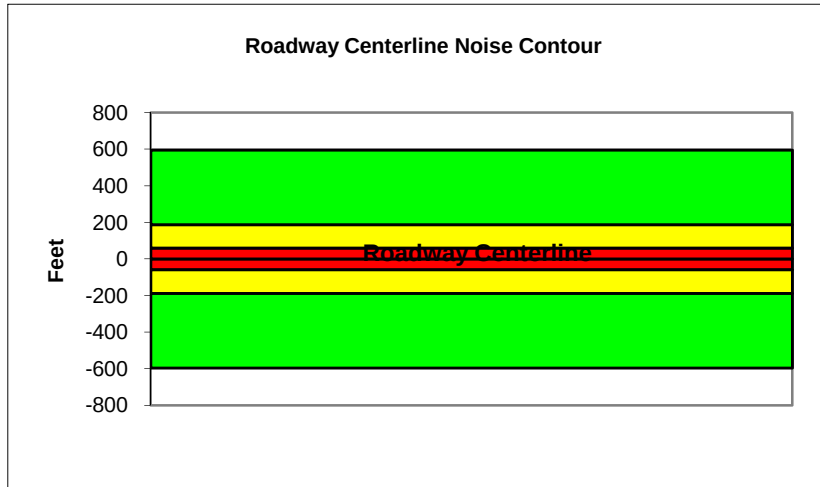
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Fourth Street  
Road Segment: Between I-15 and Etiwanda Ave

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 14,746 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 1474.6 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 50     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 30     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 56.1        | 64.8        | 63.1        | 57.0        | 65.6        | 66.2        |
| Medium Trucks:                                                   | 63.7        | 55.7        | 49.3        | 47.7        | 56.2        | 56.4        |
| Heavy Trucks:                                                    | 68.0        | 56.0        | 47.0        | 48.2        | 57.6        | 57.7        |
| <b>Vehicle Noise:</b>                                            | <b>70.3</b> | <b>65.9</b> | <b>63.4</b> | <b>58.1</b> | <b>66.7</b> | <b>67.2</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 596 |
| 65 dBA                   | 188 |
| 70 dBA                   | 60  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

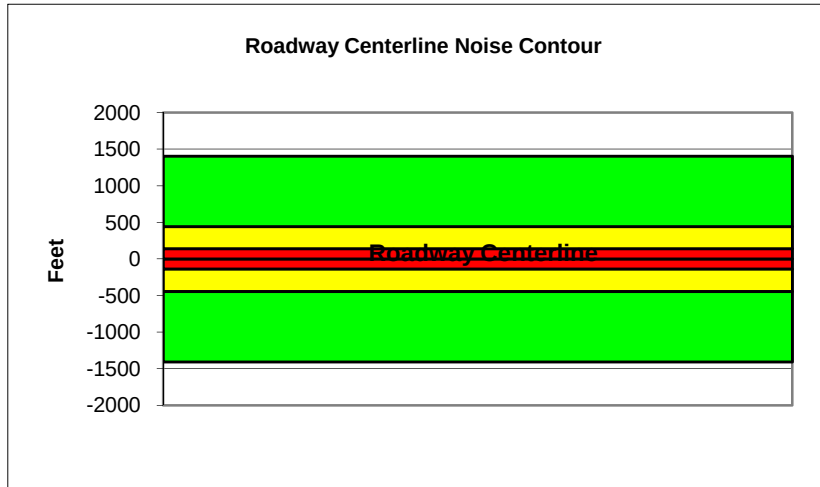
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Jurupa Street  
Road Segment: Between Cherry Ave. and Citrus Ave.

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 45,211 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 4521.1 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 45     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 48     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 59.3        | 68.1        | 66.3        | 60.2        | 68.9        | 69.5        |
| Medium Trucks:                                                   | 67.6        | 59.5        | 53.2        | 51.6        | 60.1        | 60.3        |
| Heavy Trucks:                                                    | 72.1        | 60.2        | 51.1        | 52.4        | 61.9        | 62.0        |
| <b>Vehicle Noise:</b>                                            | <b>74.5</b> | <b>69.4</b> | <b>66.7</b> | <b>61.5</b> | <b>70.1</b> | <b>70.6</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |      |
|--------------------------|------|
| Unmitigated              |      |
| 60 dBA                   | 1407 |
| 65 dBA                   | 445  |
| 70 dBA                   | 141  |
| Mitigated                |      |
| 60 dBA                   |      |
| 65 dBA                   |      |
| 70 dBA                   |      |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

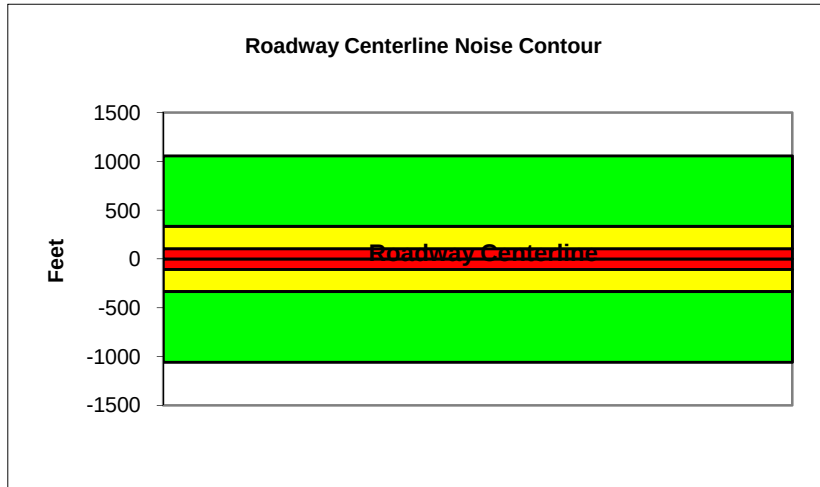
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Jurupa Street  
Road Segment: Between Citrus Ave. and Sierra Ave.

| PROJECT DATA                   |               | SITE DATA                        |        |         |       |        |
|--------------------------------|---------------|----------------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:                      | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:           | 34,009 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:               | 3400.9 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:                   | 45     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:           | 45     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS                     |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions <b>HARD SITE</b> |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                        |        |         |       |        |
| Observer Height (above grade): | 0             | Type                             | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                             | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                       | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck                      | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                                  |        |         |       |        |
| Medium Trucks:                 | 2.3           |                                  |        |         |       |        |
| Heavy Trucks:                  | 8             |                                  |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |          |         |             |           |      |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|------|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn  | CNEL |
| Autos:                                                           | 58.1     | 66.9    | 65.1        | 59.0      | 67.7 | 68.3 |
| Medium Trucks:                                                   | 66.4     | 58.3    | 52.0        | 50.4      | 58.9 | 59.1 |
| Heavy Trucks:                                                    | 70.9     | 59.0    | 49.9        | 51.2      | 60.7 | 60.8 |
| Vehicle Noise:                                                   | 73.3     | 68.2    | 65.5        | 60.3      | 68.9 | 69.4 |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |      |
|--------------------------|------|
| Unmitigated              |      |
| 60 dBA                   | 1059 |
| 65 dBA                   | 335  |
| 70 dBA                   | 106  |
| Mitigated                |      |
| 60 dBA                   |      |
| 65 dBA                   |      |
| 70 dBA                   |      |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

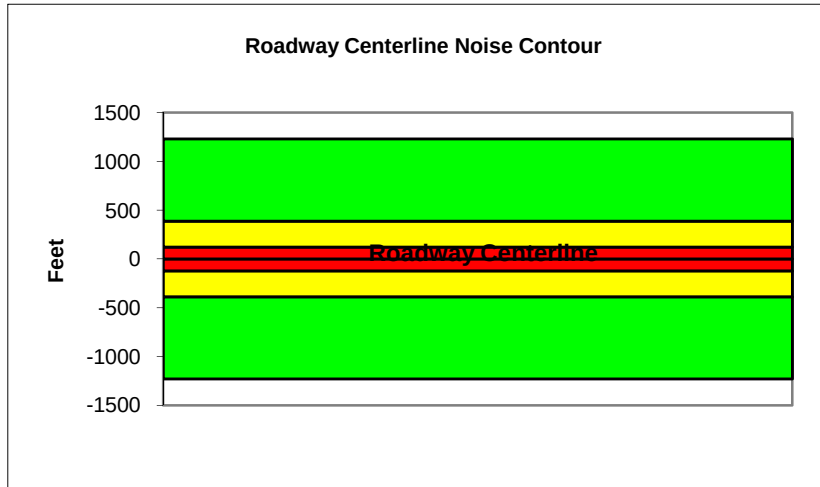
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Jurupa Street  
Road Segment: Between Etiwanda Ave. and Mulberry Ave.

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 39,560 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 3956   |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 45     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 35     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 58.9        | 67.7        | 65.9        | 59.9        | 68.5        | 69.1        |
| Medium Trucks:                                                   | 67.2        | 59.2        | 52.8        | 51.2        | 59.7        | 59.9        |
| Heavy Trucks:                                                    | 71.7        | 59.8        | 50.8        | 52.0        | 61.5        | 61.6        |
| <b>Vehicle Noise:</b>                                            | <b>74.1</b> | <b>69.0</b> | <b>66.3</b> | <b>61.2</b> | <b>69.8</b> | <b>70.3</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |      |
|--------------------------|------|
| Unmitigated              |      |
| 60 dBA                   | 1231 |
| 65 dBA                   | 389  |
| 70 dBA                   | 123  |
| Mitigated                |      |
| 60 dBA                   |      |
| 65 dBA                   |      |
| 70 dBA                   |      |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

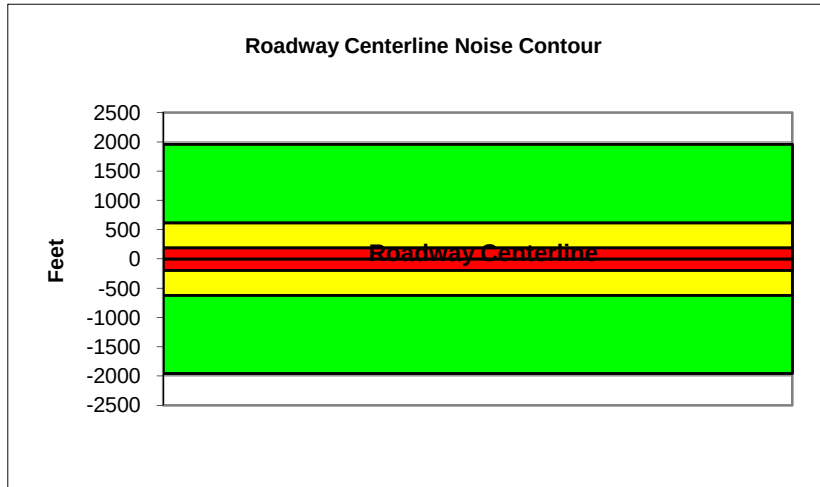
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Jurupa Street  
Road Segment: Between I-15 and Etiwanda Ave.

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 48,529 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 4852.9 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 50     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 45     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 61.0        | 69.8        | 68.0        | 61.9        | 70.6        | 71.2        |
| Medium Trucks:                                                   | 68.7        | 60.6        | 54.2        | 52.6        | 61.1        | 61.4        |
| Heavy Trucks:                                                    | 72.9        | 61.0        | 51.9        | 53.1        | 62.5        | 62.6        |
| <b>Vehicle Noise:</b>                                            | <b>75.2</b> | <b>70.9</b> | <b>68.3</b> | <b>63.0</b> | <b>71.6</b> | <b>72.1</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |      |
|--------------------------|------|
| Unmitigated              |      |
| 60 dBA                   | 1958 |
| 65 dBA                   | 619  |
| 70 dBA                   | 196  |
| Mitigated                |      |
| 60 dBA                   |      |
| 65 dBA                   |      |
| 70 dBA                   |      |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

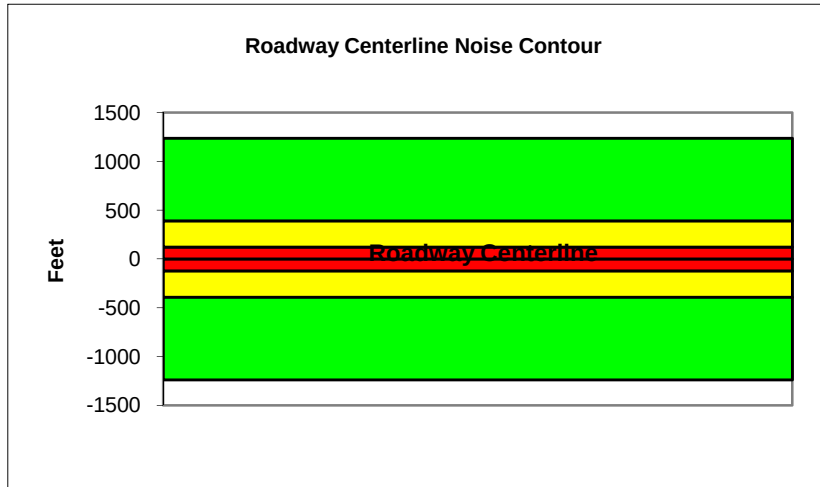
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Jurupa Street  
Road Segment: Between Mulberry Ave. and Cherry Ave.

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 39,816 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 3981.6 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 45     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 40     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 58.9        | 67.7        | 65.9        | 59.8        | 68.5        | 69.1        |
| Medium Trucks:                                                   | 67.2        | 59.1        | 52.7        | 51.2        | 59.6        | 59.9        |
| Heavy Trucks:                                                    | 71.7        | 59.8        | 50.7        | 51.9        | 61.5        | 61.6        |
| <b>Vehicle Noise:</b>                                            | <b>74.0</b> | <b>69.0</b> | <b>66.3</b> | <b>61.1</b> | <b>69.7</b> | <b>70.2</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |      |
|--------------------------|------|
| Unmitigated              |      |
| 60 dBA                   | 1239 |
| 65 dBA                   | 392  |
| 70 dBA                   | 124  |
| Mitigated                |      |
| 60 dBA                   |      |
| 65 dBA                   |      |
| 70 dBA                   |      |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

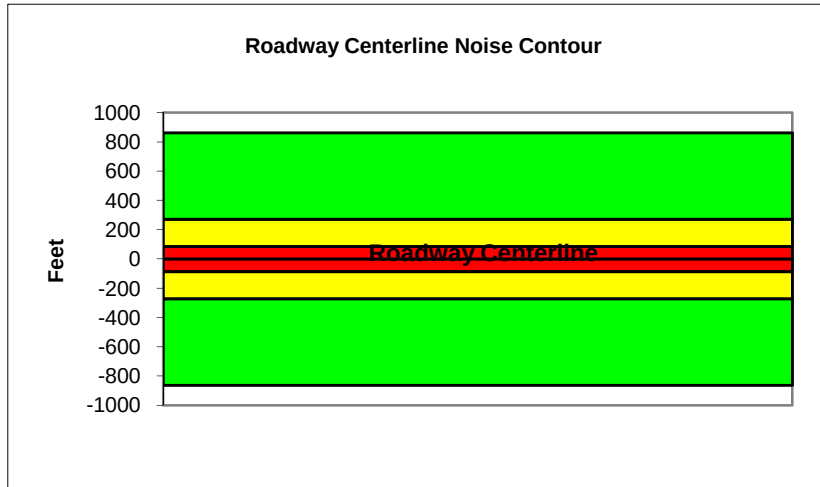
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Mulberry Avenue  
Road Segment: Between Jurupa St. and Philadelphia Ave.

| PROJECT DATA                   |           |     | SITE DATA                 |       |         |       |        |
|--------------------------------|-----------|-----|---------------------------|-------|---------|-------|--------|
| Centerline Dist to Barrier     | 0         |     | Road Grade:               |       | 0       |       |        |
| Barrier (0=wall, 1= berm):     | 0         |     | Average Daily Traffic:    |       | 21,389  |       |        |
| Receiver Barrier Dist:         | 0         |     | Peak Hour Traffic:        |       | 2138.9  |       |        |
| Centerline Dist. To Observer:  | 100       |     | Vehicle Speed:            |       | 50      |       |        |
| Barrier Near Lane CL Dist:     | 0         |     | Centerline Separation:    |       | 45      |       |        |
| Barrier Far lane CL Dist:      | 0         |     | NOISE INPUTS              |       |         |       |        |
| Pad Elevation:                 | 0.5       |     | Site conditions HARD SITE |       |         |       |        |
| Road Elevation:                | 0         |     | FLEET MIX                 |       |         |       |        |
| Observer Height (above grade): | 0         |     | Type                      | Day   | Evening | Night | Daily  |
| Barrier Height:                | 0         |     | Auto                      | 0.775 | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: | -90 | Med. Truck                | 0.848 | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |           |     | Heavy Truck               | 0.865 | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0         |     |                           |       |         |       |        |
| Medium Trucks:                 | 2.3       |     |                           |       |         |       |        |
| Heavy Trucks:                  | 8         |     |                           |       |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 57.4        | 66.2        | 64.4        | 58.3        | 67.0        | 67.6        |
| Medium Trucks:                                                   | 65.1        | 57.0        | 50.7        | 49.1        | 57.6        | 57.8        |
| Heavy Trucks:                                                    | 69.3        | 57.4        | 48.3        | 49.6        | 59.0        | 59.1        |
| <b>Vehicle Noise:</b>                                            | <b>71.7</b> | <b>67.3</b> | <b>64.7</b> | <b>59.4</b> | <b>68.0</b> | <b>68.6</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 862 |
| 65 dBA                   | 273 |
| 70 dBA                   | 86  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |





**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

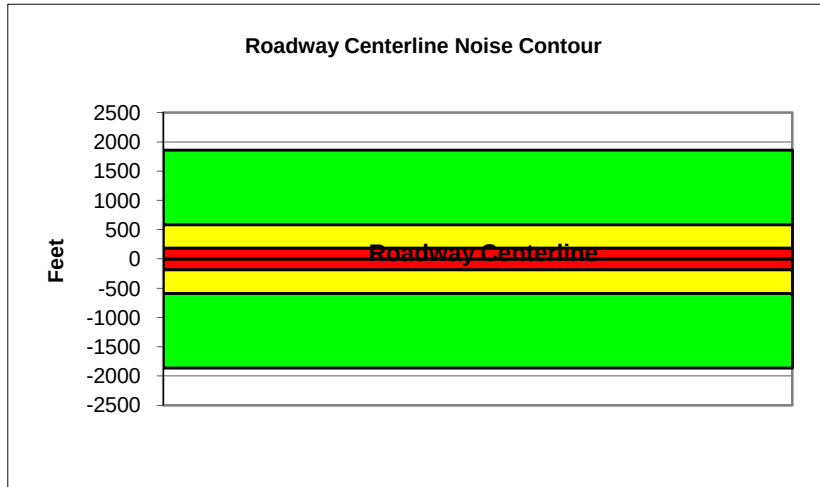
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Mulberry Avenue  
Road Segment: Between Philadelphia Ave. and SR-60

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 36,194 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 3619.4 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 55     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 45     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 60.9        | 69.7        | 67.9        | 61.8        | 70.5        | 71.1        |
| Medium Trucks:                                                   | 68.0        | 60.0        | 53.6        | 52.0        | 60.5        | 60.7        |
| Heavy Trucks:                                                    | 72.0        | 60.1        | 51.0        | 52.2        | 61.5        | 61.6        |
| <b>Vehicle Noise:</b>                                            | <b>74.3</b> | <b>70.6</b> | <b>68.2</b> | <b>62.8</b> | <b>71.4</b> | <b>71.9</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |      |
|--------------------------|------|
| Unmitigated              |      |
| 60 dBA                   | 1861 |
| 65 dBA                   | 588  |
| 70 dBA                   | 186  |
| Mitigated                |      |
| 60 dBA                   |      |
| 65 dBA                   |      |
| 70 dBA                   |      |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

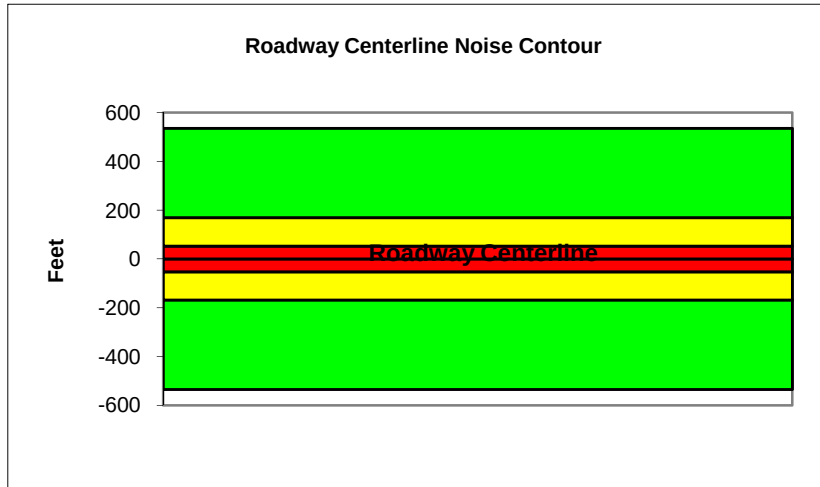
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Mulberry Avenue  
Road Segment: Between Slover Ave. and Jurupa St.

| PROJECT DATA                   |               |  | SITE DATA                 |        |         |       |        |  |
|--------------------------------|---------------|--|---------------------------|--------|---------|-------|--------|--|
| Centerline Dist to Barrier     | 0             |  | Road Grade:               | 0      |         |       |        |  |
| Barrier (0=wall, 1= berm):     | 0             |  | Average Daily Traffic:    | 13,276 |         |       |        |  |
| Receiver Barrier Dist:         | 0             |  | Peak Hour Traffic:        | 1327.6 |         |       |        |  |
| Centerline Dist. To Observer:  | 100           |  | Vehicle Speed:            | 50     |         |       |        |  |
| Barrier Near Lane CL Dist:     | 0             |  | Centerline Separation:    | 34     |         |       |        |  |
| Barrier Far lane CL Dist:      | 0             |  | NOISE INPUTS              |        |         |       |        |  |
| Pad Elevation:                 | 0.5           |  | Site conditions HARD SITE |        |         |       |        |  |
| Road Elevation:                | 0             |  | FLEET MIX                 |        |         |       |        |  |
| Observer Height (above grade): | 0             |  | Type                      | Day    | Evening | Night | Daily  |  |
| Barrier Height:                | 0             |  | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |  |
| Rt View: 90                    | Lft View: -90 |  | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |  |
| NOISE SOURCE ELEVATIONS (Feet) |               |  | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |  |
| Autos:                         | 0             |  |                           |        |         |       |        |  |
| Medium Trucks:                 | 2.3           |  |                           |        |         |       |        |  |
| Heavy Trucks:                  | 8             |  |                           |        |         |       |        |  |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 55.5        | 64.3        | 62.5        | 56.4        | 65.1        | 65.7        |
| Medium Trucks:                                                   | 63.2        | 55.1        | 48.8        | 47.2        | 55.7        | 55.9        |
| Heavy Trucks:                                                    | 67.4        | 55.5        | 46.4        | 47.7        | 57.1        | 57.2        |
| <b>Vehicle Noise:</b>                                            | <b>69.8</b> | <b>65.4</b> | <b>62.8</b> | <b>57.5</b> | <b>66.1</b> | <b>66.7</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 535 |
| 65 dBA                   | 169 |
| 70 dBA                   | 54  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

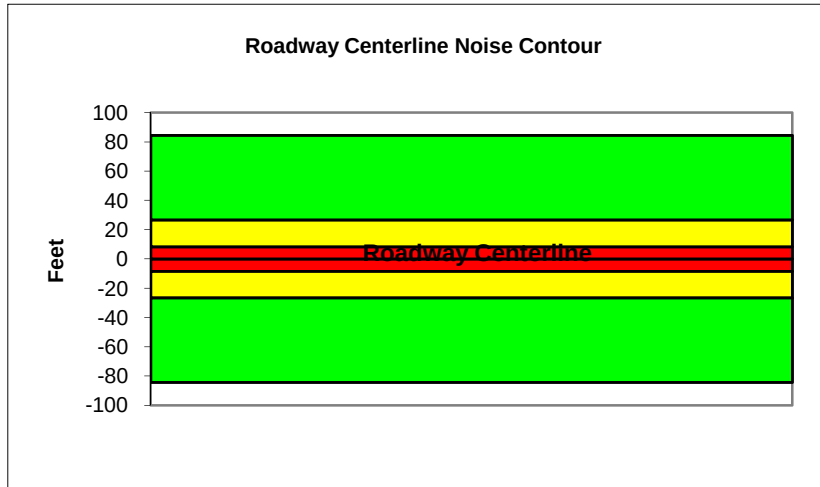
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Philadelphia Avenue  
Road Segment: Between Etiwanda Ave. and Country Village Rd.

| PROJECT DATA                   |               | SITE DATA                 |       |         |       |        |
|--------------------------------|---------------|---------------------------|-------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0     |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 3,601 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 360.1 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 40    |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 35    |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |       |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |       |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |       |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day   | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775 | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848 | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865 | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |       |         |       |        |
| Medium Trucks:                 | 2.3           |                           |       |         |       |        |
| Heavy Trucks:                  | 8             |                           |       |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 47.1        | 55.8        | 54.1        | 48.0        | 56.6        | 57.2        |
| Medium Trucks:                                                   | 56.0        | 48.0        | 41.6        | 40.0        | 48.5        | 48.7        |
| Heavy Trucks:                                                    | 60.9        | 48.9        | 39.9        | 41.1        | 50.8        | 50.9        |
| <b>Vehicle Noise:</b>                                            | <b>63.2</b> | <b>57.4</b> | <b>54.5</b> | <b>49.6</b> | <b>58.1</b> | <b>58.6</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |    |
|--------------------------|----|
| Unmitigated              |    |
| 60 dBA                   | 84 |
| 65 dBA                   | 27 |
| 70 dBA                   | 8  |
| Mitigated                |    |
| 60 dBA                   |    |
| 65 dBA                   |    |
| 70 dBA                   |    |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

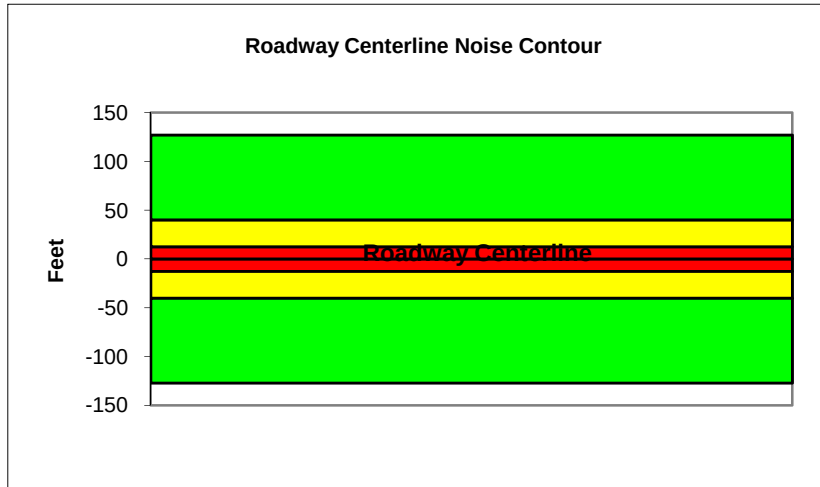
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Philadelphia Avenue  
Road Segment: Between I-15 and Etiwanda Ave.

| PROJECT DATA                   |               |  | SITE DATA                 |       |         |       |        |  |
|--------------------------------|---------------|--|---------------------------|-------|---------|-------|--------|--|
| Centerline Dist to Barrier     | 0             |  | Road Grade:               | 0     |         |       |        |  |
| Barrier (0=wall, 1= berm):     | 0             |  | Average Daily Traffic:    | 4,087 |         |       |        |  |
| Receiver Barrier Dist:         | 0             |  | Peak Hour Traffic:        | 408.7 |         |       |        |  |
| Centerline Dist. To Observer:  | 100           |  | Vehicle Speed:            | 45    |         |       |        |  |
| Barrier Near Lane CL Dist:     | 0             |  | Centerline Separation:    | 30    |         |       |        |  |
| Barrier Far lane CL Dist:      | 0             |  | NOISE INPUTS              |       |         |       |        |  |
| Pad Elevation:                 | 0.5           |  | Site conditions HARD SITE |       |         |       |        |  |
| Road Elevation:                | 0             |  | FLEET MIX                 |       |         |       |        |  |
| Observer Height (above grade): | 0             |  | Type                      | Day   | Evening | Night | Daily  |  |
| Barrier Height:                | 0             |  | Auto                      | 0.775 | 0.129   | 0.096 | 0.9742 |  |
| Rt View: 90                    | Lft View: -90 |  | Med. Truck                | 0.848 | 0.049   | 0.103 | 0.0184 |  |
| NOISE SOURCE ELEVATIONS (Feet) |               |  | Heavy Truck               | 0.865 | 0.027   | 0.108 | 0.0074 |  |
| Autos:                         | 0             |  |                           |       |         |       |        |  |
| Medium Trucks:                 | 2.3           |  |                           |       |         |       |        |  |
| Heavy Trucks:                  | 8             |  |                           |       |         |       |        |  |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 49.2        | 58.0        | 56.2        | 50.1        | 58.7        | 59.3        |
| Medium Trucks:                                                   | 57.4        | 49.4        | 43.0        | 41.4        | 49.9        | 50.1        |
| Heavy Trucks:                                                    | 62.0        | 50.0        | 41.0        | 42.2        | 51.7        | 51.9        |
| <b>Vehicle Noise:</b>                                            | <b>64.3</b> | <b>59.3</b> | <b>56.5</b> | <b>51.4</b> | <b>60.0</b> | <b>60.5</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 127 |
| 65 dBA                   | 40  |
| 70 dBA                   | 13  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

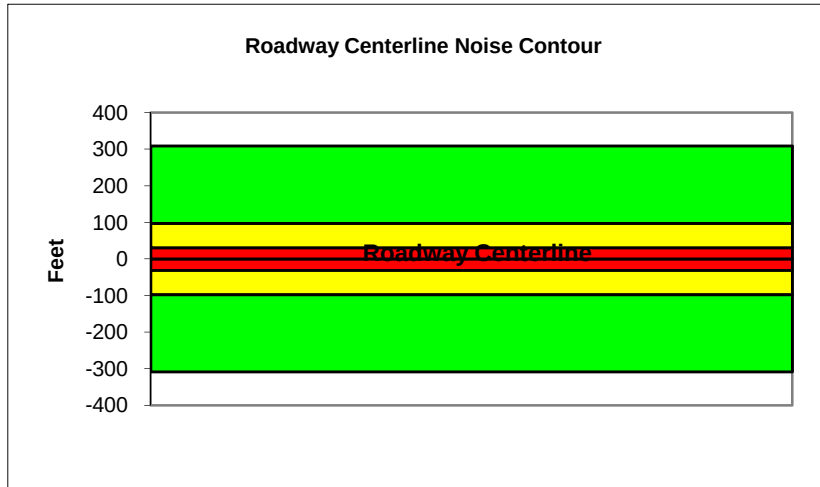
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: San Bernardino Avenue  
Road Segment: Between Cherry Ave. and Fontana Ave.

| PROJECT DATA                   |               | SITE DATA                 |       |         |       |        |
|--------------------------------|---------------|---------------------------|-------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0     |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 9,941 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 994.1 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 45    |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 23    |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |       |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |       |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |       |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day   | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775 | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848 | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865 | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |       |         |       |        |
| Medium Trucks:                 | 2.3           |                           |       |         |       |        |
| Heavy Trucks:                  | 8             |                           |       |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 53.2        | 61.9        | 60.1        | 54.1        | 62.7        | 63.3        |
| Medium Trucks:                                                   | 61.4        | 53.4        | 47.0        | 45.4        | 53.9        | 54.1        |
| Heavy Trucks:                                                    | 65.9        | 54.0        | 45.0        | 46.2        | 55.7        | 55.8        |
| <b>Vehicle Noise:</b>                                            | <b>68.3</b> | <b>63.2</b> | <b>60.5</b> | <b>55.4</b> | <b>64.0</b> | <b>64.5</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 309 |
| 65 dBA                   | 98  |
| 70 dBA                   | 31  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

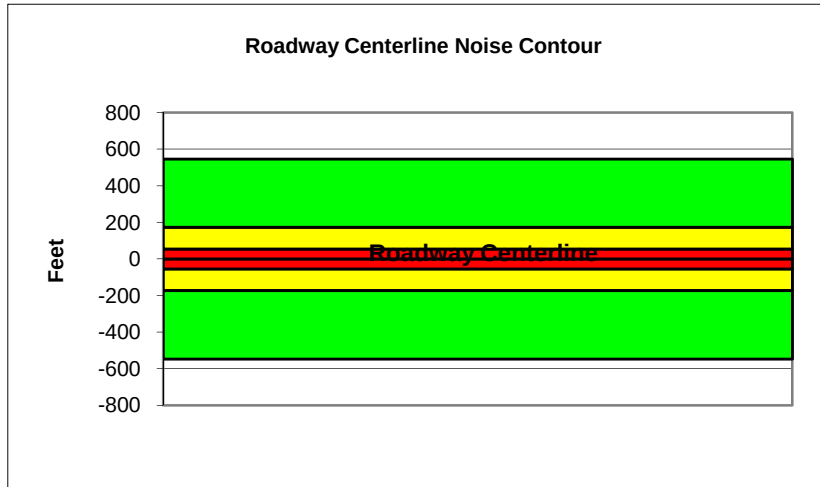
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: San Bernardino Avenue  
Road Segment: Between Etiwanda Ave and Cherry Ave

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 13,554 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 1355.4 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 50     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 23     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 55.8        | 64.6        | 62.8        | 56.7        | 65.4        | 66.0        |
| Medium Trucks:                                                   | 63.5        | 55.4        | 49.0        | 47.5        | 56.0        | 56.2        |
| Heavy Trucks:                                                    | 67.7        | 55.8        | 46.7        | 47.9        | 57.3        | 57.5        |
| <b>Vehicle Noise:</b>                                            | <b>70.0</b> | <b>65.7</b> | <b>63.1</b> | <b>57.8</b> | <b>66.4</b> | <b>66.9</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 547 |
| 65 dBA                   | 173 |
| 70 dBA                   | 55  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

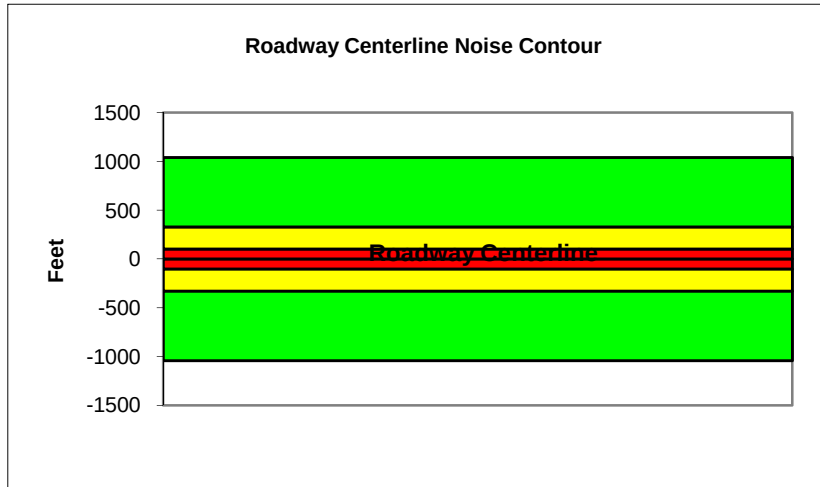
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Sierra Avenue  
Road Segment: Between Jurupa St. and Armstrong Rd.

| PROJECT DATA                   |               |  | SITE DATA                 |        |         |       |        |  |
|--------------------------------|---------------|--|---------------------------|--------|---------|-------|--------|--|
| Centerline Dist to Barrier     | 0             |  | Road Grade:               | 0      |         |       |        |  |
| Barrier (0=wall, 1= berm):     | 0             |  | Average Daily Traffic:    | 25,820 |         |       |        |  |
| Receiver Barrier Dist:         | 0             |  | Peak Hour Traffic:        | 2582   |         |       |        |  |
| Centerline Dist. To Observer:  | 100           |  | Vehicle Speed:            | 50     |         |       |        |  |
| Barrier Near Lane CL Dist:     | 0             |  | Centerline Separation:    | 45     |         |       |        |  |
| Barrier Far lane CL Dist:      | 0             |  | NOISE INPUTS              |        |         |       |        |  |
| Pad Elevation:                 | 0.5           |  | Site conditions HARD SITE |        |         |       |        |  |
| Road Elevation:                | 0             |  | FLEET MIX                 |        |         |       |        |  |
| Observer Height (above grade): | 0             |  | Type                      | Day    | Evening | Night | Daily  |  |
| Barrier Height:                | 0             |  | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |  |
| Rt View: 90                    | Lft View: -90 |  | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |  |
| NOISE SOURCE ELEVATIONS (Feet) |               |  | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |  |
| Autos:                         | 0             |  |                           |        |         |       |        |  |
| Medium Trucks:                 | 2.3           |  |                           |        |         |       |        |  |
| Heavy Trucks:                  | 8             |  |                           |        |         |       |        |  |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 58.3        | 67.0        | 65.3        | 59.2        | 67.8        | 68.4        |
| Medium Trucks:                                                   | 65.9        | 57.9        | 51.5        | 49.9        | 58.4        | 58.6        |
| Heavy Trucks:                                                    | 70.2        | 58.2        | 49.2        | 50.4        | 59.8        | 59.9        |
| <b>Vehicle Noise:</b>                                            | <b>72.5</b> | <b>68.1</b> | <b>65.6</b> | <b>60.3</b> | <b>68.9</b> | <b>69.4</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |      |
|--------------------------|------|
| Unmitigated              |      |
| 60 dBA                   | 1042 |
| 65 dBA                   | 329  |
| 70 dBA                   | 104  |
| Mitigated                |      |
| 60 dBA                   |      |
| 65 dBA                   |      |
| 70 dBA                   |      |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

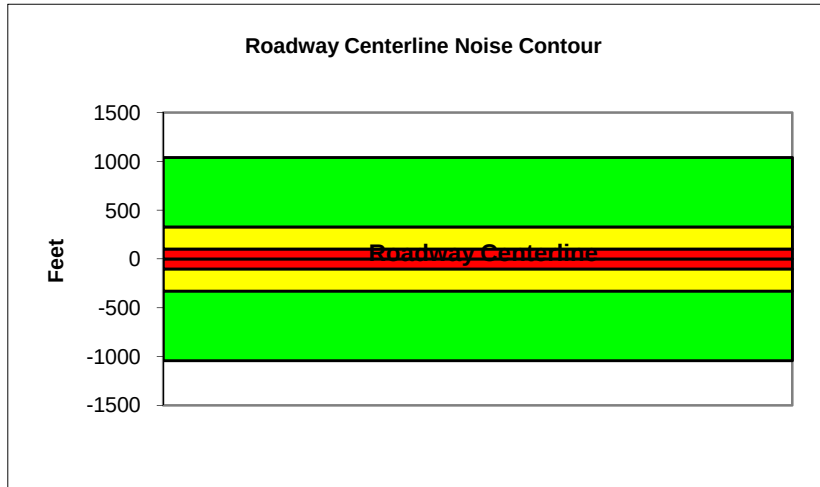
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Sierra Avenue  
Road Segment: Between Slover Ave. and Jurupa St.

| PROJECT DATA                   |           |     | SITE DATA                        |        |         |       |        |  |
|--------------------------------|-----------|-----|----------------------------------|--------|---------|-------|--------|--|
| Centerline Dist to Barrier     | 0         |     | Road Grade:                      | 0      |         |       |        |  |
| Barrier (0=wall, 1= berm):     | 0         |     | Average Daily Traffic:           | 25,853 |         |       |        |  |
| Receiver Barrier Dist:         | 0         |     | Peak Hour Traffic:               | 2585.3 |         |       |        |  |
| Centerline Dist. To Observer:  | 100       |     | Vehicle Speed:                   | 50     |         |       |        |  |
| Barrier Near Lane CL Dist:     | 0         |     | Centerline Separation:           | 50     |         |       |        |  |
| Barrier Far lane CL Dist:      | 0         |     | NOISE INPUTS                     |        |         |       |        |  |
| Pad Elevation:                 | 0.5       |     | Site conditions <b>HARD SITE</b> |        |         |       |        |  |
| Road Elevation:                | 0         |     | FLEET MIX                        |        |         |       |        |  |
| Observer Height (above grade): | 0         |     | Type                             | Day    | Evening | Night | Daily  |  |
| Barrier Height:                | 0         |     | Auto                             | 0.775  | 0.129   | 0.096 | 0.9742 |  |
| Rt View: 90                    | Lft View: | -90 | Med. Truck                       | 0.848  | 0.049   | 0.103 | 0.0184 |  |
| NOISE SOURCE ELEVATIONS (Feet) |           |     | Heavy Truck                      | 0.865  | 0.027   | 0.108 | 0.0074 |  |
| Autos:                         | 0         |     |                                  |        |         |       |        |  |
| Medium Trucks:                 | 2.3       |     |                                  |        |         |       |        |  |
| Heavy Trucks:                  | 8         |     |                                  |        |         |       |        |  |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |          |         |             |           |      |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|------|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn  | CNEL |
| Autos:                                                           | 58.2     | 67.0    | 65.2        | 59.1      | 67.7 | 68.4 |
| Medium Trucks:                                                   | 65.9     | 57.8    | 51.4        | 49.8      | 58.3 | 58.6 |
| Heavy Trucks:                                                    | 70.1     | 58.2    | 49.1        | 50.3      | 59.7 | 59.8 |
| Vehicle Noise:                                                   | 72.4     | 68.1    | 65.5        | 60.2      | 68.8 | 69.3 |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |      |
|--------------------------|------|
| Unmitigated              |      |
| 60 dBA                   | 1043 |
| 65 dBA                   | 330  |
| 70 dBA                   | 104  |
| Mitigated                |      |
| 60 dBA                   |      |
| 65 dBA                   |      |
| 70 dBA                   |      |





**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

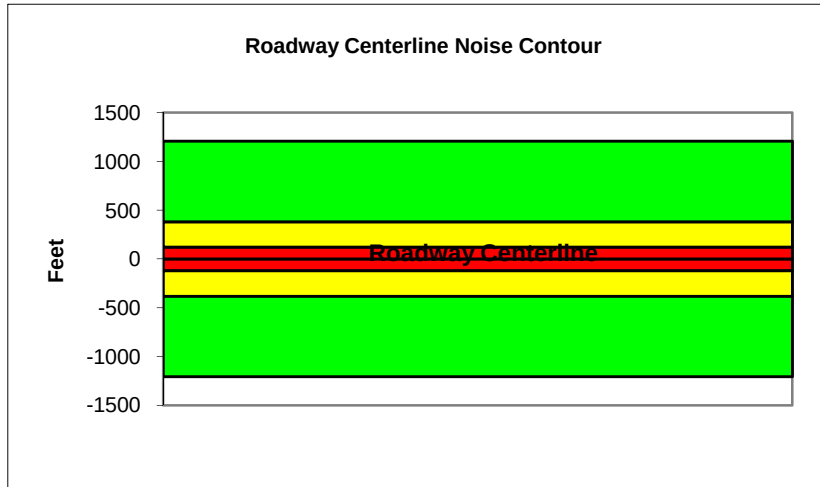
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Slover Avenue  
Road Segment: Between Cherry Ave. and Citrus Ave.

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 29,903 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 2990.3 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 50     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 30     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 59.1        | 67.9        | 66.1        | 60.0        | 68.7        | 69.3        |
| Medium Trucks:                                                   | 66.8        | 58.7        | 52.4        | 50.8        | 59.3        | 59.5        |
| Heavy Trucks:                                                    | 71.0        | 59.1        | 50.0        | 51.3        | 60.7        | 60.8        |
| <b>Vehicle Noise:</b>                                            | <b>73.3</b> | <b>69.0</b> | <b>66.4</b> | <b>61.1</b> | <b>69.7</b> | <b>70.3</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |      |
|--------------------------|------|
| Unmitigated              |      |
| 60 dBA                   | 1208 |
| 65 dBA                   | 382  |
| 70 dBA                   | 121  |
| Mitigated                |      |
| 60 dBA                   |      |
| 65 dBA                   |      |
| 70 dBA                   |      |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

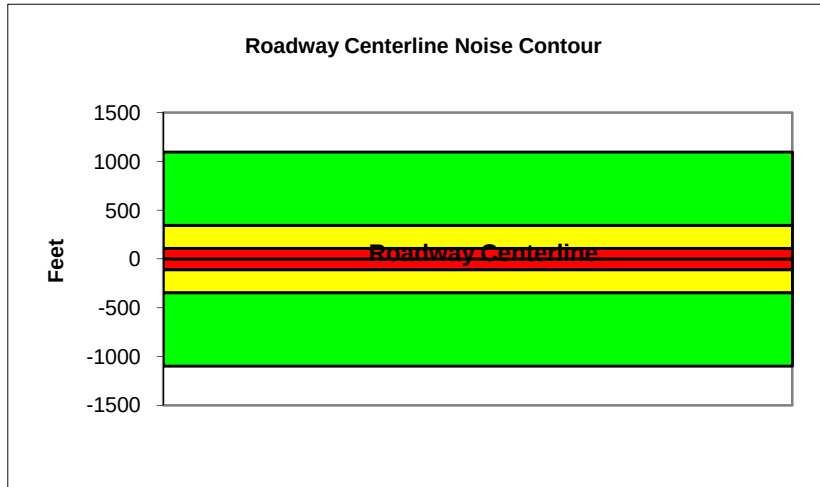
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Slover Avenue  
Road Segment: Between Citrus Ave. and Sierra Ave.

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 35,272 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 3527.2 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 45     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 30     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 58.5        | 67.3        | 65.5        | 59.4        | 68.1        | 68.7        |
| Medium Trucks:                                                   | 66.8        | 58.7        | 52.4        | 50.8        | 59.3        | 59.5        |
| Heavy Trucks:                                                    | 71.3        | 59.4        | 50.3        | 51.6        | 61.1        | 61.2        |
| <b>Vehicle Noise:</b>                                            | <b>73.7</b> | <b>68.6</b> | <b>65.9</b> | <b>60.7</b> | <b>69.3</b> | <b>69.8</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |      |
|--------------------------|------|
| Unmitigated              |      |
| 60 dBA                   | 1096 |
| 65 dBA                   | 347  |
| 70 dBA                   | 110  |
| Mitigated                |      |
| 60 dBA                   |      |
| 65 dBA                   |      |
| 70 dBA                   |      |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

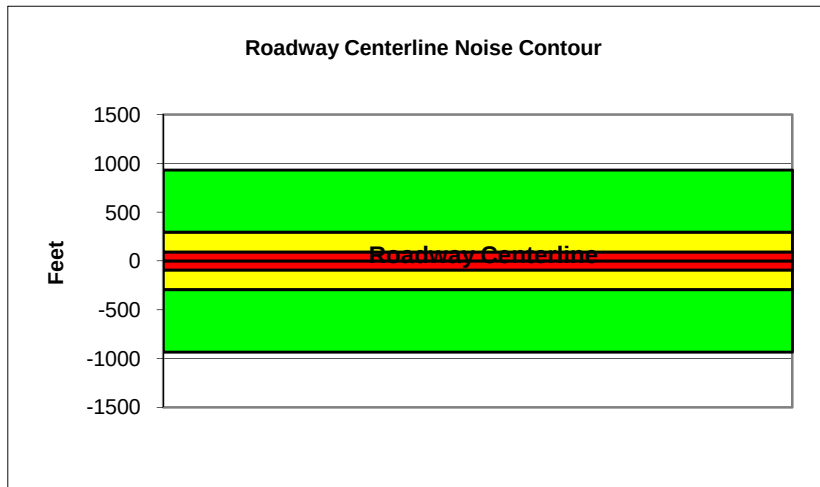
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Slover Avenue  
Road Segment: Between Etiwanda Ave. and Mulberry Ave.

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 29,999 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 2999.9 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 45     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 35     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 57.7        | 66.5        | 64.7        | 58.7        | 67.3        | 67.9        |
| Medium Trucks:                                                   | 66.0        | 58.0        | 51.6        | 50.0        | 58.5        | 58.7        |
| Heavy Trucks:                                                    | 70.5        | 58.6        | 49.6        | 50.8        | 60.3        | 60.4        |
| <b>Vehicle Noise:</b>                                            | <b>72.9</b> | <b>67.8</b> | <b>65.1</b> | <b>60.0</b> | <b>68.5</b> | <b>69.1</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 934 |
| 65 dBA                   | 295 |
| 70 dBA                   | 93  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

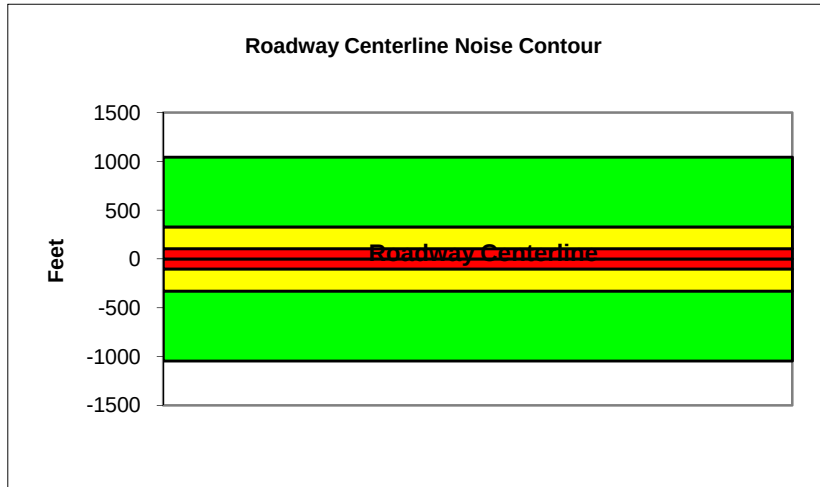
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Slover Avenue  
Road Segment: Between Mulberry Ave. and Cherry Ave.

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 25,881 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 2588.1 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 50     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 30     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 58.5        | 67.3        | 65.5        | 59.4        | 68.1        | 68.7        |
| Medium Trucks:                                                   | 66.2        | 58.1        | 51.7        | 50.2        | 58.6        | 58.9        |
| Heavy Trucks:                                                    | 70.4        | 58.5        | 49.4        | 50.6        | 60.0        | 60.2        |
| <b>Vehicle Noise:</b>                                            | <b>72.7</b> | <b>68.4</b> | <b>65.8</b> | <b>60.5</b> | <b>69.1</b> | <b>69.6</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |      |
|--------------------------|------|
| Unmitigated              |      |
| 60 dBA                   | 1045 |
| 65 dBA                   | 330  |
| 70 dBA                   | 104  |
| Mitigated                |      |
| 60 dBA                   |      |
| 65 dBA                   |      |
| 70 dBA                   |      |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

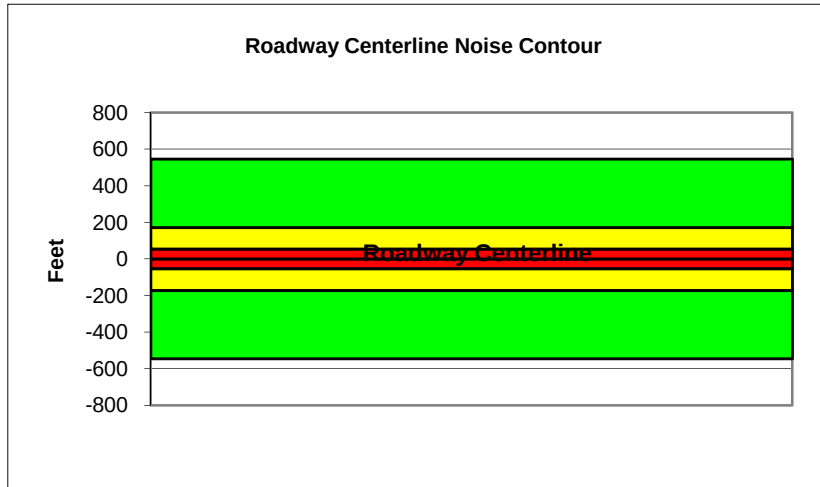
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Valley Boulevard  
Road Segment: Between Cherry Ave. and Fontana Ave.

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 17,559 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 1755.9 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 45     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 30     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 55.5        | 64.3        | 62.5        | 56.4        | 65.1        | 65.7        |
| Medium Trucks:                                                   | 63.8        | 55.7        | 49.3        | 47.8        | 56.2        | 56.5        |
| Heavy Trucks:                                                    | 68.3        | 56.4        | 47.3        | 48.5        | 58.1        | 58.2        |
| <b>Vehicle Noise:</b>                                            | <b>70.6</b> | <b>65.6</b> | <b>62.9</b> | <b>57.7</b> | <b>66.3</b> | <b>66.8</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 546 |
| 65 dBA                   | 173 |
| 70 dBA                   | 55  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

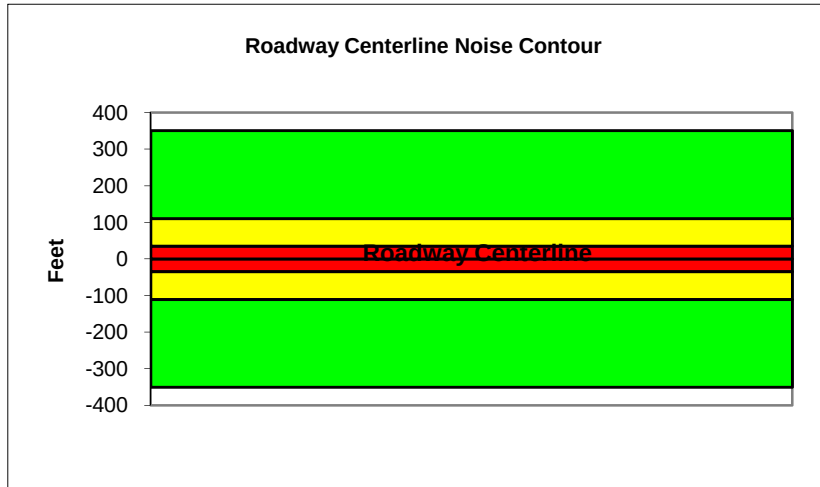
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Valley Boulevard  
Road Segment: Between Citrus Ave. and Sierra Ave.

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 14,950 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 1495   |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 40     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 30     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 53.3        | 62.1        | 60.3        | 54.2        | 62.9        | 63.5        |
| Medium Trucks:                                                   | 62.3        | 54.2        | 47.8        | 46.3        | 54.7        | 55.0        |
| Heavy Trucks:                                                    | 67.1        | 55.2        | 46.1        | 47.4        | 57.1        | 57.2        |
| <b>Vehicle Noise:</b>                                            | <b>69.5</b> | <b>63.7</b> | <b>60.8</b> | <b>55.8</b> | <b>64.4</b> | <b>64.9</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 351 |
| 65 dBA                   | 111 |
| 70 dBA                   | 35  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

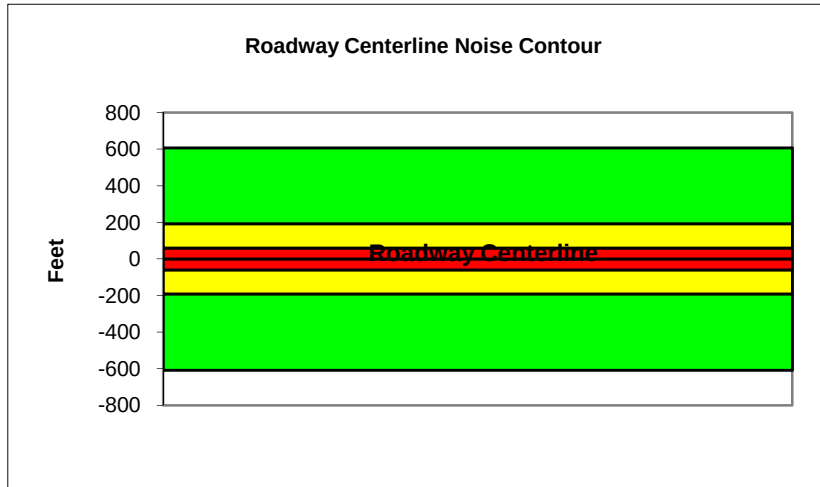
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Valley Boulevard  
Road Segment: Between Etiwanda Ave. and Cherry Ave.

| PROJECT DATA                   |               | SITE DATA                        |        |         |       |        |
|--------------------------------|---------------|----------------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:                      | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:           | 19,571 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:               | 1957.1 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:                   | 45     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:           | 30     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS                     |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions <b>HARD SITE</b> |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                        |        |         |       |        |
| Observer Height (above grade): | 0             | Type                             | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                             | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                       | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck                      | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                                  |        |         |       |        |
| Medium Trucks:                 | 2.3           |                                  |        |         |       |        |
| Heavy Trucks:                  | 8             |                                  |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 56.0        | 64.8        | 63.0        | 56.9        | 65.5        | 66.1        |
| Medium Trucks:                                                   | 64.3        | 56.2        | 49.8        | 48.2        | 56.7        | 56.9        |
| Heavy Trucks:                                                    | 68.8        | 56.8        | 47.8        | 49.0        | 58.5        | 58.7        |
| <b>Vehicle Noise:</b>                                            | <b>71.1</b> | <b>66.1</b> | <b>63.3</b> | <b>58.2</b> | <b>66.8</b> | <b>67.3</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 608 |
| 65 dBA                   | 192 |
| 70 dBA                   | 61  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |



**Federal Highway Administration RD-77-108  
Traffic Noise Prediction Model (CALVENO)**

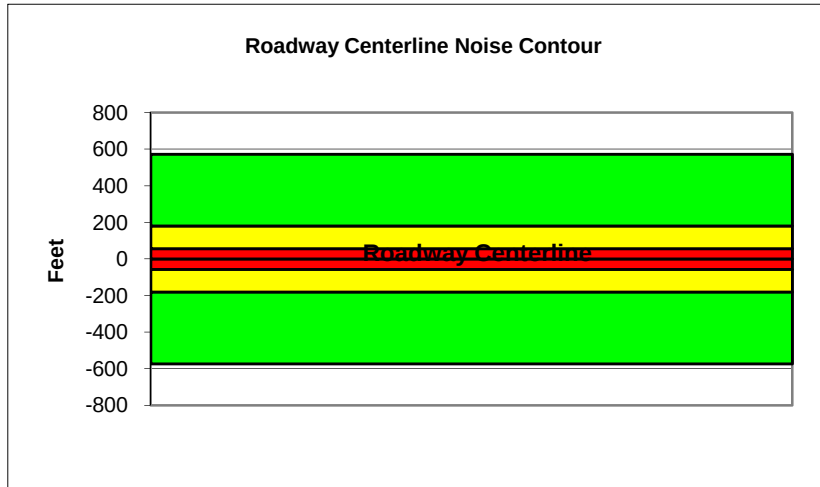
Project Name: SWIP Specific Plan Update and Annexation Project      Scenario: Future Plus Project  
Analyst: Brian Allee      Job #: 65100340  
Roadway: Valley Boulevard  
Road Segment: Between Fontana Ave. and Citrus Ave.

| PROJECT DATA                   |               | SITE DATA                 |        |         |       |        |
|--------------------------------|---------------|---------------------------|--------|---------|-------|--------|
| Centerline Dist to Barrier     | 0             | Road Grade:               | 0      |         |       |        |
| Barrier (0=wall, 1= berm):     | 0             | Average Daily Traffic:    | 18,442 |         |       |        |
| Receiver Barrier Dist:         | 0             | Peak Hour Traffic:        | 1844.2 |         |       |        |
| Centerline Dist. To Observer:  | 100           | Vehicle Speed:            | 45     |         |       |        |
| Barrier Near Lane CL Dist:     | 0             | Centerline Separation:    | 23     |         |       |        |
| Barrier Far lane CL Dist:      | 0             | NOISE INPUTS              |        |         |       |        |
| Pad Elevation:                 | 0.5           | Site conditions HARD SITE |        |         |       |        |
| Road Elevation:                | 0             | FLEET MIX                 |        |         |       |        |
| Observer Height (above grade): | 0             | Type                      | Day    | Evening | Night | Daily  |
| Barrier Height:                | 0             | Auto                      | 0.775  | 0.129   | 0.096 | 0.9742 |
| Rt View: 90                    | Lft View: -90 | Med. Truck                | 0.848  | 0.049   | 0.103 | 0.0184 |
| NOISE SOURCE ELEVATIONS (Feet) |               | Heavy Truck               | 0.865  | 0.027   | 0.108 | 0.0074 |
| Autos:                         | 0             |                           |        |         |       |        |
| Medium Trucks:                 | 2.3           |                           |        |         |       |        |
| Heavy Trucks:                  | 8             |                           |        |         |       |        |

| UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation) |             |             |             |             |             |             |
|------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Vehicle Type                                                     | Peak Leq    | Leq Day     | Leq Evening | Leq Night   | Ldn         | CNEL        |
| Autos:                                                           | 55.8        | 64.6        | 62.8        | 56.7        | 65.4        | 66.0        |
| Medium Trucks:                                                   | 64.1        | 56.0        | 49.7        | 48.1        | 56.6        | 56.8        |
| Heavy Trucks:                                                    | 68.6        | 56.7        | 47.6        | 48.9        | 58.4        | 58.5        |
| <b>Vehicle Noise:</b>                                            | <b>71.0</b> | <b>65.9</b> | <b>63.2</b> | <b>58.0</b> | <b>66.6</b> | <b>67.1</b> |

| MITIGATED NOISE LEVELS (With topographic or barrier attenuation) |          |         |             |           |     |      |
|------------------------------------------------------------------|----------|---------|-------------|-----------|-----|------|
| Vehicle Type                                                     | Peak Leq | Leq Day | Leq Evening | Leq Night | Ldn | CNEL |
| Autos:                                                           |          |         |             |           |     |      |
| Medium Trucks:                                                   |          |         |             |           |     |      |
| Heavy Trucks:                                                    |          |         |             |           |     |      |
| Vehicle Noise:                                                   |          |         |             |           |     |      |

| CENTERLINE NOISE CONTOUR |     |
|--------------------------|-----|
| Unmitigated              |     |
| 60 dBA                   | 573 |
| 65 dBA                   | 181 |
| 70 dBA                   | 57  |
| Mitigated                |     |
| 60 dBA                   |     |
| 65 dBA                   |     |
| 70 dBA                   |     |







## **H. Water and Sewer Infrastructure Study**

# **City of Fontana Southwest Industrial Park Specific Plan**

*Water and Sewer Infrastructure Study*

**April 2009**

Prepared by:



JN 65-100340

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## **EXHIBITS**

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**Acronyms**

|        |                                                |
|--------|------------------------------------------------|
| SWIP   | Southwest Industrial Park                      |
| SP     | Specific Plan                                  |
| FWC    | Fontana Water Company                          |
| SBVMWD | San Bernardino Valley Municipal Water District |
| IEUA   | Inland Empire Utilities Water Agency           |
| RP     | Regional Plant                                 |
| WSMP   | Water System Master Plan                       |
| cfs    | Cubic feet per second                          |
| gpm    | Gallons per minute                             |
| MGD    | Million gallons per day                        |
| gpd    | Gallons per day                                |
| gpm    | Gallons per minute                             |
| HGL    | Hydraulic grade line                           |
| FF     | Fire flow                                      |
| sf     | Square feet                                    |

## 1. INTRODUCTION

The Water and Sewer Infrastructure study (Study) has been prepared in support of the Southwest Industrial Park (SWIP) Specific Plan 2009 update. The proposed SWIP Specific Plan boundary is generally defined as the four sub-regions north and south of Interstate 10. The total project consists of approximately 3,109 acres within incorporated City of Fontana and unincorporated San Bernardino County. Exhibit 1-1 shows the regional vicinity within San Bernardino County and Exhibit 1-2 shows the proposed SWIP SP study area and sub-regions.

The current Specific Plan for the SWIP was prepared in 1998 and included only areas within the City of Fontana. The total area was approximately 1843 acres and included agriculture, industrial, and business park uses. The proposed SWIP includes land uses which would enhance the trucking, manufacturing and industrial uses; add warehousing, research and technology uses; expand and enhance commercial uses for office, retail and service; and incorporate some residential mixed-use areas.

As shown in Exhibit 1-2 the Southwest Industrial Park Specific Plan Area is composed of four non-contiguous sub-areas, described as follows:

- West SWIP – this area is bounded by Etiwanda Avenue to the west, Philadelphia to the south, Mulberry Avenue to the east and Jurupa Avenue to the north (approx. 600 acres);
- Central SWIP – bounded by Mulberry Avenue to the west, Jurupa Avenue to the south, Citrus Avenue to the east and the I-10 freeway to the north (approx. 2300 acres);
- Northwest SWIP – bounded by Banana Avenue to the west, Valley Blvd. and I-10 Freeway to the south, Cherry Avenue to the east, and Andel Drive to the north (approx. 160 acres); and
- Northeast SWIP – bounded by Hemlock Avenue to the west, the I-10 Freeway to the south, Beech Avenue to the east and Valley Boulevard to the north (approx. 50 acres)

## 2. LAND USE

The revised Specific Plan study area consists of land within the City of Fontana and currently unincorporated San Bernardino County area. Total acreage of the Specific Plan and areas added for the 2009 update are shown in Table 2-1.

**TABLE 2-1 – SWIP Area**

| <b>Southwest Industrial Park Specific Plan</b> | <b>Acreage</b> | <b>% Acreage</b> |
|------------------------------------------------|----------------|------------------|
| 1998 SWIP Study Area                           | 1,843          | 59.2%            |
| Additional Area                                | 1,266          | 40.8%            |
| <b>Proposed SWIP Area (2009 Update)</b>        | <b>3,109</b>   | <b>100.0%</b>    |

The existing development of the Specific Plan study area includes industrial, commercial, Kaiser High School, and residential uses, along with utility and infrastructure easements and roadways. The expanded study area for the 2009 Specific Plan refines the current General Planning land uses to include specific types of industrial districts. In all, eight industrial districts are proposed primarily as Commercial (Retail, Office and Service), Light Industrial, Warehouse and Manufacturing. Minor development of residential, technology and mixed-use is also proposed. **Appendix A** includes a tabulation of the existing and proposed development within each of the industrial districts envisioned for the SWIP Specific Plan. Exhibit 2-1 shows the proposed redevelopment districts.

The current General Plan land uses within the SWIP Specific Plan include:

- o Light Industrial (I-L)
- o General Industrial (I-G)
- o Public Utility Corridors (P-UC)
- o Public Facilities (P-PF)
- o Community Commercial (C-C)
- o General Commercial (C-G)
- o Open Space (O-S)

The current zoning designations within the SWIP Specific Plan include:

- o Light Industrial (M-1)
- o General Industrial (M-2)
- o Public Facilities (P-PF)
- o Community Commercial (C-1)
- o Specific Plan Areas (SP)
- o Agricultural (A)
- o Industrial-Related Commercial (C)
- o Business Park (BP)
- o Light Industrial (M-1)
- o Medium Industrial (M-2)
- o Transportation Industrial (M2-T)
- o Heavy Industrial (M-2H)

A large portion of the revised SWIP study area is under-utilized or vacant. Table 2-2 summarizes the existing land uses within the proposed SWIP districts.

**TABLE 2-2 – Existing Land Uses**

| Land Use                     | Area<br>(acres) | Building Area<br>(square feet) | Dwelling Units<br>(DU) |
|------------------------------|-----------------|--------------------------------|------------------------|
| Industrial                   | 347             | 963,510                        | -                      |
| Commercial                   | 99              | 181,455                        | -                      |
| Residential                  | 513             | -                              | 577                    |
| Miscellaneous                | 89              | 105,510                        | -                      |
| Vacant                       | 402             | -                              | -                      |
| <i>Development to Remain</i> | 1289            | 10,218,267                     | -                      |
| <i>Public Facilities</i>     | 38              | -                              | -                      |
| <i>Drainage</i>              | 20              | -                              | -                      |
| <i>Power Easement</i>        | 16              | -                              | -                      |
| <i>Railroad</i>              | 56              | -                              | -                      |
| <i>Roads</i>                 | 240             | -                              | -                      |
| <b>Total</b>                 | <b>3,109 Ac</b> | <b>11,468,742 sf</b>           | <b>577 DUs</b>         |

Proposed build-out of the revised SWIP Specific Plan area is summarized in Table 2-4.

**TABLE 2-3 – Ultimate SWIP Area Land Uses (2009 Update)**

| Land Use                     | Gross Area<br>(acres) | Building Area<br>(square feet) | Dwelling Units<br>(DU) |
|------------------------------|-----------------------|--------------------------------|------------------------|
| Industrial (Light)           | -                     | 6,981,601                      | 0                      |
| Industrial (Manufacturing)   | -                     | 1,113,002                      | 0                      |
| Commercial (Retail)          | -                     | 1,638,793                      | 0                      |
| Commercial (Office)          | -                     | 1,766,129                      | 0                      |
| Commercial (Service)         | -                     | 3,844,638                      | 0                      |
| Warehouse                    | -                     | 12,666,268                     | 0                      |
| Residential (< 5 du/ac)      | -                     | -                              | 180                    |
| Live/Work                    | -                     | 813,243                        | -                      |
| Flex Tech                    | -                     | 813,243                        | 0                      |
| <i>Development to Remain</i> | 1289                  | 10,218,267                     | 0                      |
| <b>TOTAL</b>                 | <b>3,109 Ac</b>       | <b>38,383,585 sf</b>           | <b>180 DUs</b>         |



### **3. WATER SERVICE**

The Southwest Industrial Park SP area is within the service area of the Fontana Water Company (FWC), a private water purveyor which provides water service to the City of Fontana. Based on the 2005 Water System Master Plan, FWC will rely on up to 75 percent of its total water supply from local groundwater sources drawing from the Chino Basin. Therefore, FWC plans to develop new water supply sources based on this percentage, which will require construction of new water facilities for, and possibly within, the SWIP area. The Chino Basin is an adjudicated basin which requires imported sources for basin replenishment. The new facilities are expected to be required due to the estimated increase in water demands of the SWIP area to approximately 3.47 MGD on average, and 6.93 MGD during a maximum summer day. With the proposed implementation of recycled (non-domestic) water service to the SWIP study area, the increase in domestic water demands can be reduced.

IEUA recognizes that the availability of critical imported water sources continue to decline, both in capacity and reliability while the region continues to develop, outpacing water conservation efforts. Also, the Chino Basin Watermaster has documented the economic benefits of maximizing the use of recycled water. Each of IEUA's member agencies are expected to take advantage of the opportunities to offset the need for expensive imported water supplies. IEUA plans to achieve this by maximizing recycled water from their regional distribution system for candidate uses within their member agencies' service areas. The SWIP Specific Plan area may provide the City with industrial customers that will implement centralized boiler and chiller systems, material cooling and washdown systems, as well as landscape irrigation. All of these could potentially be candidate uses of recycled water.

#### **3.1 Existing Water System**

The existing water system serves the current land uses within the SWIP area with potable (domestic) water, and is owned and operated by the Fontana Water Company. Water supply is from local groundwater and surface water sources, and imported water from San Bernardino Valley Municipal Water District (SBVMWD) and Inland Empire Utilities Agency. In order to accommodate the expected increase in water demands for the SWIP study area, FWC will require increased capacity from these sources. The 2005 FWC Water System Master Plan (WSMP) indicates the Company has interest in re-activating groundwater production at sites within, and adjacent to, the SWIP study area.

The existing FWC water distribution system is necessarily divided into service pressure zones to maintain operating pressures within acceptable limits and for water service redundancy and reliability. The service pressure zone serving the study area operates at supply hydraulic gradient of approximately 1260 feet above mean sea level. The SWIP SP study area is at approximate service elevations ranging from 850 feet to 1100 feet. For efficient service to the existing land uses FWC pressure-reduces the Juniper Zone for manageable service pressures south and west of Santa Ana Avenue and Live Oak Avenue.

**Appendix B** includes exhibits copied from the WSMP (Figures 7-1 thru 7-3) and provides a general understanding of the City-wide system operation. Exhibit 3-1

shows the existing distribution piping system and proposed improvements within the SWIP study area.

### **3.2 Water Demand**

Water demand for both existing and ultimate conditions of the SWIP area was estimated for the Study. In the absence of historic meter records, an estimate of the existing landuses and percent buildout was determined using current zoning and aerial images. Standard water demand usage factors were applied to the existing land uses, which calculates to average and maximum-day water demands of the SWIP area of 1.49 MGD (1,673 AF/yr) and 2.99 MGD, respectively. The calculations are shown in Table 3-1. The ultimate land uses for the update to the Specific Plan, as determined above, include total building square footage of approximately 39.8 million square feet. The corresponding average and maximum-day water demands are estimated at 3.46 MGD (3,882 AF/yr) and 6.93 MGD, respectively, as shown in Table 3-2.

It's important to recognize at this concept planning phase that a significant component of the ultimate demands may be served from non-domestic water sources, such as recycled water. Although fire flows are an accepted use of recycled water, concerns arising from fire engine pumping systems and fire fighter bodily contact, has generally prevented this from an accepted use of recycled water. As the volume of water required for fire fighting purposes is relatively minor, it is recommended that the development and expansion of the water distribution systems for the SWIP area be developed based on fire flow from the domestic water system. The FWC's 2005 WSMP designates a fire flow capacity for the original SWIP SP study area. With the proposed expansion of the SP, the Infrastructure Study assumes the fire flow requirement for all proposed SWIP districts of 5,000 gpm in order to provide for planning flexibility. Table 3-3 summarizes the estimated existing and ultimate water demands for the SWIP SP area.

**Table 3-1**  
**Fontana SWIP Specific Plan Update**  
**Existing Water Demand Calculation**

| SWIP SP DISTRICTS                       |                       | EXISTING DEVELOPMENT        |                    |             |                     | ESTIMATE OF EXISTING WATER DEMAND |                           |       |                                |         |  |
|-----------------------------------------|-----------------------|-----------------------------|--------------------|-------------|---------------------|-----------------------------------|---------------------------|-------|--------------------------------|---------|--|
| DISTRICT                                | Land Use Type         | Existing Acreage            | Existing Units     | Existing SF | Factor [2] gpd/     | per unit                          | Average Demand (gpd) (AF) |       | Max Day Demand [3] (gpd) (gpm) |         |  |
| Freeway Industrial Commercial           | Industrial            | 68.38                       | 0                  | 205,293     | 100                 | ksf                               | 20,529                    | 23.0  | 41,059                         | 28.5    |  |
|                                         | Commercial            | 17.04                       | 0                  | 15,889      | 100                 | ksf                               | 1,589                     | 1.8   | 3,178                          | 2.2     |  |
|                                         | Residential           | 99.5                        | 195                | -           | 600                 | du                                | 117,000                   | 131.1 | 234,000                        | 162.5   |  |
|                                         | Miscellaneous         | 6.42                        | 0                  | 20,927      | 100                 | ksf                               | 2,093                     | 2.3   | 4,185                          | 2.9     |  |
|                                         | Vacant Land           | 59.47                       | 0                  | -           | -                   | -                                 | -                         | -     | -                              | -       |  |
|                                         | Development to Remain | 82.95                       | -                  | 478,645     | 100                 | ksf                               | 47,865                    | 53.6  | 95,729                         | 66.5    |  |
|                                         | Subtotal              | 333.76                      | 195                | 720,754     |                     |                                   | 189,075                   | 211.8 | 378,151                        | 262.6   |  |
| Jurupa North Research and Development   | Industrial            | 34.32                       | -                  | 26,570      | 100                 | ksf                               | 2,657                     | 3.0   | 5,314                          | 3.7     |  |
|                                         | Commercial            | 20.64                       | -                  | 72,170      | 100                 | ksf                               | 7,217                     | 8.1   | 14,434                         | 10.0    |  |
|                                         | Residential           | 165.88                      | 97                 | -           | 600                 | du                                | 58,200                    | 65.2  | 116,400                        | 80.8    |  |
|                                         | Miscellaneous         | 19.08                       | -                  | 40,023      | 100                 | ksf                               | 4,002                     | 4.5   | 8,005                          | 5.6     |  |
|                                         | Vacant                | 133.47                      | -                  | -           | -                   | -                                 | -                         | -     | -                              | -       |  |
|                                         | Development to Remain | 187.59                      | -                  | 392,934     | 100                 | ksf                               | 39,293                    | 44.0  | 78,587                         | 54.6    |  |
|                                         | Subtotal              | 560.98                      | 97                 | 531,697     |                     |                                   | 111,370                   | 124.8 | 222,739                        | 154.7   |  |
| Jurupa South Industrial                 | Industrial            | 65.89                       | 0                  | 378,990     | 100                 | ksf                               | 37,899                    | 42.5  | 75,798                         | 52.6    |  |
|                                         | Commercial            | 1.87                        | 0                  | 3,800       | 100                 | ksf                               | 380                       | 0.4   | 760                            | 0.5     |  |
|                                         | Residential           | 4.18                        | 0                  | -           | -                   | -                                 | -                         | -     | -                              | -       |  |
|                                         | Miscellaneous         | 13.94                       | 0                  | 2,600       | 100                 | ksf                               | 260                       | 0.3   | 520                            | 0.4     |  |
|                                         | Vacant Land           | 17.42                       | 0                  | -           | -                   | -                                 | -                         | -     | -                              | -       |  |
|                                         | Development to Remain | 432.59                      | -                  | 7,241,326   | 100                 | ksf                               | 724,133                   | 811.2 | 1,448,265                      | 1,005.7 |  |
|                                         | Subtotal              | 535.89                      | 0                  | 7,626,716   |                     |                                   | 762,672                   | 854.4 | 1,525,343                      | 1,059.3 |  |
| Slover Central Manufacturing/Industrial | Industrial            | 37.35                       | -                  | 108,475     | 100                 | ksf                               | 10,848                    | 12.2  | 21,695                         | 15.1    |  |
|                                         | Commercial            | 6.66                        | -                  | 12,987      | 100                 | ksf                               | 1,299                     | 1.5   | 2,597                          | 1.8     |  |
|                                         | Residential           | 35.52                       | 38                 | -           | 600                 | du                                | 22,800                    | 25.5  | 45,600                         | 31.7    |  |
|                                         | Miscellaneous         | 8.16                        | -                  | 14,031      | 100                 | ksf                               | 1,403                     | 1.6   | 2,806                          | 1.9     |  |
|                                         | Vacant Land           | 82.65                       | -                  | -           | -                   | -                                 | -                         | -     | -                              | -       |  |
|                                         | Development to Remain | 253.38                      | -                  | 960,325     | 100                 | ksf                               | 96,033                    | 107.6 | 192,065                        | 133.4   |  |
|                                         | Subtotal              | 423.72                      | 38                 | 1,095,818   |                     |                                   | 132,382                   | 148.3 | 264,764                        | 183.9   |  |
| Slover East Industrial                  | Industrial            | 25.09                       | -                  | 35,148      | 100                 | ksf                               | 3,515                     | 3.9   | 7,030                          | 4.9     |  |
|                                         | Commercial            | 0.00                        | 0                  | -           | -                   | -                                 | -                         | -     | -                              | -       |  |
|                                         | Residential           | 13.6                        | 65                 | -           | 600                 | du                                | 39,000                    | 43.7  | 78,000                         | 54.2    |  |
|                                         | Miscellaneous         | 28.94                       | -                  | 8,926       | 100                 | ksf                               | 893                       | 1.0   | 1,785                          | 1.2     |  |
|                                         | Vacant Land           | 47.86                       | -                  | -           | -                   | -                                 | -                         | -     | -                              | -       |  |
|                                         | Development to Remain | 264.2                       | -                  | 1,025,461   | 100                 | ksf                               | 102,546                   | 114.9 | 205,092                        | 142.4   |  |
|                                         | Subtotal              | 379.69                      | 65                 | 1,069,535   |                     |                                   | 145,954                   | 163.5 | 291,907                        | 202.7   |  |
| Slover West Industrial                  | Industrial            | 64.92                       | -                  | 122,900     | 100                 | ksf                               | 12,290                    | 13.8  | 24,580                         | 17.1    |  |
|                                         | Commercial            | 16.99                       | -                  | 11,880      | 100                 | ksf                               | 1,188                     | 1.3   | 2,376                          | 1.7     |  |
|                                         | Residential           | 104.71                      | 66                 | -           | 600                 | du                                | 39,600                    | 44.4  | 79,200                         | 55.0    |  |
|                                         | Miscellaneous         | 6.47                        | -                  | 7,803       | 100                 | ksf                               | 780                       | 0.9   | 1,561                          | 1.1     |  |
|                                         | Vacant Land           | 37.67                       | -                  | -           | -                   | -                                 | -                         | -     | -                              | -       |  |
|                                         | Development to Remain | 58.38                       | -                  | 88,068      | 100                 | ksf                               | 8,807                     | 9.9   | 17,614                         | 12.2    |  |
|                                         | Subtotal              | 289.14                      | 66                 | 230,651     |                     |                                   | 62,665                    | 70.2  | 125,330                        | 87.0    |  |
| Speedway Industrial                     | Industrial            | 51.13                       | -                  | 86,134      | 100                 | ksf                               | 8,613                     | 9.6   | 17,227                         | 12.0    |  |
|                                         | Commercial            | 35.55                       | -                  | 64,729      | 100                 | ksf                               | 6,473                     | 7.3   | 12,946                         | 9.0     |  |
|                                         | Residential           | 2.03                        | 20                 | -           | 600                 | du                                | 12,000                    | 13.4  | 24,000                         | 16.7    |  |
|                                         | Miscellaneous         | 4.44                        | -                  | 9,355       | 100                 | ksf                               | 936                       | 1.0   | 1,871                          | 1.3     |  |
|                                         | Vacant Land           | 23.5                        | -                  | -           | -                   | -                                 | -                         | -     | -                              | -       |  |
|                                         | Development to Remain | 9.56                        | -                  | 31,508      | 100                 | ksf                               | 3,151                     | 3.5   | 6,302                          | 4.4     |  |
|                                         | Subtotal              | 126.21                      | 20                 | 191,726     |                     |                                   | 31,173                    | 34.9  | 62,345                         | 43.3    |  |
| SWIP Residential Trucking               | Industrial            | 0                           | 0                  | 0           | -                   | -                                 | -                         | -     | -                              | -       |  |
|                                         | Commercial            | 0.00                        | 0                  | -           | -                   | -                                 | -                         | -     | -                              | -       |  |
|                                         | Residential           | 87.7                        | 96                 | -           | 600                 | du                                | 57,600                    | 64.5  | 115,200                        | 80.0    |  |
|                                         | Miscellaneous         | 1.93                        | -                  | 1,845       | 100                 | ksf                               | 185                       | 0.2   | 369                            | 0.3     |  |
|                                         | Vacant Land           | 0.28                        | 0                  | -           | -                   | -                                 | -                         | -     | -                              | -       |  |
|                                         | Development to Remain | 0                           | 0                  | -           | -                   | -                                 | -                         | -     | -                              | -       |  |
|                                         | Subtotal              | 89.91                       | 96                 | 1,845       |                     |                                   | 57,785                    | 64.7  | 115,569                        | 80.3    |  |
| [1]                                     | Public Facilities [1] | 37.66                       | -                  | -           |                     |                                   |                           |       |                                |         |  |
|                                         | Drainage [1]          | 19.65                       | -                  | -           |                     |                                   |                           |       |                                |         |  |
|                                         | Power Easement [1]    | 16.00                       | -                  | -           |                     |                                   |                           |       |                                |         |  |
|                                         | Railroad [1]          | 56.25                       | -                  | -           |                     |                                   |                           |       |                                |         |  |
|                                         | Road [1]              | 239.96                      | -                  | -           |                     |                                   |                           |       |                                |         |  |
|                                         | Subtotal              | 369.52                      | -                  | -           |                     |                                   |                           |       |                                |         |  |
|                                         |                       |                             | EXISTING TOTAL     | Acres       | Units               | SF                                |                           |       |                                |         |  |
|                                         |                       |                             | 3,109              | 577         | 11,468,742          |                                   |                           |       |                                |         |  |
|                                         |                       | EXISTING WATER DEMAND TOTAL | Avg Day (gpd) (AF) |             | Max Day (gpd) (gpm) |                                   |                           |       |                                |         |  |
|                                         |                       |                             | 1,493,074          | 1,673       | 2,986,148           | 2,074                             |                           |       |                                |         |  |

[1] Existing land uses removed from the SWIP SP Districts.

[2] Based on Los Angeles Bureau of Engineering Generation factors.

[3] Max Day = 2 x Average

**Table 3-2**  
**Fontana SWIP Specific Plan Update**  
**Ultimate Water Demand Calculation**

| SWIP SP DISTRICTS                        |                       | ULTIMATE DEVELOPMENT |             |                    | ESTIMATE OF ULTIMATE WATER DEMAND |                           |         |                                |           |         |
|------------------------------------------|-----------------------|----------------------|-------------|--------------------|-----------------------------------|---------------------------|---------|--------------------------------|-----------|---------|
| DISTRICT                                 | Land Use Type         | Ultimate Units       | Ultimate SF | Factor [2]<br>gpd/ | per unit                          | Average Demand (gpd) (AF) |         | Max Day Demand [3] (gpd) (gpm) |           |         |
| Freeway Industrial Commercial            | Commercial/ Retail    |                      | 1,638,793   |                    | 150                               | ksf                       | 245,819 | 275.4                          | 491,638   | 341.4   |
|                                          | Commercial/ Office    |                      | 546,264     |                    | 150                               | ksf                       | 81,940  | 91.8                           | 163,879   | 113.8   |
|                                          | Warehouse             |                      | 2,731,321   |                    | 10                                | ksf                       | 27,313  | 30.6                           | 54,626    | 37.9    |
|                                          | Service Commercial    |                      | 546,264     |                    | 150                               | ksf                       | 81,940  | 91.8                           | 163,879   | 113.8   |
|                                          | Development to Remain |                      | 478,645     |                    | 100                               | ksf                       | 47,865  | 53.6                           | 95,729    | 66.5    |
|                                          | Subtotal              | 0                    | 5,941,287   |                    |                                   |                           | 484,876 | 543.2                          | 969,752   | 673.4   |
| Jurupa North Research and Development    | Office                |                      | 1,219,865   |                    | 150                               | ksf                       | 182,980 | 205.0                          | 365,960   | 254.1   |
|                                          | Light Industrial      |                      | 3,252,974   |                    | 100                               | ksf                       | 325,297 | 364.4                          | 650,595   | 451.8   |
|                                          | Live / Work           |                      | 813,243     |                    | 300                               | ksf                       | 243,973 | 273.3                          | 487,946   | 338.9   |
|                                          | Flex Tech             |                      | 813,243     |                    | 150                               | ksf                       | 121,987 | 136.7                          | 243,973   | 169.4   |
|                                          | Service Commercial    |                      | 2,033,109   |                    | 100                               | ksf                       | 203,311 | 227.8                          | 406,622   | 282.4   |
|                                          | Development to Remain |                      | 392,934     |                    | 100                               | ksf                       | 39,293  | 44.0                           | 78,587    | 54.6    |
| Subtotal                                 | 0                     | 8,525,368            |             |                    |                                   | 1,116,841                 | 1,251.1 | 2,233,682                      | 1,551.2   |         |
| Jurupa South Industrial                  | Warehousing           |                      | 1,799,899   |                    | 10                                | ksf                       | 17,999  | 20.2                           | 35,998    | 25.0    |
|                                          | Light Industrial      |                      | 449,975     |                    | 100                               | ksf                       | 44,997  | 50.4                           | 89,995    | 62.5    |
|                                          | Development to Remain |                      | 7,241,326   |                    | 100                               | ksf                       | 724,133 | 811.2                          | 1,448,265 | 1,005.7 |
|                                          | Subtotal              | 0                    | 9,491,200   |                    |                                   |                           | 787,129 | 881.8                          | 1,574,258 | 1,093.2 |
| Slover Central Manufacturing/ Industrial | Warehousing           |                      | 2,597,004   |                    | 10                                | ksf                       | 25,970  | 29.1                           | 51,940    | 36.1    |
|                                          | Manufacturing         |                      | 1,113,002   |                    | 200                               | ksf                       | 222,600 | 249.4                          | 445,201   | 309.2   |
|                                          | Development to Remain |                      | 960,325     |                    | 100                               | ksf                       | 96,033  | 107.6                          | 192,065   | 133.4   |
|                                          | Subtotal              | 0                    | 4,670,330   |                    |                                   |                           | 344,603 | 386.0                          | 689,206   | 478.6   |
| Slover East Industrial                   | Warehousing           |                      | 1,257,686   |                    | 10                                | ksf                       | 12,577  | 14.1                           | 25,154    | 17.5    |
|                                          | Light Industrial      |                      | 754,612     |                    | 100                               | ksf                       | 75,461  | 84.5                           | 150,922   | 104.8   |
|                                          | Service Commercial    |                      | 503,074     |                    | 100                               | ksf                       | 50,307  | 56.4                           | 100,615   | 69.9    |
|                                          | Development to Remain |                      | 1,025,461   |                    | 100                               | ksf                       | 102,546 | 114.9                          | 205,092   | 142.4   |
|                                          | Subtotal              | 0                    | 3,540,833   |                    |                                   |                           | 240,892 | 269.9                          | 481,783   | 334.6   |
| Slover West Industrial                   | Warehousing           |                      | 3,518,167   |                    | 10                                | ksf                       | 35,182  | 39.4                           | 70,363    | 48.9    |
|                                          | Light Industrial      |                      | 1,507,786   |                    | 100                               | ksf                       | 150,779 | 168.9                          | 301,557   | 209.4   |
|                                          | Development to Remain |                      | 88,068      |                    | 100                               | ksf                       | 8,807   | 9.9                            | 17,614    | 12.2    |
|                                          | Subtotal              | 0                    | 5,114,021   |                    |                                   |                           | 194,767 | 218.2                          | 389,534   | 270.5   |
| Speedway Industrial                      | Warehousing           |                      | 762,191     |                    | 10                                | ksf                       | 7,622   | 8.5                            | 15,244    | 10.6    |
|                                          | Light Industrial      |                      | 1,016,255   |                    | 100                               | ksf                       | 101,625 | 113.8                          | 203,251   | 141.1   |
|                                          | Service Commercial    |                      | 762,191     |                    | 100                               | ksf                       | 76,219  | 85.4                           | 152,438   | 105.9   |
|                                          | Development to Remain |                      | 31,508      |                    | 100                               | ksf                       | 3,151   | 3.5                            | 6,302     | 4.4     |
|                                          | Subtotal              | 0                    | 2,572,145   |                    |                                   |                           | 188,617 | 211.3                          | 377,235   | 262.0   |
| SWIP Residential Trucking                | Residential           | 180                  | -           | 600                | du                                | 108,000                   | 121.0   | 216,000                        | 150.0     |         |
|                                          | Development to Remain |                      | -           |                    |                                   | -                         | -       | -                              | -         |         |
| Subtotal                                 | 180                   | 0                    |             |                    |                                   | 108,000                   | 121.0   | 216,000                        | 150.0     |         |
| [1]                                      | Public Facilities     | [1]                  |             | ULTIMATE           |                                   | Average                   |         | Max Day                        |           |         |
|                                          | Drainage              | [1]                  |             | WATER DEMAND       |                                   | (gpd) (AF)                |         | (gpd) (gpm)                    |           |         |
|                                          | Power Easement        | [1]                  |             | TOTAL              |                                   | 3,465,725 3,882           |         | 6,931,449 4,814                |           |         |
|                                          | Railroad              | [1]                  |             |                    |                                   |                           |         |                                |           |         |
|                                          | Road                  | [1]                  |             |                    |                                   |                           |         |                                |           |         |
|                                          | Subtotal              |                      |             |                    |                                   |                           |         |                                |           |         |
| EXISTING                                 |                       | Units                | SF          |                    |                                   |                           |         |                                |           |         |
| TOTAL                                    |                       | 180                  | 39,855,184  |                    |                                   |                           |         |                                |           |         |

[1] Included within the respective SWIP Districts.

[2] Based on Los Angeles Bureau of Engineering generation factors.

[3] Max Day = 2 x average

Table 3-3  
Fontana SWIP Specific Plan Update  
Estimated Water Demand Summary

| SWIP SP DISTRICTS                       | EXISTING WATER DEMAND   |                          | ULTIMATE WATER DEMAND   |                          |
|-----------------------------------------|-------------------------|--------------------------|-------------------------|--------------------------|
| DISTRICT                                | Average (AF)            | Max Day (gpd)            | Average (AF)            | Max Day (gpd)            |
| Freeway Industrial Commercial           | 211.8                   | 378,151                  | 543.2                   | 969,752                  |
| Jurupa North Research and Development   | 124.8                   | 222,739                  | 1251.1                  | 2,233,682                |
| Jurupa South Industrial                 | 854.4                   | 1,525,343                | 881.8                   | 1,574,258                |
| Slover Central Manufacturing/Industrial | 148.3                   | 264,764                  | 386.0                   | 689,206                  |
| Slover East Industrial                  | 163.5                   | 291,907                  | 269.9                   | 481,783                  |
| Slover West Industrial                  | 70.2                    | 125,330                  | 218.2                   | 389,534                  |
| Speedway Industrial                     | 34.9                    | 62,345                   | 211.3                   | 377,235                  |
| SWIP Residential Trucking               | 64.7                    | 115,569                  | 121.0                   | 216,000                  |
|                                         | Average (Existing) (AF) | Max Day (Existing) (gpd) | Average (Ultimate) (AF) | Max Day (Ultimate) (gpd) |
|                                         | 1,673                   | 2,986,148                | 3,882                   | 6,931,449                |

### **3.3 Domestic Water System Evaluation**

The SWIP SP area is within the FWC Juniper pressure zone and serves the existing land uses. Due to the range of service elevations, the Juniper system is divided into high and low subzones. The SWIP topography generally slopes southwesterly with the highest elevations at Citrus and Slover Avenues. The service boundary is generally defined by Santa Ana Avenue and Live Oak Avenue – development to the north and east are served by the Juniper-high subzone, while the remainder of the SWIP area to the south and west are served through pressure-reducing stations for the Juniper-low subzone.

#### ***Storage and Pumping***

Distribution storage and pumping work in unison with the pipeline conveyance system in order to effectively distribute service flows to all customers within the Juniper Zone. Juniper Zone storage tanks directly “float” the Juniper-high subzone from off-site storage facilities with a total capacity of 7.1 MG. Optimum distribution storage capacity is typically 50- to 100-percent of daily demand volume, depending on operational needs and desired level of service redundancy. In addition, fire flow volume may also be included in distribution storage tanks. Optimum pumping capacity is typically between 100- and 150-percent of maximum daily flow, plus fire flow if fire flow volume is not included in “floating” storage. According to the WSMP, the ultimate Juniper Zone storage requirement is 4.56 MG. The SWIP water demand estimated for the WSMP should be verified; however, it appears any increase in proposed SP land use densities over those anticipated in the WSMP can be accommodated in existing storage.

#### ***Distribution System***

Existing distribution capacity may be sufficient for ultimate SWIP land uses. Hydraulic analysis using computer simulation should be performed as part of master planning and preliminary design of the initial system upgrades. This will provide FWC engineering staff alternative looping and pipe size configurations, for flexibility and constructability, to meet critical service scenarios. For the purposes of the Study, it is assumed that fire flow requirements would dictate the sizing of the distribution system. In order to meet standard accepted velocity and headloss criteria during fire flow conditions, RBF has developed the following chart to use as a guide to general rule-of-thumb minimum pipe sizes:

| <u>Land Use Designation</u> | <u>Possible FF<br/>Requirement</u> | <u>Planning-Level<br/>Minimum Pipe size</u> |                |
|-----------------------------|------------------------------------|---------------------------------------------|----------------|
|                             |                                    | <u>Dead end</u>                             | <u>Looping</u> |
| Commercial, Retail          | 3,500 gpm                          | 12-inch                                     | 10-inch        |
| Commercial, Office          | 5,000 gpm                          | 16-inch                                     | 12-inch        |
| Service Commercial          | 3,500 gpm                          | 12-inch                                     | 10-inch        |
| Light Industrial            | 5,000 gpm                          | 16-inch                                     | 12-inch        |
| Live/Work                   | 5,000 gpm                          | 16-inch                                     | 12-inch        |
| Flex Tech                   | 5,000 gpm                          | 16-inch                                     | 12-inch        |
| Warehousing                 | 5,000 gpm                          | 16-inch                                     | 12-inch        |
| Manufacturing               | 5,000 gpm                          | 16-inch                                     | 12-inch        |
| Residential                 | 1,500 gpm                          | 10-inch                                     | 8-inch         |

Currently, FWC does not operate a separate recycled water distribution system within the SWIP area. However, IEUA plans to construct the Wineville Extension for delivery of recycled water from their RP-4 wastewater treatment plant at 1158 feet HGL (**Appendix C**). This nominal operating HGL of the delivery system could allow for direct service within the West SWIP sub-area. All other sub-areas will likely require FWC develop a higher zone of operation parallel to their domestic water Juniper-high zone system. The potable water system exhibit (Exhibit 3-1) shows the currently planned location of the Wineville Extension in Marley Avenue. It is estimated that this system could serve candidate non-domestic water uses and conserve potable water sources.

#### ***Recommended SWIP Distribution Systems***

It is recommended that the SWIP area domestic water distribution system be upgraded pursuant to the 2005 WSMP concept shown on Exhibit 3-1. As noted in the table above, additional capacity upgrades may be necessary for isolated areas without 12-inch or larger transmission pipelines. Fire Department flow requirements should be validated on a case by case basis, and hydraulic analysis simulation performed to verify service capacity and reliability for adequate service.

## **4. WASTEWATER SERVICE**

The Southwest Industrial Park SP area is within the sewer service area of the City of Fontana and the Inland Empire Utilities Agency (IEUA). Fontana is a member agency of the IEUA, which provides the City contracting privileges with the Agency for off-site collection, treatment, disposal and reuse. Previous planning concepts included construction of a treatment plant within the City, which would have required regional sewerage lift station(s) and force main system(s) for serving the SWIP land users. However, current planning is now focused on gravity service for most of the SWIP area.

The City is currently updating their 2000 Sewer Master Plan. The new master plan will consider IEUA wastewater treatment capacity at their reclamation plants that serve the City, and their recycled water delivery system. The new master plan is also performing extensive flow monitoring and investigating flow factors and peaking formulas. Improved capacity projections will optimize sewer life and ensure improvement projects are scheduled in a timely manner.

New trunk sewer systems are expected to be required to expand sewer service within the SWIP area. Under the Specific Plan, wastewater generation is estimated to increase to approximately 3.02 MGD, or approximately 2,100 gpm, on average. For the purposes of the Study, peak flow is assumed to be twice the average flow (Peaking Factor = 2.0), to account for higher water usage in the summer time and higher inflow and infiltration rates in the winter time during wet-weather conditions. Land uses within the south portion of the West SWIP sub-area will require lift stations if the City deems the wastewater flows from this area essential for reclaiming.

IEUA Regional Plants 1 and 4 (RP-1 and RP-4) treat the majority of the City wastewater. RP-4 is planned as the recycled water source for the City of Fontana. The issues regarding the decisions to maximize recycled water use are (1) FWC's need for supplemental water supply from local sources, and (2) water resources management of the Chino Basin.

#### **4.1 Existing Wastewater Collection System**

The existing wastewater collection system serves only current land uses within city limits and is owned and operated by the City of Fontana. Current land uses within the SWIP study area, but not within current city limits are served by private systems. Two major collection systems owned and operated by the IEUA serve City flows and are located within West SWIP in Jurupa Avenue and Marlay Avenue. These systems collect all flow from the SWIP area and much of the eastern portion of Fontana. (**Appendix D** is a copy of the City-wide collection system and 2000 Sewer Master Plan.) A City flow control structure at Jurupa Avenue and Beech Avenue allows the City to optimize the capacities of each system. Exhibit 4-1 shows the existing collection system and proposed city sewers pursuant to information received from engineering staff.

IEUA serves the treatment and disposal needs of the City. In order to accommodate the expected increase in wastewater from the SWIP Specific Plan, the City will require increased capacities from IEUA treatment and disposal facilities, and City collection facilities. In addition, the two agencies have plans to expand recycled water service from off-site treatment plants to the SWIP area.

#### **4.2 Wastewater Flows**

Wastewater flows for both existing and ultimate conditions of the SWIP area were estimated for the Study. Currently only those wastewater generators within the incorporated City limits are sewered and contribute flows to the IEUA system, according to City engineering staff. In the absence of historic non-irrigation water meter records, which can closely mimic wastewater flows, an estimate of the existing landuses and percent buildout was determined using current zoning and



aerial images. Standard wastewater flow factors were applied to the existing land uses, and calculate to an average wastewater generation within the SWIP area of 1.20 MGD, of which a portion is served by the City's sewer system and disposed of to IEUA's regional system. The estimate is shown in Table 4-1.

The ultimate land uses for the update to the Specific Plan include total building square footage of approximately 39.8 million square feet. The corresponding average wastewater flow is estimated at 3.02 MGD, as shown in Table 4-2. All unincorporated areas within the SWIP are proposed to be annexed into the City of Fontana and planned to be added to the City's sewer system. The estimated existing and ultimate wastewater flows are summarized in Table 4-3.

**Table 4-1**  
**Fontana SWIP Specific Plan Update**  
**Existing Sewer Flow Calculation**

| SWIP SP DISTRICTS                       |                          | EXISTING DEVELOPMENT |                |                   |  | ESTIMATE OF EXISTING SEWER FLOW |          |                        |                              |              |            |
|-----------------------------------------|--------------------------|----------------------|----------------|-------------------|--|---------------------------------|----------|------------------------|------------------------------|--------------|------------|
| DISTRICT                                | Land Use Type            | Existing Acreage     | Existing Units | Existing SF       |  | Factor [2]<br>gpd/              | per unit | Average<br>(gpd) (gpm) | Peak Flow [3]<br>(gpm) (cfs) |              |            |
| Freeway Industrial Commercial           | Industrial               | 68.38                | 0              | 205,293           |  | 90                              | ksf      | 18,476                 | 12.8                         |              |            |
|                                         | Commercial               | 17.04                | 0              | 15,889            |  | 90                              | ksf      | 1,430                  | 1.0                          |              |            |
|                                         | Residential              | 99.5                 | 195            |                   |  | 300                             | du       | 58,500                 | 40.6                         |              |            |
|                                         | Miscellaneous            | 6.42                 | 0              | 20,927            |  | 90                              | ksf      | 1,883                  | 1.3                          |              |            |
|                                         | Vacant Land              | 59.47                | 0              |                   |  | -                               |          | -                      | -                            |              |            |
|                                         | Development to Remain    | 82.95                |                | 478,645           |  | 90                              | ksf      | 43,078                 | 29.9                         |              |            |
|                                         | <b>Subtotal</b>          | <b>333.76</b>        | <b>195</b>     | <b>720,754</b>    |  | <b>Subtotal</b>                 |          | <b>123,368</b>         | <b>85.7</b>                  | <b>171</b>   | <b>0.4</b> |
| Jurupa North Research and Development   | Industrial               | 34.32                |                | 26,570            |  | 90                              | ksf      | 2,391                  | 1.7                          |              |            |
|                                         | Commercial               | 20.64                |                | 72,170            |  | 90                              | ksf      | 6,495                  | 4.5                          |              |            |
|                                         | Residential              | 165.88               | 97             |                   |  | 300                             | du       | 29,100                 | 20.2                         |              |            |
|                                         | Miscellaneous            | 19.08                |                | 40,023            |  | 90                              | ksf      | 3,602                  | 2.5                          |              |            |
|                                         | Vacant                   | 133.47               |                |                   |  | -                               |          | -                      | -                            |              |            |
|                                         | Development to Remain    | 187.59               |                | 392,934           |  | 90                              | ksf      | 35,364                 | 24.6                         |              |            |
|                                         | <b>Subtotal</b>          | <b>560.98</b>        | <b>97</b>      | <b>531,697</b>    |  | <b>Subtotal</b>                 |          | <b>76,953</b>          | <b>53.4</b>                  | <b>107</b>   | <b>0.2</b> |
| Jurupa South Industrial                 | Industrial               | 65.89                | 0              | 378,990           |  | 90                              | ksf      | 34,109                 | 23.7                         |              |            |
|                                         | Commercial               | 1.87                 | 0              | 3,800             |  | 90                              | ksf      | 342                    | 0.2                          |              |            |
|                                         | Residential              | 4.18                 |                |                   |  | -                               |          | -                      | -                            |              |            |
|                                         | Miscellaneous            | 13.94                | 0              | 2,600             |  | 90                              | ksf      | 234                    | 0.2                          |              |            |
|                                         | Vacant Land              | 17.42                | 0              |                   |  | -                               |          | -                      | -                            |              |            |
|                                         | Development to Remain    | 432.59               |                | 7,241,326         |  | 90                              | ksf      | 651,719                | 452.6                        |              |            |
|                                         | <b>Subtotal</b>          | <b>535.89</b>        | <b>0</b>       | <b>7,626,716</b>  |  | <b>Subtotal</b>                 |          | <b>686,404</b>         | <b>476.7</b>                 | <b>953</b>   | <b>2.1</b> |
| Slover Central Manufacturing/Industrial | Industrial               | 37.35                |                | 108,475           |  | 90                              | ksf      | 9,763                  | 6.8                          |              |            |
|                                         | Commercial               | 6.66                 |                | 12,987            |  | 90                              | ksf      | 1,169                  | 0.8                          |              |            |
|                                         | Residential              | 35.52                | 38             |                   |  | 300                             | du       | 11,400                 | 7.9                          |              |            |
|                                         | Miscellaneous            | 8.16                 |                | 14,031            |  | 90                              | ksf      | 1,263                  | 0.9                          |              |            |
|                                         | Vacant Land              | 82.65                |                |                   |  | -                               |          | -                      | -                            |              |            |
|                                         | Development to Remain    | 253.38               |                | 960,325           |  | 90                              | ksf      | 86,429                 | 60.0                         |              |            |
|                                         | <b>Subtotal</b>          | <b>423.72</b>        | <b>38</b>      | <b>1,095,818</b>  |  | <b>Subtotal</b>                 |          | <b>110,024</b>         | <b>76.4</b>                  | <b>153</b>   | <b>0.3</b> |
| Slover East Industrial                  | Industrial               | 25.09                |                | 35,148            |  | 90                              | ksf      | 3,163                  | 2.2                          |              |            |
|                                         | Commercial               | 0                    |                |                   |  | -                               |          | -                      | -                            |              |            |
|                                         | Residential              | 13.6                 | 65             |                   |  | 300                             | du       | 19,500                 | 13.5                         |              |            |
|                                         | Miscellaneous            | 28.94                |                | 8,926             |  | 90                              | ksf      | 803                    | 0.6                          |              |            |
|                                         | Vacant Land              | 47.86                |                |                   |  | -                               |          | -                      | -                            |              |            |
|                                         | Development to Remain    | 264.2                |                | 1,025,461         |  | 90                              | ksf      | 92,291                 | 64.1                         |              |            |
|                                         | <b>Subtotal</b>          | <b>379.69</b>        | <b>65</b>      | <b>1,069,535</b>  |  | <b>Subtotal</b>                 |          | <b>115,758</b>         | <b>80.4</b>                  | <b>161</b>   | <b>0.4</b> |
| Slover West Industrial                  | Industrial               | 64.92                |                | 122,900           |  | 90                              | ksf      | 11,061                 | 7.7                          |              |            |
|                                         | Commercial               | 16.99                |                | 11,880            |  | 90                              | ksf      | 1,069                  | 0.7                          |              |            |
|                                         | Residential              | 104.71               | 66             |                   |  | 300                             | du       | 19,800                 | 13.8                         |              |            |
|                                         | Miscellaneous            | 6.47                 |                | 7,803             |  | 90                              | ksf      | 702                    | 0.5                          |              |            |
|                                         | Vacant Land              | 37.67                |                |                   |  | -                               |          | -                      | -                            |              |            |
|                                         | Development to Remain    | 58.38                |                | 88,068            |  | 90                              | ksf      | 7,926                  | 5.5                          |              |            |
|                                         | <b>Subtotal</b>          | <b>289.14</b>        | <b>66</b>      | <b>230,651</b>    |  | <b>Subtotal</b>                 |          | <b>40,559</b>          | <b>28.2</b>                  | <b>56</b>    | <b>0.1</b> |
| Speedway Industrial                     | Industrial               | 51.13                |                | 86,134            |  | 90                              | ksf      | 7,752                  | 5.4                          |              |            |
|                                         | Commercial               | 35.55                |                | 64,729            |  | 90                              | ksf      | 5,826                  | 4.0                          |              |            |
|                                         | Residential              | 2.03                 | 20             |                   |  | 300                             | du       | 6,000                  | 4.2                          |              |            |
|                                         | Miscellaneous            | 4.44                 |                | 9,355             |  | 90                              | ksf      | 842                    | 0.6                          |              |            |
|                                         | Vacant Land              | 23.5                 |                |                   |  | -                               |          | -                      | -                            |              |            |
|                                         | Development to Remain    | 9.56                 |                | 31,508            |  | 90                              | ksf      | 2,836                  | 2.0                          |              |            |
|                                         | <b>Subtotal</b>          | <b>126.21</b>        | <b>20</b>      | <b>191,726</b>    |  | <b>Subtotal</b>                 |          | <b>23,255</b>          | <b>16.1</b>                  | <b>32</b>    | <b>0.1</b> |
| SWIP Residential Trucking               | Industrial               | 0                    | 0              |                   |  | -                               |          | -                      | -                            |              |            |
|                                         | Commercial               | 0                    | 0              |                   |  | -                               |          | -                      | -                            |              |            |
|                                         | Residential              | 87.7                 | 96             |                   |  | 300                             | du       | 28,800                 | 20.0                         |              |            |
|                                         | Vacant                   | 0.28                 |                |                   |  | -                               |          | -                      | -                            |              |            |
|                                         | Miscellaneous            | 1.93                 |                | 1,845             |  | 90                              | ksf      | 166                    | 0.1                          |              |            |
|                                         | Development to Remain    | 0                    |                |                   |  | -                               |          | -                      | -                            |              |            |
|                                         | <b>Subtotal</b>          | <b>89.91</b>         | <b>96</b>      | <b>1,845</b>      |  | <b>Subtotal</b>                 |          | <b>28,966</b>          | <b>20.1</b>                  | <b>40</b>    | <b>0.1</b> |
| [1]                                     | <i>Public Facilities</i> | 37.66                |                |                   |  | <b>EXISTING SEWER FLOW</b>      |          | <b>Average</b>         | <b>Peak Flow</b>             |              |            |
|                                         | <i>Drainage</i>          | 19.65                |                |                   |  |                                 |          | <b>(gpd) (gpm)</b>     | <b>(gpm) (cfs)</b>           |              |            |
|                                         | <i>Power Easement</i>    | 16.00                |                |                   |  | <b>TOTAL</b>                    |          | <b>1,205,287</b>       | <b>837</b>                   | <b>1,674</b> | <b>3.7</b> |
|                                         | <i>Railroad</i>          | 56.25                |                |                   |  |                                 |          |                        |                              |              |            |
|                                         | <i>Road</i>              | 239.96               |                |                   |  |                                 |          |                        |                              |              |            |
|                                         | <b>Subtotal</b>          | <b>369.52</b>        |                |                   |  |                                 |          |                        |                              |              |            |
|                                         | <b>EXISTING TOTAL</b>    | <b>Acres</b>         | <b>Units</b>   | <b>SF</b>         |  |                                 |          |                        |                              |              |            |
|                                         |                          | <b>3,109</b>         | <b>480</b>     | <b>11,468,742</b> |  |                                 |          |                        |                              |              |            |

[1] Existing land uses removed from the SWIP SP Districts.

[2] Based on Los Angeles Bureau of Engineering Generation factors.

[3] Peak Flow = 2 x Avg Flow

**Table 4-2**  
**Fontana SWIP Specific Plan Update**  
**Ultimate Sewer Flow Calculation**

| SWIP SP DISTRICTS                       |                       | ULTIMATE DEVELOPMENT |                   | ESTIMATE OF ULTIMATE SEWER FLOW |          |                           |                                 |                  |
|-----------------------------------------|-----------------------|----------------------|-------------------|---------------------------------|----------|---------------------------|---------------------------------|------------------|
| DISTRICT                                | Land Use Type         | Ultimate Units       | Ultimate SF       | Factor [2]<br>gpd/              | per unit | Average<br>(gpd)<br>(gpm) | Peak Flow [3]<br>(gpm)<br>(cfs) |                  |
| Freeway Industrial Commercial           | Commercial/ Retail    |                      | 1,638,793         | 135                             | ksf      | 221,237                   | 153.6                           |                  |
|                                         | Commercial/ Office    |                      | 546,264           | 135                             | ksf      | 73,746                    | 51.2                            |                  |
|                                         | Warehouse             |                      | 2,731,321         | 9                               | ksf      | 24,582                    | 17.1                            |                  |
|                                         | Service Commercial    |                      | 546,264           | 135                             | ksf      | 73,746                    | 51.2                            |                  |
|                                         | Development to Remain |                      | 478,645           | 90                              | ksf      | 43,078                    | 29.9                            |                  |
|                                         | <b>Subtotal</b>       | <b>0</b>             | <b>5,941,287</b>  |                                 |          | <b>436,388</b>            | <b>303.0</b>                    | <b>606 1.4</b>   |
| Jurupa North Research and Development   | Office                |                      | 1,219,865         | 135                             | ksf      | 164,682                   | 114.4                           |                  |
|                                         | Light Industrial      |                      | 3,252,974         | 90                              | ksf      | 292,768                   | 203.3                           |                  |
|                                         | Live / Work           |                      | 813,243           | 200                             | ksf      | 162,649                   | 113.0                           |                  |
|                                         | Flex Tech             |                      | 813,243           | 135                             | ksf      | 109,788                   | 76.2                            |                  |
|                                         | Service Commercial    |                      | 2,033,109         | 90                              | ksf      | 182,980                   | 127.1                           |                  |
|                                         | Development to Remain |                      | 392,934           | 90                              | ksf      | 35,364                    | 24.6                            |                  |
|                                         | <b>Subtotal</b>       | <b>0</b>             | <b>8,525,368</b>  |                                 |          | <b>948,230</b>            | <b>658.5</b>                    | <b>1,317 2.9</b> |
| Jurupa South Industrial                 | Warehousing           |                      | 1,799,899         | 9                               | ksf      | 16,199                    | 11.2                            |                  |
|                                         | Light Industrial      |                      | 449,975           | 90                              | ksf      | 40,498                    | 28.1                            |                  |
|                                         | Development to Remain |                      | 7,241,326         | 90                              | ksf      | 651,719                   | 452.6                           |                  |
|                                         | <b>Subtotal</b>       | <b>0</b>             | <b>9,491,200</b>  |                                 |          | <b>708,416</b>            | <b>492.0</b>                    | <b>984 2.2</b>   |
| Slover Central Manufacturing/Industrial | Warehousing           |                      | 2,597,004         | 9                               | ksf      | 23,373                    | 16.2                            |                  |
|                                         | Manufacturing         |                      | 1,113,002         | 180                             | ksf      | 200,340                   | 139.1                           |                  |
|                                         | Development to Remain |                      | 960,325           | 90                              | ksf      | 86,429                    | 60.0                            |                  |
|                                         | <b>Subtotal</b>       | <b>0</b>             | <b>4,670,330</b>  |                                 |          | <b>310,143</b>            | <b>215.4</b>                    | <b>431 1.0</b>   |
| Slover East Industrial                  | Warehousing           |                      | 1,257,686         | 9                               | ksf      | 11,319                    | 7.9                             |                  |
|                                         | Light Industrial      |                      | 754,612           | 90                              | ksf      | 67,915                    | 47.2                            |                  |
|                                         | Service Commercial    |                      | 503,074           | 90                              | ksf      | 45,277                    | 31.4                            |                  |
|                                         | Development to Remain |                      | 1,025,461         | 90                              | ksf      | 92,291                    | 64.1                            |                  |
|                                         | <b>Subtotal</b>       | <b>0</b>             | <b>3,540,833</b>  |                                 |          | <b>216,802</b>            | <b>150.6</b>                    | <b>301 0.7</b>   |
| Slover West Industrial                  | Warehousing           |                      | 3,518,167         | 9                               | ksf      | 31,664                    | 22.0                            |                  |
|                                         | Light Industrial      |                      | 1,507,786         | 90                              | ksf      | 135,701                   | 94.2                            |                  |
|                                         | Development to Remain |                      | 88,068            | 90                              | ksf      | 7,926                     | 5.5                             |                  |
|                                         | <b>Subtotal</b>       | <b>0</b>             | <b>5,114,021</b>  |                                 |          | <b>175,290</b>            | <b>121.7</b>                    | <b>243 0.5</b>   |
| Speedway Industrial                     | Warehousing           |                      | 762,191           | 9                               | ksf      | 6,860                     | 4.8                             |                  |
|                                         | Light Industrial      |                      | 1,016,255         | 90                              | ksf      | 91,463                    | 63.5                            |                  |
|                                         | Service Commercial    |                      | 762,191           | 90                              | ksf      | 68,597                    | 47.6                            |                  |
|                                         | Development to Remain |                      | 31,508            | 90                              | ksf      | 2,836                     | 2.0                             |                  |
|                                         | <b>Subtotal</b>       | <b>0</b>             | <b>2,572,145</b>  |                                 |          | <b>169,756</b>            | <b>117.9</b>                    | <b>236 0.5</b>   |
| SWIP Residential Trucking               | Residential           | 180                  | -                 | 300                             | du       | 54,000                    | 37.5                            |                  |
|                                         | Development to Remain |                      | -                 |                                 |          | -                         | -                               |                  |
|                                         | <b>Subtotal</b>       | <b>180</b>           | <b>0</b>          |                                 |          | <b>54,000</b>             | <b>37.5</b>                     | <b>75 0.2</b>    |
| [1]                                     | Public Facilities     |                      |                   |                                 |          |                           |                                 |                  |
|                                         | Drainage              |                      |                   |                                 |          |                           |                                 |                  |
|                                         | Power Easement        |                      |                   |                                 |          |                           |                                 |                  |
|                                         | Railroad              |                      |                   |                                 |          |                           |                                 |                  |
|                                         | Road                  |                      |                   |                                 |          |                           |                                 |                  |
|                                         | <b>Subtotal</b>       |                      |                   |                                 |          |                           |                                 |                  |
| <b>EXISTING</b>                         |                       | <b>Units</b>         | <b>SF</b>         |                                 |          |                           |                                 |                  |
| <b>TOTAL</b>                            |                       | <b>180</b>           | <b>39,855,184</b> |                                 |          |                           |                                 |                  |
|                                         |                       |                      |                   | <b>PROPOSED SEWER FLOW</b>      |          | <b>Average</b>            | <b>Peak Flow</b>                |                  |
|                                         |                       |                      |                   |                                 |          | <b>(gpd)</b>              | <b>(gpm)</b>                    | <b>(cfs)</b>     |
|                                         |                       |                      |                   | <b>TOTAL</b>                    |          | <b>3,019,025</b>          | <b>2,096.5</b>                  | <b>4,193 9.3</b> |

[1] Included within the respective SWIP Districts.

[2] Based on Los Angeles Bureau of Engineering Generation factors.

[3] Peak Flow = 2 x Avg Flow (Global)

**Table 4-3**  
**Fontana SWIP Specific Plan Update**  
**Estimated Sewer Flow Summary**

| SWIP SP DISTRICTS                           |  | EXISTING SEWER FLOW    |                         | ULTIMATE SEWER FLOW    |                         |
|---------------------------------------------|--|------------------------|-------------------------|------------------------|-------------------------|
| DISTRICT                                    |  | Avg Flow<br>(gpd)      | Peak Flow<br>(gpm)      | Avg Flow<br>(gpd)      | Peak Flow<br>(gpm)      |
| Freeway Industrial Commercial               |  | 123,368                | 171                     | 436,388                | 606                     |
| Jurupa North Research and Development       |  | 76,953                 | 107                     | 948,230                | 1,317                   |
| Jurupa South Industrial                     |  | 686,404                | 953                     | 708,416                | 984                     |
| Slover Central Manufacturing/<br>Industrial |  | 110,024                | 153                     | 310,143                | 431                     |
| Slover East Industrial                      |  | 115,758                | 161                     | 216,802                | 301                     |
| Slover West Industrial                      |  | 40,559                 | 56                      | 175,290                | 243                     |
| Speedway Industrial                         |  | 23,255                 | 32                      | 169,756                | 236                     |
| SWIP Residential Trucking                   |  | 28,966                 | 40                      | 54,000                 | 75                      |
|                                             |  | Avg Flow<br>(Existing) | Peak Flow<br>(Existing) | Avg Flow<br>(Ultimate) | Peak Flow<br>(Ultimate) |
|                                             |  | (gpd)                  | (gpm)                   | (gpd)                  | (gpm)                   |
|                                             |  | 1,205,287              | 1,674                   | 3,019,025              | 4,193                   |

### 4.3 Wastewater System Evaluation

The existing topography within the SWIP area ranges in elevation from 1100 feet (above mean sea level) at the northeast end to 850 feet at the southwest end. The general drainage direction from the northeast to the southwest is at an average slope of approximately one percent. Although this would seem favorable for gravity sewer systems, constraints not foreseeable at the concept planning phase, for areas not currently sewered and those areas that may require sewer upgrades, will likely prove challenging to maintaining gravity flow conditions during design and construction. During interim operating conditions of the expanded use areas to be annexed into the City, temporary lifting for service flows from individual development projects may be necessary. The City has little control of development phasing of the SWIP area; therefore, the Study does not evaluate phased system operation.

#### ***On-site Collection System***

Existing sewerage collection capacity may be sufficient for ultimate SWIP land uses of the areas currently within the City limits. New sewer systems will be required for the annexation areas. Hydraulic analysis using computer simulation should be performed as part of master planning and preliminary design of the initial system upgrades. This will provide the City engineering staff alternative collection alignment and pipe size configurations to meet critical service flow scenarios of the annexation areas. Alternative configurations will be essential as the City moves into the design phase for system expansion to serve development and redevelopment projects pursuant to the Specific Plan. For the purposes of the Study and to meet standard minimum velocity criteria during dry weather conditions, RBF recommends using the following chart as a guide to minimum slopes and pipe sizes for precluding solids settlement and minimizing sewer pipe scour:

**Table 4-4 – Standard Gravity Sewer Flow Characteristics**

| Size    | Allowable<br>d/D | Minimum<br>Slope | Velocity at Allowable d/D (fps) |                |
|---------|------------------|------------------|---------------------------------|----------------|
|         |                  |                  | <u>Minimum</u>                  | <u>Maximum</u> |
| 8-inch  | 50%              | 0.0040           | 2                               | 10             |
| 10-inch | 50%              | 0.0028           | 2                               | 10             |
| 12-inch | 50%              | 0.0022           | 2                               | 10             |
| 15-inch | 67%              | 0.0015           | 2                               | 10             |
| 18-inch | 75%              | 0.0012           | 2                               | 10             |
| 21-inch | 75%              | 0.0010           | 2                               | 10             |
| 24-inch | 75%              | 0.0008           | 2                               | 10             |

#### ***Recommended SWIP Wastewater Collection System***

It is recommended that the SWIP area sewer system be expanded pursuant to the needs of annexation, development and redevelopment activities. As the unincorporated areas are currently unsewered, and much of the Specific Plan

area is under-utilized, estimated flows for each trunk sewer system should be revised as these activities occur, in order to optimize sewer sizing. In addition, potential trunk system alignment modifications may be in order to efficiently serve new parcel construction. The new City sewer master plan is scheduled to be completed in 2009, and should incorporate the development planning concepts of the SWIP. Flow estimates should be validated on a parcel-by-parcel basis as individual site projects secure entitlements, and hydraulic analysis simulation performed to update the SWIP sewer master plan. In addition, interim collection facilities, including lift stations, may be necessary as a cost-saving measure until ultimate collection systems are constructed.



Southwest Industrial Park  
Regional Vicinity

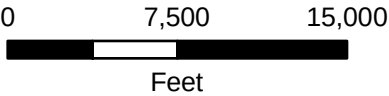
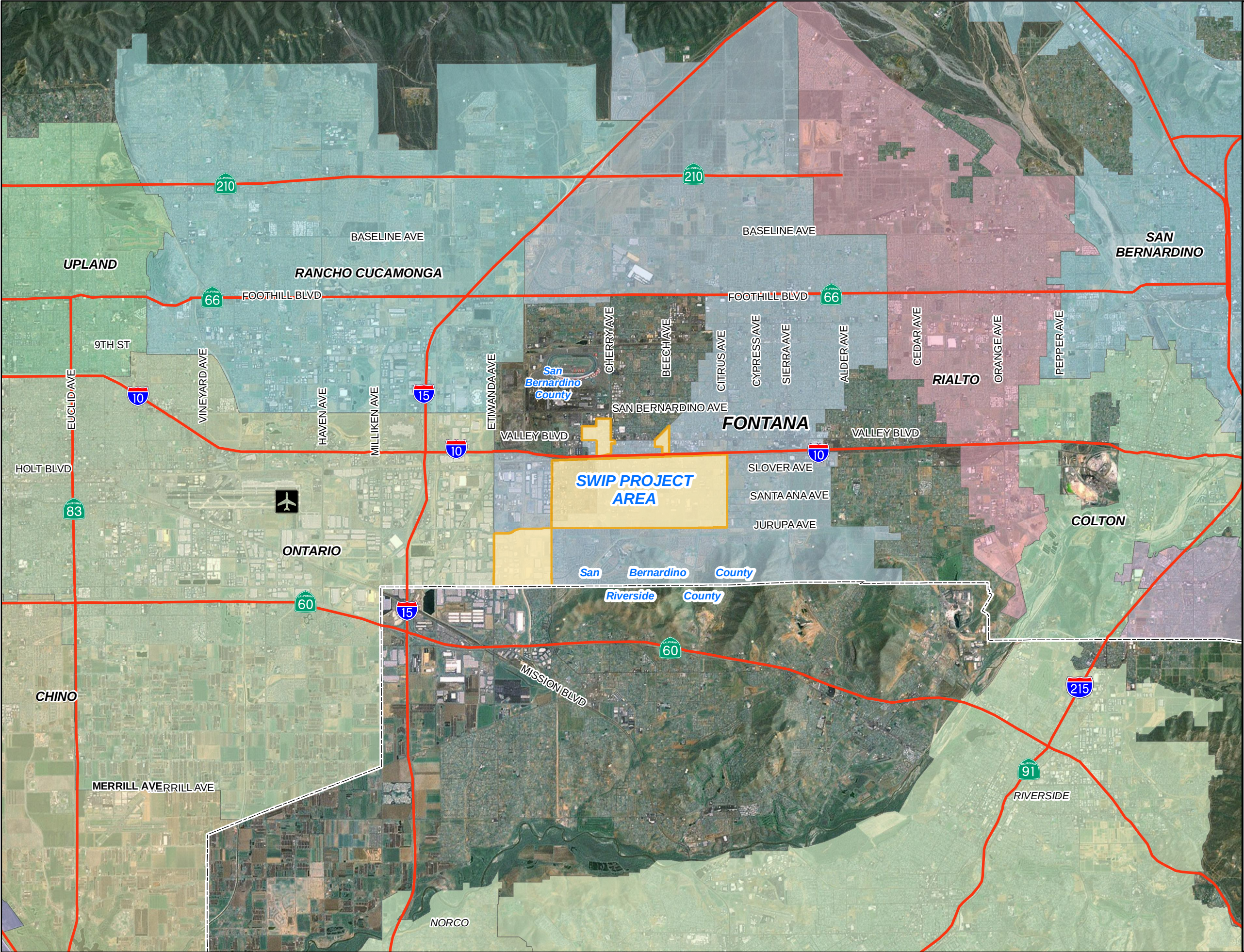
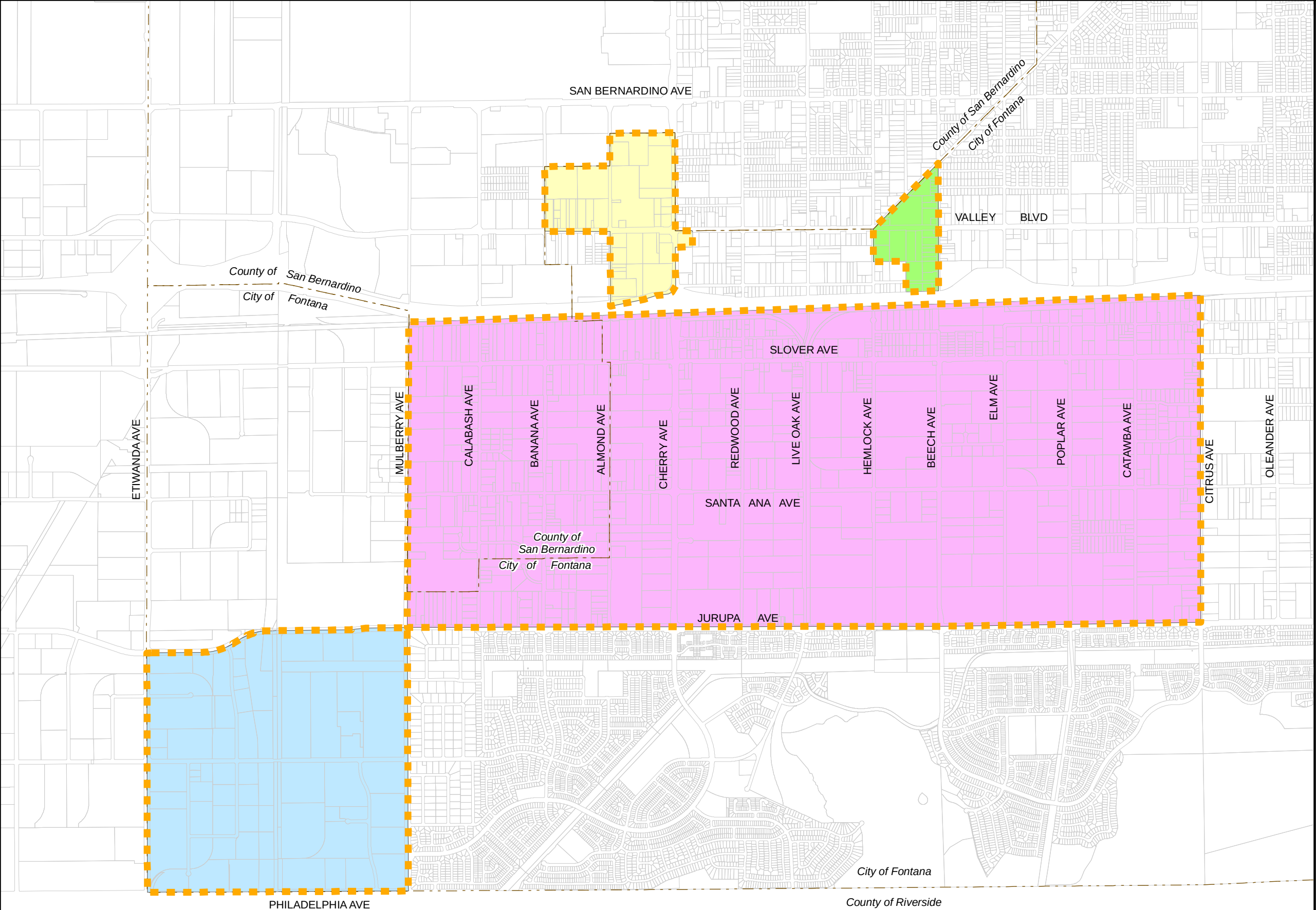


Exhibit 1-1



City of Fontana  
Southwest Industrial Park  
Study Area



- Revised SWIP Boundary
- Fontana City Boundary
- West SWIP
- Central SWIP
- Northwest SWIP
- Northeast SWIP

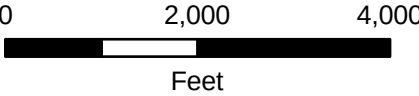


Exhibit 1-2



# City of Fontana Southwest Industrial Park Land Use

- Speedway Industrial District
- Freeway Industrial/Commercial
- Slover East and West Industrial District
- Slover Central Manufacturing/Industrial District
- Jurupa North Research and Development District
- SWIP Residential Trucking Districts
- Public Facilities (Kaiser High School)
- Jurupa South Industrial District
- ROW
- Revised SWIP Boundary

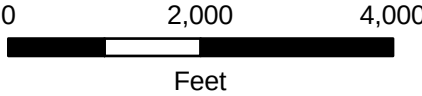
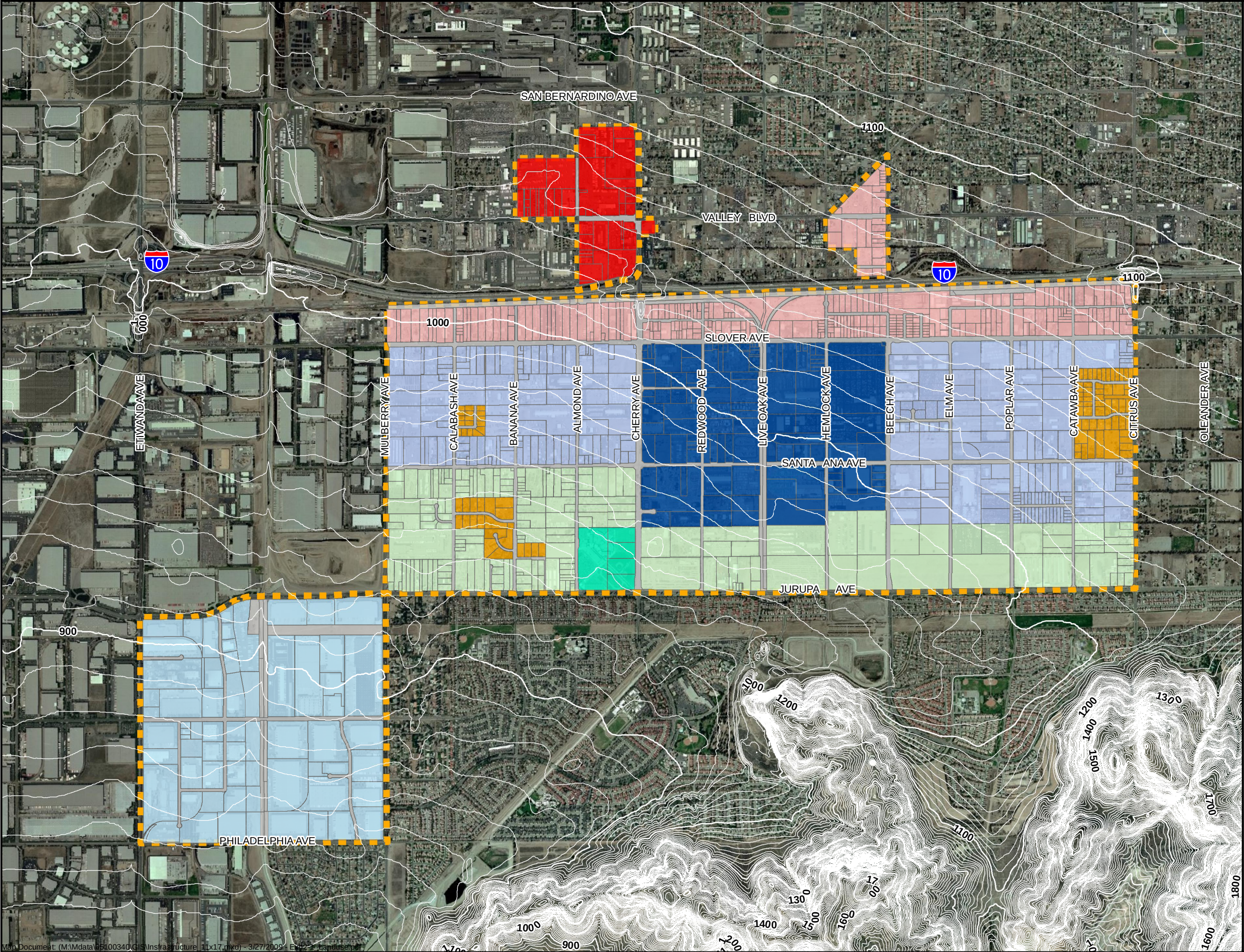
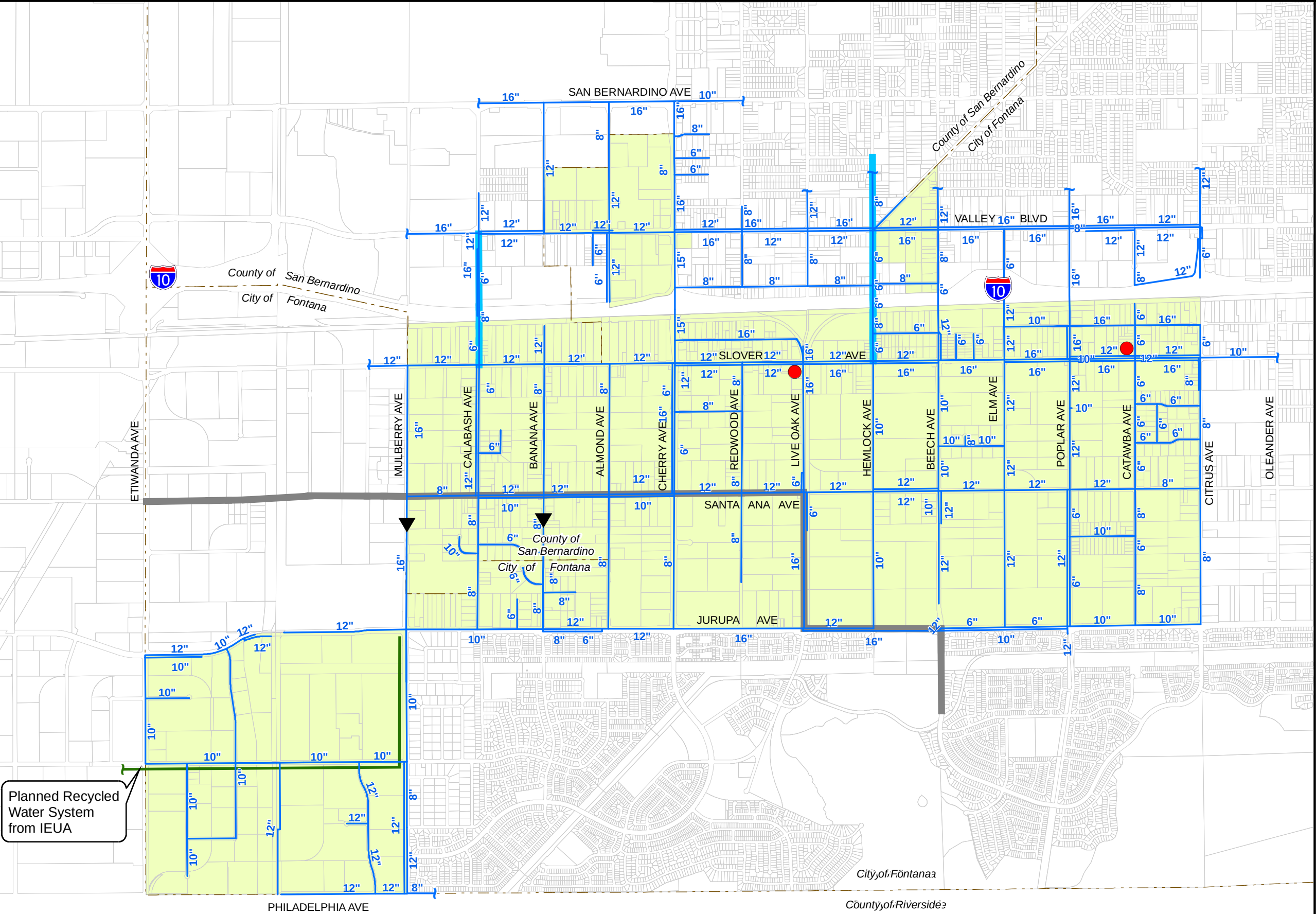


Exhibit 2-1





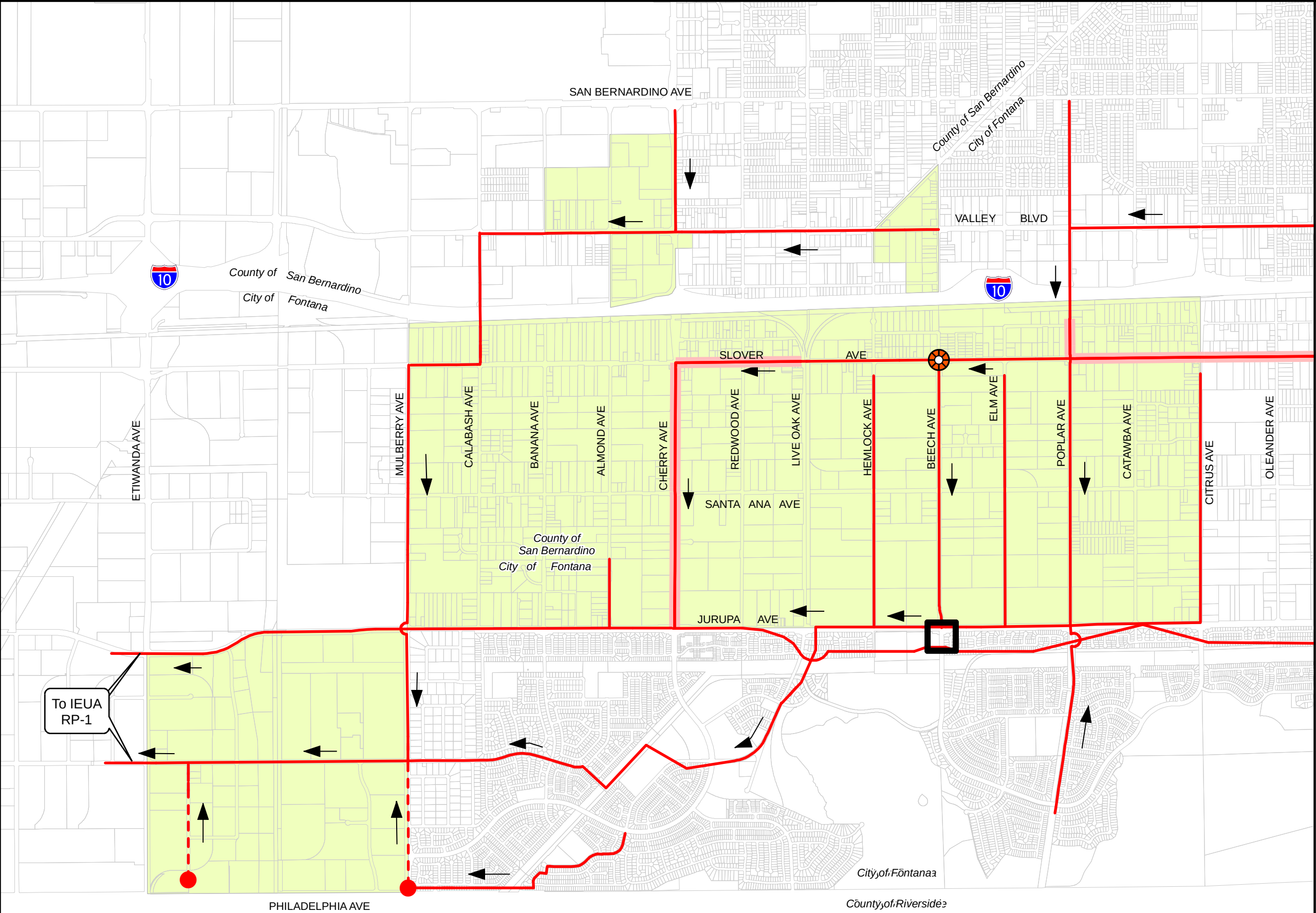
Fontana Water Company  
Potable Water System  
(Portion of Juniper Zone)



0 2,000 4,000  
Feet

Exhibit 3-1

City of Fontana  
Sewer System



- Existing Lift Station
- Diversion Manhole
- Control Structure
- Existing Gravity Trunk Sewers
- Proposed City Trunk Sewer
- Existing Force Main
- Existing Master Plan Flow Direction
- Revised SWIP Boundary

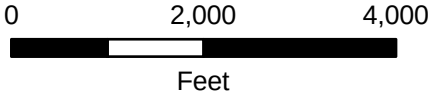
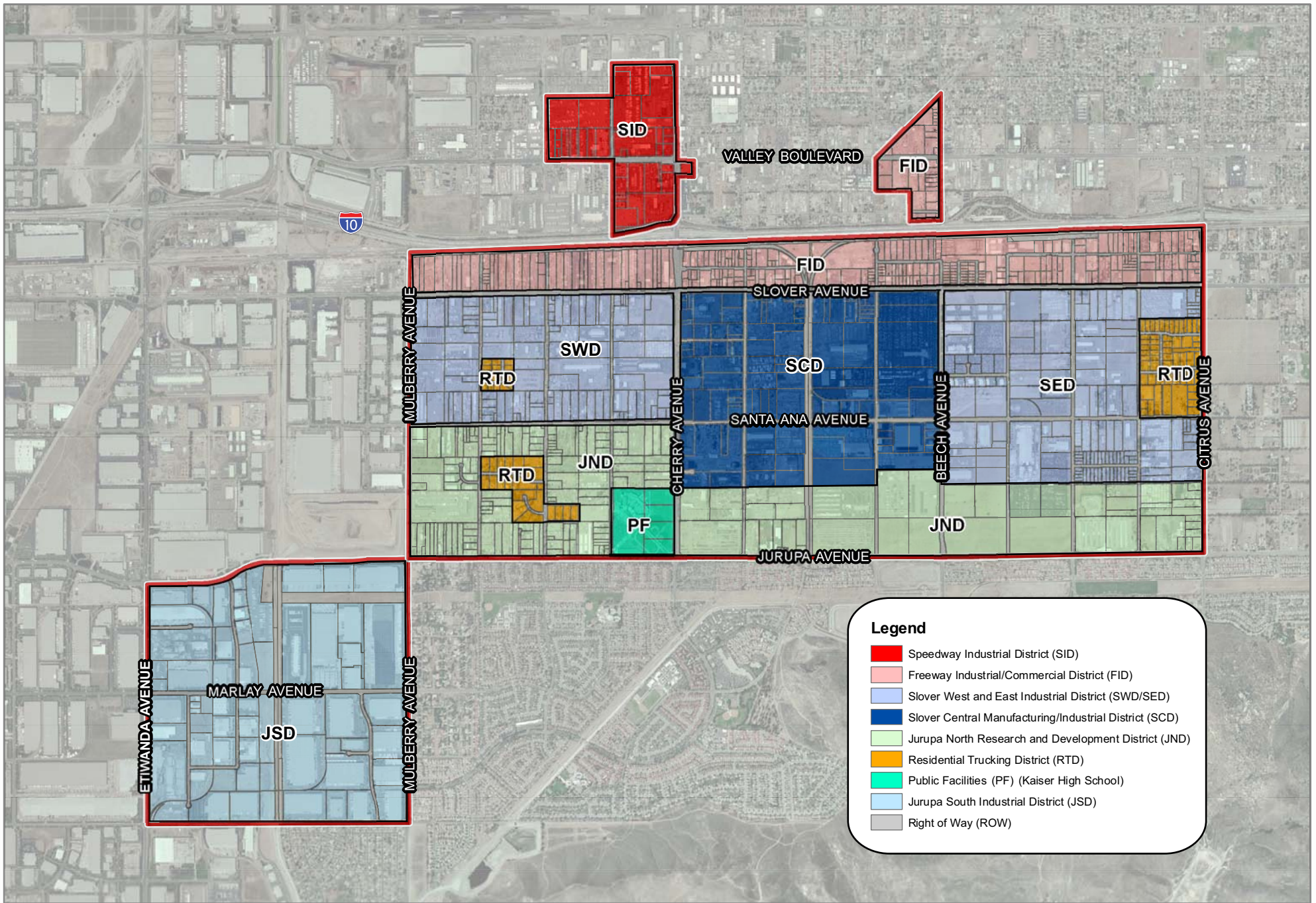


Exhibit 4-1

## *APPENDIX A*





#### Legend

- Speedway Industrial District (SID)
- Freeway Industrial/Commercial District (FID)
- Slover West and East Industrial District (SWD/SED)
- Slover Central Manufacturing/Industrial District (SCD)
- Jurupa North Research and Development District (JND)
- Residential Trucking District (RTD)
- Public Facilities (PF) (Kaiser High School)
- Jurupa South Industrial District (JSD)
- Right of Way (ROW)

Source: Eagle Aerial, 2007



**Fontana SWIP Land Use Buildout (Realistic)**

| SWIP SPECIFIC PLAN LAND USE DISTRICTS                               |                                                                                    | EXISTING DEVELOPMENT   |                                 |                |               | PROPOSED LAND USES |                  |               |               | PROPOSED BUILDOUT     |                |               | NET CHANGE (FUTURE - EXISTING) |             |               |
|---------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------|---------------------------------|----------------|---------------|--------------------|------------------|---------------|---------------|-----------------------|----------------|---------------|--------------------------------|-------------|---------------|
| DISTRICT                                                            | LANDUSE                                                                            | Land Use Type          | Existing Acreage                | Existing Units | Existing SF   | Land Use Type      | Distribution (%) | Density du/ac | Intensity FAR | Land Use Type         | Buildout Units | Buildout SF   | Land Use Type                  | Total Units | Total SF      |
| Freeway Industrial Commercial                                       | Commercial/ Retail<br>Commercial/ Office<br>Warehouse<br>Service Commercial        | Commercial             | 17.04                           | 0              | 15,889        | Commercial/ Retail | 0.30             |               | 0.50          | Commercial/ Retail    |                | 1,638,793     | Commercial/ Retail             |             |               |
|                                                                     |                                                                                    | Industrial             | 68.38                           | 0              | 205,293       | Commercial/ Office | 0.10             |               | 0.50          | Commercial/ Office    |                | 546,264       | Commercial/ Office             |             |               |
|                                                                     |                                                                                    | Residential            | 99.5                            | 195            |               | Warehouse          | 0.50             |               | 0.50          | Warehouse             |                | 2,731,321     | Warehouse                      |             |               |
|                                                                     |                                                                                    | Miscellaneous          | 6.42                            | 0              | 20,927        | Service Commercial | 0.10             |               | 0.50          | Service Commercial    |                | 546,264       | Service Commercial             |             |               |
|                                                                     |                                                                                    | Vacant Land            | 59.47                           | 0              | -             |                    |                  |               |               |                       |                |               |                                |             |               |
|                                                                     |                                                                                    | Development to Remain  | 82.95                           |                | 478,645       |                    |                  |               |               | Development to Remain |                | 478,645       |                                |             |               |
|                                                                     |                                                                                    | TOTAL                  | 333.76                          | 195            | 720,754       |                    |                  |               |               | SUBTOTAL              | 0              | 5,941,287     |                                |             |               |
|                                                                     |                                                                                    | SUBTOTAL               |                                 |                |               |                    |                  |               |               |                       |                |               |                                |             |               |
| Jurupa North Research and Development                               | Office<br>Light Industrial<br>Live/ Work<br>Flex Tech<br>Service Commercial        | Industrial             | 34.32                           |                | 26,570        | Office             | 0.15             |               | 0.50          | Office                |                | 1,219,865     | Office                         |             |               |
|                                                                     |                                                                                    | Commercial             | 20.64                           |                | 72,170        | Light Industrial   | 0.40             |               | 0.50          | Light Industrial      |                | 3,252,974     | Light Industrial               |             |               |
|                                                                     |                                                                                    | Residential            | 165.88                          | 97             |               | Live/ Work         | 0.10             |               | 0.50          | Live/ Work            |                | 813,243       | Live/ Work                     |             |               |
|                                                                     |                                                                                    | Miscellaneous          | 19.08                           |                | 40,023        | Flex Tech          | 0.10             |               | 0.50          | Flex Tech             |                | 813,243       | Flex Tech                      |             |               |
|                                                                     |                                                                                    | Vacant                 | 133.47                          |                | -             | Service Commercial | 0.25             |               | 0.50          | Service Commercial    |                | 2,033,109     | Service Commercial             |             |               |
|                                                                     |                                                                                    | Development to Remain  | 187.59                          |                | 392,934       |                    |                  |               |               | Development to Remain |                | 392,934       |                                |             |               |
|                                                                     |                                                                                    | TOTAL                  | 560.98                          | 97             | 531,697       |                    |                  |               |               | SUBTOTAL              | 0              | 8,525,368     |                                |             |               |
|                                                                     |                                                                                    | SUBTOTAL               |                                 |                |               |                    |                  |               |               |                       |                |               |                                |             |               |
| Jurupa South Industrial                                             | Warehousing<br>Light Industrial                                                    | Industrial             | 65.89                           | 0              | 378,990       | Warehousing        | 0.80             |               | 0.50          | Warehousing           |                | 1,799,899     | Warehousing                    |             |               |
|                                                                     |                                                                                    | Commercial             | 1.87                            | 0              | 3,800         | Light Industrial   | 0.20             |               | 0.50          | Light Industrial      |                | 449,975       | Light Industrial               |             |               |
|                                                                     |                                                                                    | Miscellaneous          | 13.94                           | 0              | 2,600         |                    |                  |               |               |                       |                |               |                                |             |               |
|                                                                     |                                                                                    | Vacant Land            | 17.42                           | 0              | -             |                    |                  |               |               | Development to Remain |                | 7,241,326     |                                |             |               |
|                                                                     |                                                                                    | Residential            | 4.18                            |                |               |                    |                  |               |               | SUBTOTAL              | 0              | 9,491,200     |                                |             |               |
|                                                                     |                                                                                    | Development to Remain  | 432.59                          |                | 7,241,326     |                    |                  |               |               |                       |                |               |                                |             |               |
|                                                                     |                                                                                    | TOTAL                  | 535.89                          | 0              | 7,626,716     |                    |                  |               |               |                       |                |               |                                |             |               |
|                                                                     |                                                                                    | SUBTOTAL               |                                 |                |               |                    |                  |               |               |                       |                |               |                                |             |               |
| Slover Central Manufacturing/Industrial                             | Warehousing<br>Manufacturing                                                       | Industrial             | 37.35                           |                | 108,475       | Warehousing        | 0.70             |               | 0.50          | Warehousing           |                | 2,597,004     | Warehousing                    |             |               |
|                                                                     |                                                                                    | Commercial             | 6.66                            |                | 12,987        | Manufacturing      | 0.30             |               | 0.50          | Manufacturing         |                | 1,113,002     | Manufacturing                  |             |               |
|                                                                     |                                                                                    | Residential            | 35.52                           | 38             |               |                    |                  |               |               |                       |                |               |                                |             |               |
|                                                                     |                                                                                    | Miscellaneous          | 8.16                            |                | 14,031        |                    |                  |               |               | Development to Remain |                | 960,325       |                                |             |               |
|                                                                     |                                                                                    | Vacant Land            | 82.65                           |                | -             |                    |                  |               |               | SUBTOTAL              | 0              | 4,670,330     |                                |             |               |
|                                                                     |                                                                                    | Development to Remain  | 253.38                          |                | 960,325       |                    |                  |               |               |                       |                |               |                                |             |               |
|                                                                     |                                                                                    | TOTAL                  | 423.72                          | 38             | 1,095,815     |                    |                  |               |               |                       |                |               |                                |             |               |
|                                                                     |                                                                                    | SUBTOTAL               |                                 |                |               |                    |                  |               |               |                       |                |               |                                |             |               |
| Slover East Industrial                                              | Warehousing<br>Light Industrial<br>Service Commercial                              | Industrial             | 25.09                           |                | 35,148        | Warehousing        | 0.50             |               | 0.50          | Warehousing           |                | 1,257,686     | Warehousing                    |             |               |
|                                                                     |                                                                                    | Residential            | 13.6                            | 65             |               | Light Industrial   | 0.30             |               | 0.50          | Light Industrial      |                | 754,612       | Light Industrial               |             |               |
|                                                                     |                                                                                    | Miscellaneous          | 28.94                           |                | 8,926         | Service Commercial | 0.20             |               | 0.50          | Service Commercial    |                | 503,074       | Service Commercial             |             |               |
|                                                                     |                                                                                    | Vacant Land            | 47.86                           |                | -             |                    |                  |               |               | Development to Remain |                | 1,025,461     |                                |             |               |
|                                                                     |                                                                                    | Development to Remain  | 264.2                           |                | 1,025,461     |                    |                  |               |               | SUBTOTAL              | 0              | 3,540,833     |                                |             |               |
|                                                                     |                                                                                    | TOTAL                  | 379.69                          | 65             | 1,069,535     |                    |                  |               |               |                       |                |               |                                |             |               |
|                                                                     |                                                                                    | SUBTOTAL               |                                 |                |               |                    |                  |               |               |                       |                |               |                                |             |               |
|                                                                     |                                                                                    | Slover West Industrial | Warehousing<br>Light Industrial | Industrial     | 64.92         |                    | 122,900          | Warehousing   | 0.70          |                       | 0.50           | Warehousing   |                                | 3,518,167   | Warehousing   |
| Commercial                                                          | 16.99                                                                              |                        |                                 |                | 11,880        | Light Industrial   | 0.30             |               | 0.50          | Light Industrial      |                | 1,507,786     | Light Industrial               |             |               |
| Residential                                                         | 104.71                                                                             |                        |                                 | 66             |               |                    |                  |               |               |                       |                |               |                                |             |               |
| Miscellaneous                                                       | 6.47                                                                               |                        |                                 |                | 7,803         |                    |                  |               |               | Development to Remain |                | 88,068        |                                |             |               |
| Vacant Land                                                         | 37.67                                                                              |                        |                                 |                | -             |                    |                  |               |               | SUBTOTAL              | 0              | 5,114,021     |                                |             |               |
| Development to Remain                                               | 58.38                                                                              |                        |                                 |                | 88,068        |                    |                  |               |               |                       |                |               |                                |             |               |
| TOTAL                                                               | 289.14                                                                             |                        |                                 | 66             | 230,651       |                    |                  |               |               |                       |                |               |                                |             |               |
| SUBTOTAL                                                            |                                                                                    |                        |                                 |                |               |                    |                  |               |               |                       |                |               |                                |             |               |
| Speedway Industrial                                                 | Warehousing<br>Light Industrial<br>Service Commercial                              | Industrial             | 51.13                           |                | 86,134        | Warehousing        | 0.30             |               | 0.50          | Warehousing           |                | 762,191       | Warehousing                    |             |               |
|                                                                     |                                                                                    | Commercial             | 35.55                           |                | 64,729        | Light Industrial   | 0.40             |               | 0.50          | Light Industrial      |                | 1,016,255     | Light Industrial               |             |               |
|                                                                     |                                                                                    | Residential            | 2.03                            | 20             |               | Service Commercial | 0.30             |               | 0.50          | Service Commercial    |                | 762,191       | Service Commercial             |             |               |
|                                                                     |                                                                                    | Vacant Land            | 23.5                            |                | -             |                    |                  |               |               | Development to Remain |                | 31,508        |                                |             |               |
|                                                                     |                                                                                    | Miscellaneous          | 4.44                            |                | 9,355         |                    |                  |               |               | SUBTOTAL              | 0              | 2,572,145     |                                |             |               |
|                                                                     |                                                                                    | Development to Remain  | 9.56                            |                | 31,508        |                    |                  |               |               |                       |                |               |                                |             |               |
|                                                                     |                                                                                    | TOTAL                  | 126.21                          | 20             | 191,726       |                    |                  |               |               |                       |                |               |                                |             |               |
|                                                                     |                                                                                    | SUBTOTAL               |                                 |                |               |                    |                  |               |               |                       |                |               |                                |             |               |
| SWIP Residential Trucking                                           | Residential                                                                        | Residential            | 87.7                            | 96             | -             | Residential        | 1.00             | 2             |               | Residential           | 180            | 0             | Residential                    |             |               |
|                                                                     |                                                                                    | Vacant                 | 0.28                            |                | -             |                    |                  |               |               |                       |                |               |                                |             |               |
|                                                                     |                                                                                    | Miscellaneous          | 1.93                            |                | 1,845         |                    |                  |               |               | Development to Remain |                | 0             |                                |             |               |
|                                                                     |                                                                                    | Development to Remain  | 0                               |                | -             |                    |                  |               |               | SUBTOTAL              | 180            | 0             |                                |             |               |
|                                                                     |                                                                                    | TOTAL                  | 89.91                           | 96             | 1,845         |                    |                  |               |               |                       |                |               |                                |             |               |
| Public Facilities<br>Drainage<br>Power Easement<br>Railroad<br>Road | Kaiser High School<br>Right of Way<br>Right of Way<br>Right of Way<br>Right of Way |                        | 37.66                           |                |               |                    |                  |               |               |                       |                |               |                                |             |               |
|                                                                     |                                                                                    |                        | 19.65                           |                |               |                    |                  |               |               |                       |                |               |                                |             |               |
|                                                                     |                                                                                    |                        | 16.00                           |                |               |                    |                  |               |               |                       |                |               |                                |             |               |
|                                                                     |                                                                                    |                        | 56.25                           |                |               |                    |                  |               |               |                       |                |               |                                |             |               |
|                                                                     |                                                                                    |                        | 239.96                          |                |               |                    |                  |               |               |                       |                |               |                                |             |               |
|                                                                     |                                                                                    | TOTAL                  | 369.52                          |                |               |                    |                  |               |               |                       |                |               |                                |             |               |
|                                                                     |                                                                                    |                        |                                 |                |               |                    |                  |               |               |                       |                |               |                                |             |               |
|                                                                     |                                                                                    | EXISTING TOTAL         | Acres 3108.82                   | Units 577      | SF 11,468,742 |                    |                  |               |               | PROPOSED BULDOZ TOTAL | Units 180      | SF 39,855,184 | NET TOTAL                      | Units -397  | SF 28,386,442 |

**Fontana SWIP Land Use Buildout (Theoretical)**

| SWIP SPECIFIC PLAN LAND USE DISTRICTS   |                    | EXISTING DEVELOPMENT |                  |                |               | PROPOSED LAND USES |                  |               |               | PROPOSED BUILDOUT     |                |               | NET CHANGE (FUTURE - EXISTING) |             |               |
|-----------------------------------------|--------------------|----------------------|------------------|----------------|---------------|--------------------|------------------|---------------|---------------|-----------------------|----------------|---------------|--------------------------------|-------------|---------------|
| DISTRICT                                | LANDUSE            | Land Use Type        | Existing Acreage | Existing Units | Existing SF   | Land Use Type      | Distribution (%) | Density du/ac | Intensity FAR | Land Use Type         | Buildout Units | Buildout SF   | Land Use Type                  | Total Units | Total SF      |
| Freeway Industrial Commercial           | Commercial/ Retail | Commercial           | 33.28            | 0              | 54,121        | Commercial/ Retail | 0.30             |               | 0.50          | Commercial/ Retail    |                | 2,180,788     | Commercial/ Retail             |             |               |
|                                         | Commercial/ Office | Industrial           | 103.69           | 0              | 611,733       | Commercial/ Office | 0.10             |               | 0.50          | Commercial/ Office    |                | 726,929       | Commercial/ Office             |             |               |
|                                         | Warehouse          | Residential          | 106.18           | 203            | -             | Warehouse          | 0.50             |               | 0.50          | Warehouse             |                | 3,634,646     | Warehouse                      |             |               |
|                                         | Service Commercial | Miscellaneous        | 27.00            | 0              | 54,900        | Service Commercial | 0.10             |               | 0.50          | Service Commercial    |                | 726,929       | Service Commercial             |             |               |
|                                         |                    | Vacant Land          | 63.61            | 0              | -             |                    |                  |               |               |                       |                |               |                                |             |               |
|                                         | TOTAL              |                      | 333.76           | 203            | 720,754       |                    |                  |               |               | SUBTOTAL              | 0              | 7,269,293     |                                | SUBTOTAL    | -203          |
| Jurupa North Research and Development   | Office             | Industrial           | 101.77           |                | 233,648       | Office             | 0.15             |               | 0.50          | Office                |                | 1,832,722     | Office                         |             |               |
|                                         | Light Industrial   | Commercial           | 53.78            |                | 170,170       | Light Industrial   | 0.40             |               | 0.50          | Light Industrial      |                | 4,887,258     | Light Industrial               |             |               |
|                                         | Live/ Work         | Residential          | 170.75           | 97             | -             | Live/ Work         | 0.10             |               | 0.50          | Live/ Work            |                | 1,221,814     | Live/ Work                     |             |               |
|                                         | Flex Tech          | Miscellaneous        | 70.60            |                | 127,879       | Flex Tech          | 0.10             |               | 0.50          | Flex Tech             |                | 1,221,814     | Flex Tech                      |             |               |
|                                         | Service Commercial | Vacant               | 164.08           |                | -             | Service Commercial | 0.25             |               | 0.50          | Service Commercial    |                | 3,054,536     | Service Commercial             |             |               |
|                                         | TOTAL              |                      | 560.98           | 97             | 531,697       |                    |                  |               |               | SUBTOTAL              | 0              | 12,218,144    |                                | SUBTOTAL    | -97           |
| Jurupa South Industrial                 | Warehousing        | Industrial           | 468.79           | 0              | 7,425,566     | Warehousing        | 0.80             |               | 0.50          | Warehousing           |                | 9,332,120     | Warehousing                    |             |               |
|                                         | Light Industrial   | Commercial           | 2.38             | 0              | 13,550        | Light Industrial   | 0.20             |               | 0.50          | Light Industrial      |                | 2,333,030     | Light Industrial               |             |               |
|                                         |                    | Miscellaneous        | 27.23            | 0              | 187,600       |                    |                  |               |               |                       |                |               |                                |             |               |
|                                         |                    | Vacant Land          | 37.19            | 0              | -             |                    |                  |               |               |                       |                |               |                                |             |               |
|                                         | TOTAL              |                      | 535.59           | 0              | 7,626,716     |                    |                  |               |               | SUBTOTAL              | 0              | 11,665,150    |                                | SUBTOTAL    | 0             |
| Slover Central Manufacturing/Industrial | Warehousing        | Industrial           | 153.82           |                | 852,894       | Warehousing        | 0.70             |               | 0.50          | Warehousing           |                | 6,460,035     | Warehousing                    |             |               |
|                                         | Manufacturing      | Commercial           | 87.35            |                | 145,969       | Manufacturing      | 0.30             |               | 0.50          | Manufacturing         |                | 2,768,586     | Manufacturing                  |             |               |
|                                         |                    | Residential          | 40.54            | 38             | -             |                    |                  |               |               |                       |                |               |                                |             |               |
|                                         |                    | Miscellaneous        | 13.71            |                | 96,955        |                    |                  |               |               |                       |                |               |                                |             |               |
|                                         |                    | Vacant Land          | 128.3            |                | -             |                    |                  |               |               |                       |                |               |                                |             |               |
|                                         | TOTAL              |                      | 423.72           | 38             | 1,095,818     |                    |                  |               |               | SUBTOTAL              | 0              | 9,228,622     |                                | SUBTOTAL    | -38           |
| Slover East Industrial                  | Warehousing        | Industrial           | 145.2            |                | 884,231       | Warehousing        | 0.50             |               | 0.50          | Warehousing           |                | 4,134,824     | Warehousing                    |             |               |
|                                         | Light Industrial   | Commercial           | 27.05            |                | 87,178        | Light Industrial   | 0.30             |               | 0.50          | Light Industrial      |                | 2,480,894     | Light Industrial               |             |               |
|                                         | Service Commercial | Residential          | 67.8             | 65             | -             | Service Commercial | 0.20             |               | 0.50          | Service Commercial    |                | 1,653,930     | Service Commercial             |             |               |
|                                         |                    | Miscellaneous        | 28.94            |                | 98,126        |                    |                  |               |               |                       |                |               |                                |             |               |
|                                         |                    | Vacant Land          | 110.7            |                | -             |                    |                  |               |               |                       |                |               |                                |             |               |
|                                         | TOTAL              |                      | 379.69           | 65             | 1,069,535     |                    |                  |               |               | SUBTOTAL              | 0              | 8,269,648     |                                | SUBTOTAL    | -65           |
| Slover West Industrial                  | Warehousing        | Industrial           | 108.72           |                | 217,271       | Warehousing        | 0.70             |               | 0.50          | Warehousing           |                | 4,408,228     | Warehousing                    |             |               |
|                                         | Light Industrial   | Commercial           | 16.99            |                | 11,880        | Light Industrial   | 0.30             |               | 0.50          | Light Industrial      |                | 1,889,241     | Light Industrial               |             |               |
|                                         |                    | Residential          | 108.8            | 66             | -             |                    |                  |               |               |                       |                |               |                                |             |               |
|                                         |                    | Miscellaneous        | 6.47             |                | 1,500         |                    |                  |               |               |                       |                |               |                                |             |               |
|                                         |                    | Vacant Land          | 48.16            |                | -             |                    |                  |               |               |                       |                |               |                                |             |               |
|                                         | TOTAL              |                      | 289.14           | 66             | 230,651       |                    |                  |               |               | SUBTOTAL              | 0              | 6,297,469     |                                | SUBTOTAL    | -66           |
| Speedway Industrial                     | Warehousing        | Industrial           | 51.13            |                | 86,134        | Warehousing        | 0.30             |               | 0.50          | Warehousing           |                | 824,656       | Warehousing                    |             |               |
|                                         | Light Industrial   | Commercial           | 44.86            |                | 105,592       | Light Industrial   | 0.40             |               | 0.50          | Light Industrial      |                | 1,099,542     | Light Industrial               |             |               |
|                                         | Service Commercial | Residential          | 2.03             | 20             | -             | Service Commercial | 0.30             |               | 0.50          | Service Commercial    |                | 824,656       | Service Commercial             |             |               |
|                                         |                    | Vacant Land          | 28.19            |                | -             |                    |                  |               |               |                       |                |               |                                |             |               |
|                                         | TOTAL              |                      | 126.21           | 20             | 191,726       |                    |                  |               |               | SUBTOTAL              | 0              | 2,748,854     |                                | SUBTOTAL    | -20           |
| SWIP Residential Trucking               | Residential        | Residential          | 87.7             | 96             |               | Residential        | 1.00             | 2             |               | Residential           | 180            | 0             | Residential                    |             |               |
|                                         |                    | Miscellaneous        | 1.93             |                | 1,845         |                    |                  |               |               |                       |                |               |                                |             |               |
|                                         |                    | Vacant               | 0.28             |                | -             |                    |                  |               |               |                       |                |               |                                |             |               |
|                                         | TOTAL              |                      | 89.91            | 96             | 1,845         |                    |                  |               |               | SUBTOTAL              | 180            | 0             |                                | SUBTOTAL    | 84            |
| Public Facilities                       | Kaiser High School |                      | 37.66            |                |               |                    |                  |               |               |                       |                |               |                                |             |               |
|                                         | Drainage           | Right of Way         | 19.65            |                |               |                    |                  |               |               |                       |                |               |                                |             |               |
|                                         | Power Easement     | Right of Way         | 16.00            |                |               |                    |                  |               |               |                       |                |               |                                |             |               |
|                                         | Railroad           | Right of Way         | 56.25            |                |               |                    |                  |               |               |                       |                |               |                                |             |               |
|                                         | Road               | Right of Way         | 239.96           |                |               |                    |                  |               |               |                       |                |               |                                |             |               |
|                                         |                    | TOTAL                |                  | 369.52         |               |                    |                  |               |               |                       |                |               |                                |             |               |
|                                         |                    | EXISTING TOTAL       | Acres 3108.52    | Units 585      | SF 11,468,742 |                    |                  |               |               | PROPOSED BULDOZ TOTAL | Units 180      | SF 57,697,180 | NET TOTAL                      | Units -405  | SF 46,228,432 |

## *APPENDIX B*



FIGURE 7-1

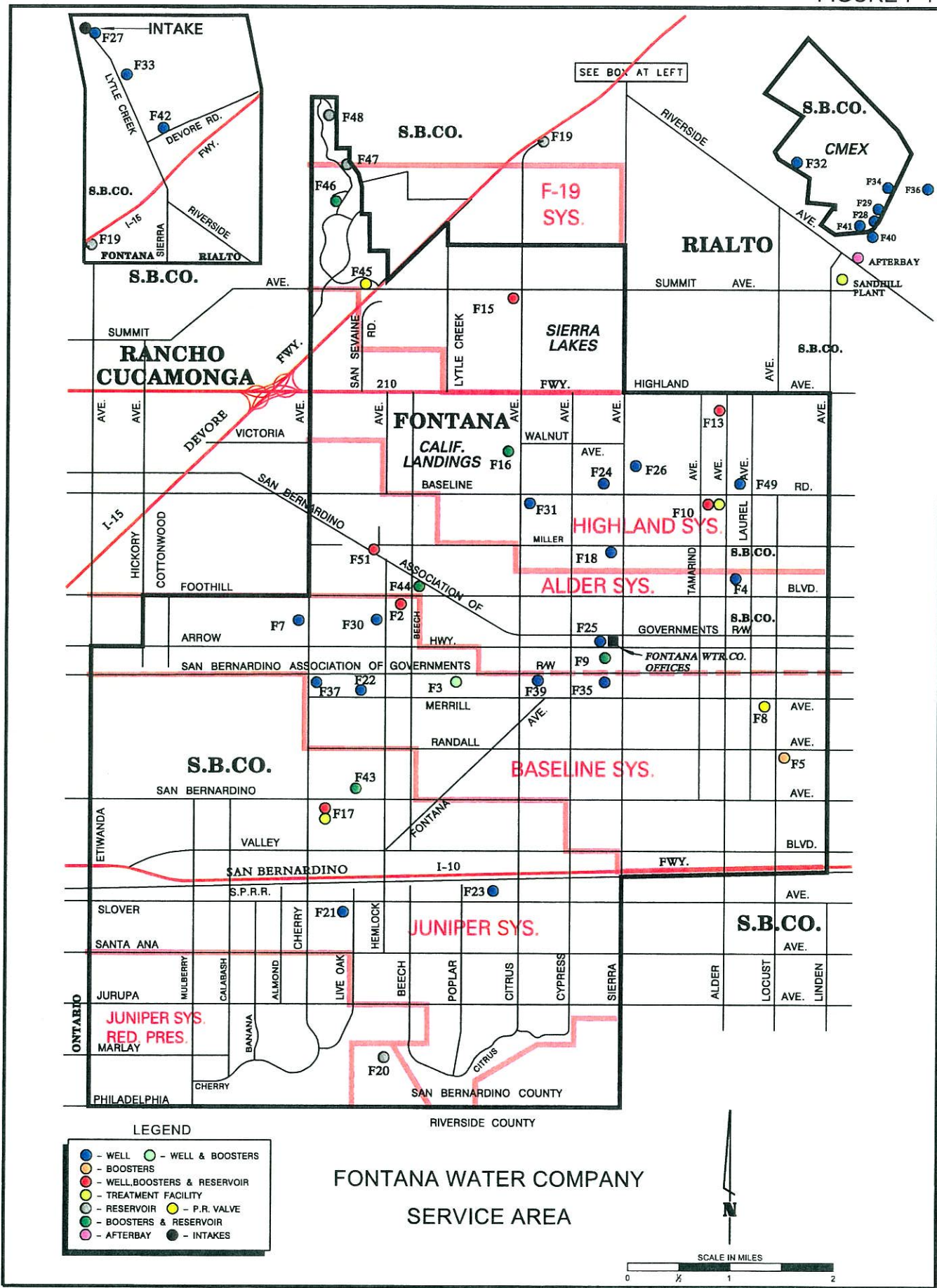


FIGURE 7-2

# SYSTEM DIAGRAM

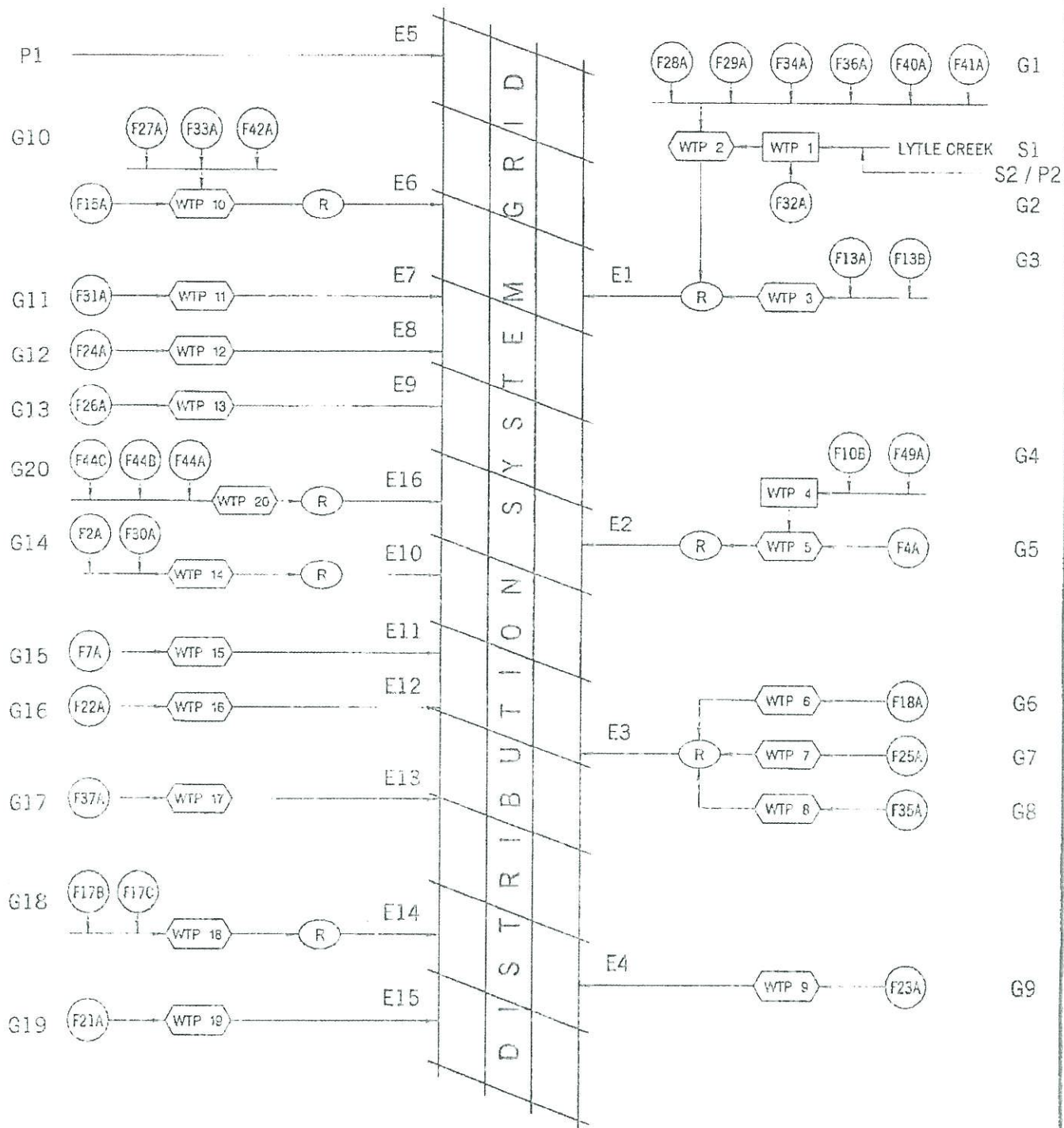
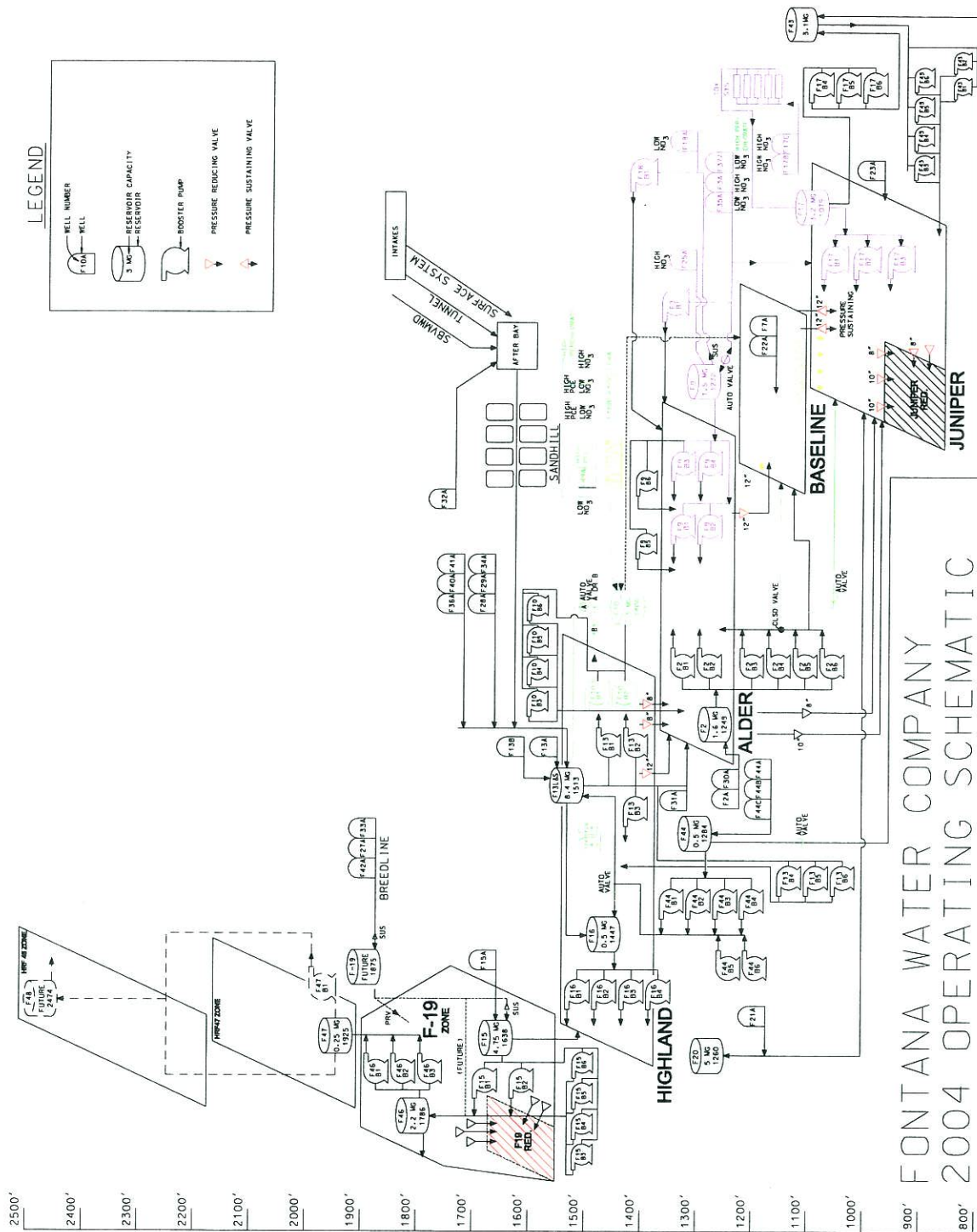




FIGURE 7-3



# FONTANA WATER COMPANY 2004 OPERATING SCHEMATIC

## *APPENDIX C*



Adopted: September 2000





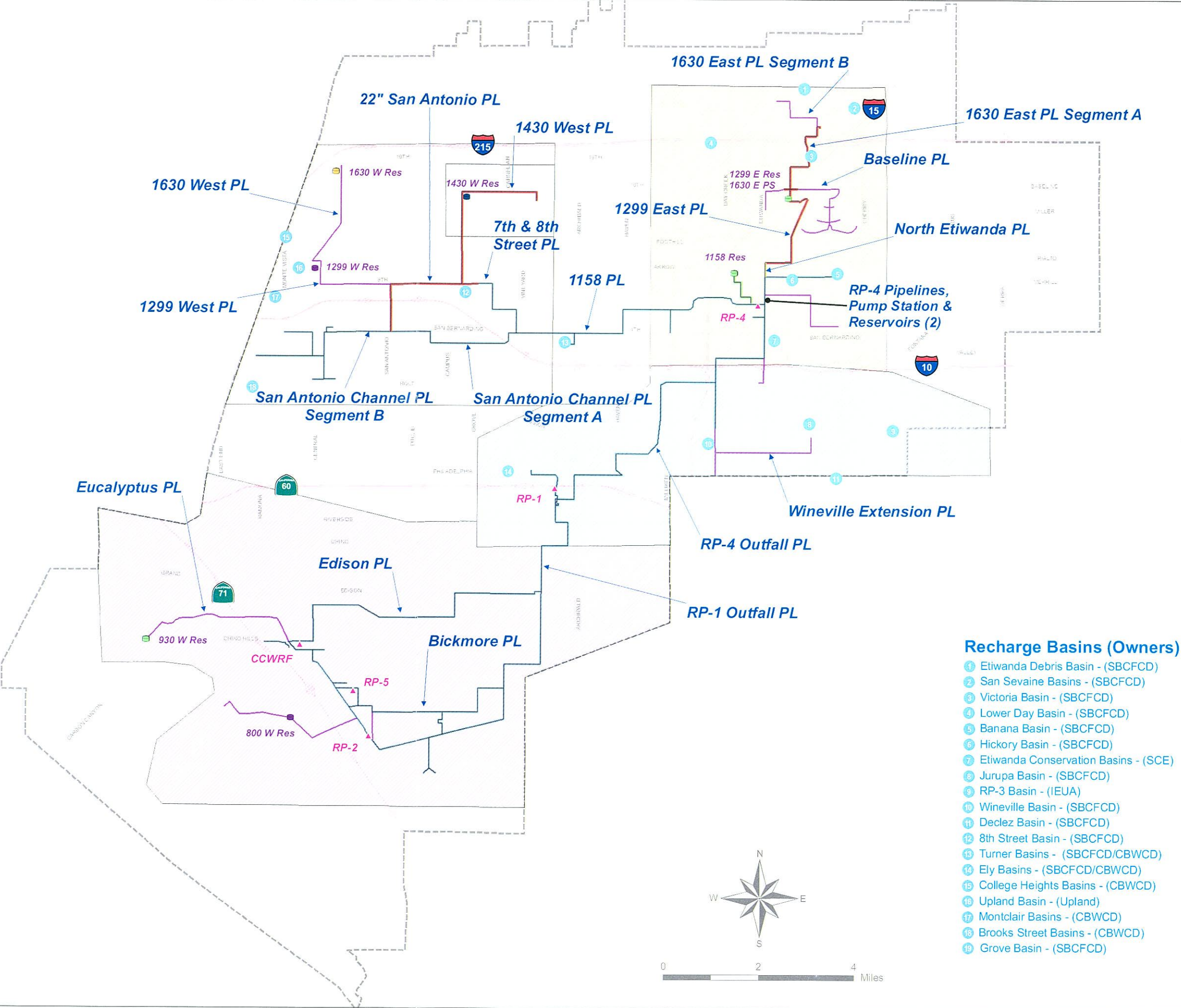
## *APPENDIX D*

Recycled Water  
Capital Projects  
Business Plan

November 2008

Status of  
Recycled Water Pipes

- ▲ Treatment Plants
- Reservoirs**
  - Priority 1
  - Priority 2
  - Priority 3
  - Priority 4
- RW Business Plan Status**
  - 3-Year
  - - - Planning
- RW Construction Project Status**
  - Bid
  - Construction
  - Design
  - Operating
- Project Areas**
  - Central
  - Northeast
  - Northwest
  - Red Hill
  - South

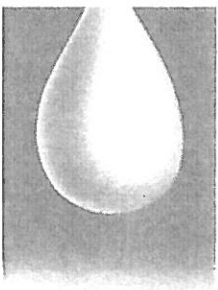




## **I. Water Supply Assessment**

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# FONTANA WATER COMPANY

A DIVISION OF SAN GABRIEL VALLEY WATER COMPANY

15966 ARROW ROUTE • P.O. BOX 987, FONTANA, CALIFORNIA 92334 • (909) 822-2201

January 15, 2010

RECEIVED  
JAN 19 2010  
PLANNING DEPT.  
hand delivered

Mr. Don Williams  
City of Fontana  
8353 Sierra Avenue  
Fontana, California 92335

Subject: Water Supply Assessment  
South West Industrial Park

Dear Mr. Williams:

Pursuant to your request, enclosed is Fontana Water Company's Water Supply Assessment prepared by our consultant Stetson Engineers Inc. for the South West Industrial Park located within the City of Fontana.

Please acknowledge receipt of this letter and the Water Supply Assessment by signing and returning the enclosed copy of this letter. Thank you.

Very truly yours,

Robert K. Young  
General Manager

RKY:bf  
Enclosure

## ACKNOWLEDGMENT

Receipt of this letter and Water Supply Assessment is hereby acknowledged.

By:   
Date: 1-19-10

**WATER SUPPLY ASSESSMENT FOR THE  
SOUTHWEST INDUSTRIAL PARK PROJECT**

**CITY OF FONTANA, CALIFORNIA**

**PREPARED  
FOR**

**FONTANA WATER COMPANY  
JULY 2009**

**PREPARED  
BY**



**STETSON ENGINEERS INC.**

San Rafael and Covina, California  
Mesa, Arizona

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## ABBREVIATIONS AND ACRONYMS

|        |                                                    |
|--------|----------------------------------------------------|
| AF     | Acre-Feet                                          |
| AFY    | Acre-Feet per Year                                 |
| cfs    | Cubic Feet per Second                              |
| CPUC   | California Public Utilities Commission             |
| DWR    | Department of Water Resources                      |
| FUWC   | Fontana Union Water Company                        |
| IEUA   | Inland Empire Utilities Agency                     |
| MGD    | Million Gallons per Day                            |
| MSL    | Mean Sea Level                                     |
| MWD    | Metropolitan Water District of Southern California |
| SB     | Senate Bill                                        |
| SBVMWD | San Bernardino Valley Municipal Water District     |
| SF     | Square Feet                                        |
| SWIP   | Southwest Industrial Park                          |
| SWP    | State Water Project                                |
| USGS   | United States Geological Survey                    |
| WSA    | Water Supply Assessment                            |
| WVWD   | West Valley Water District                         |

## 1.0 EXECUTIVE SUMMARY

The present and future water supplies available to Fontana Water Company are groundwater pumped from the Chino Basin, Lytle Basin, Rialto Basin, and No-Man's Land, surface water diversions from Lytle Creek, imported SWP water from IEUA and SBVMWD, and recycled water. The surface and groundwater sources have been adjudicated. Chino Basin, the largest basin, has enhanced reliability during drought and is a significant and reliable source of water supply.

Fontana Water Company's water supply reliability is partially related to IEUA's water management goals and implementation of strategies, such as its imported untreated water distribution policy of supplying supplemental imported SWP water directly to water purveyors like Fontana Water Company in addition to MWD water to the Chino Basin Watermaster for groundwater recharge, exchange, groundwater banking, conjunctive use programs, and the use of recycled water. IEUA has also analyzed future water demands and water supplies within its service area, including a large portion of Fontana Water Company's service area, and concluded that sufficient water supplies will be available for the next twenty years.

Based on analysis of historical water supplies, water rights, Fontana Water Company's Water System Master Plan, Fontana Water Company's and IEUA's Urban Water Management Plans, and consideration of recent restrictions on SWP water, this Water Supply Assessment shows clearly that Fontana Water Company's available water supplies will be sufficient to meet the water demands in Fontana Water Company's service area with the Project for the next twenty years.

## **2.0 INTRODUCTION**

### **PROJECT DESCRIPTION**

The Southwest Industrial Park Project (Project) is located within the southwestern portion of Fontana Water Company's service area as approved by the California Public Utilities Commission (CPUC) (Figure 1). The Project includes areas bounded primarily by Philadelphia Avenue and Jurupa Avenue to the south, Etiwanda Avenue and Mulberry Avenue to the west, San Bernardino Avenue to the north, and Citrus Avenue to the east. Currently there are 11,468,742 square feet of industrial and commercial development and 577 residential units within the Project area. Based on current information provided by RBF Consulting, the City of Fontana's consultant on this project, there will be 39,568,777 square feet of industrial, commercial, and warehouse development and 180 residential units within the Project area at buildout.





## **PURPOSE AND SCOPE OF ASSESSMENT**

The Project is located entirely within Fontana Water Company's CPUC certificated service area as shown in Figure 1. Fontana Water Company is ready, willing, and able to provide all necessary water utility service to meet the water supply needs within the Project. The Project is within that part of Fontana Water Company's service area which is within the Inland Empire Utilities Agency's (IEUA) service area. IEUA is a regional agency providing Colorado River and State Water Project (SWP) water from Metropolitan Water District of Southern California, wholesale sales and distribution of untreated imported and recycled water supplies, and sewage treatment. Figure 2 visually depicts the relationship between IEUA's service area, Fontana Water Company's service area, and the Project area.

Fontana Water Company will provide all public utility water service to the entire Project. The reliability of future water supply provided by Fontana Water Company is directly related to the Company's longstanding water rights and access to local renewable groundwater and surface water supplies as listed in Table 1 (Summary of Fontana Water Company Water Rights). It is also partially related to IEUA's water management goals and implementation strategies, such as its imported water distribution policy, groundwater banking programs, and the use of recycled water. This Water Supply Assessment (WSA) evaluates all available water supply sources and projected water demands for Fontana Water Company's service area and the Project area as well as IEUA's service area, with an emphasis on Fontana Water Company's service area.

**TABLE 1 SUMMARY OF FONTANA WATER COMPANY WATER RIGHTS**

| Sources of Supply                                                | Water Right                                                                    | Description                                                                                                                                                                                                                                                                                                                                                                              |
|------------------------------------------------------------------|--------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Lytle Creek<br/>(Surface Water)</b><br><br><b>Lytle Basin</b> | Lytle Judgments,<br>(1897 McKinley Decree<br>and January 28, 1924<br>Judgment) | <ul style="list-style-type: none"> <li>• Entitled to divert up to 3,480.78 miner's inches (~50,400 AFY) from Lytle Creek Region, including up to 2,500 miner's inches (~36,200 AFY) of combined surface and groundwater extractions to augment surface water diversions.</li> <li>• Entitled to divert groundwater from Lytle Basin up to 1,300 miner's inches (~18,800 AFY).</li> </ul> |
| <b>Chino Basin</b>                                               | Chino Basin Judgment,<br>1978                                                  | <ul style="list-style-type: none"> <li>• Unrestricted pumping, subject to replenishment through Watermaster</li> <li>• Safe yield of Chino Basin = 140,000 AFY.</li> <li>• 9,183.3 AFY in appropriate rights.</li> </ul>                                                                                                                                                                 |
| <b>Rialto Basin</b>                                              | 1961 Rialto Basin<br>Decree                                                    | <ul style="list-style-type: none"> <li>• Unrestricted pumping in most years pursuant to the 1961 Rialto Basin Decree.</li> </ul>                                                                                                                                                                                                                                                         |
| <b>No-Man's Land</b>                                             | Unadjudicated                                                                  | <ul style="list-style-type: none"> <li>• No pumping restriction.</li> </ul>                                                                                                                                                                                                                                                                                                              |

### Water Supply Planning Provisions

Population growth in the State of California has resulted in additional water demand on water systems. The State legislature has enacted laws to ensure that the increased demands are adequately addressed and that a firm source of water supply is available prior to approval of certain new developments. The regulations include Senate Bill 610 (SB610), authored by Senator Jim Costa, and Senate Bill 221 (SB221), authored by Senator Sheila Kuehl, which are briefly described below. SB610 and SB221 are companion measures which seek to promote more collaborative planning between local water suppliers and cities and counties. SB610 (which amended California Water Code Sections 10910-10912) and SB 221 (which amended Government Code 66473.7) require detailed information regarding water availability to be provided to city and county land use planners prior to approval of certain specified large land use development projects. This WSA, prepared pursuant to the

City of Fontana's request, was prepared in accordance with the guidelines in California Water Code sections 10910-10912 for the approach, required information, and criteria to be used in determining sufficient supply for a water supply assessment. The Urban Water Management Plan (UWMP) is a foundational document for compliance with both Water Code Sections SB610 and SB221. Both SB610 and SB221 repeatedly identify the UWMP as a planning document that can be used by a water supplier to meet the standards set forth in both statutes. California Environmental Quality Act (CEQA) guidelines section 15083.5 contains similar provisions regarding consultation with water agencies for certain projects. Fontana Water Company's UWMP (December 2005) and IEUA's 2005 Regional UWMP (November 2005), both prepared pursuant to California Water Code sections 10610 through 10656, describe future water demands and future availability of the water supply sources used by Fontana Water Company and other retail water agencies in its service area. Information from IEUA's 2005 UWMP has been incorporated into Fontana Water Company's 2005 UWMP. Fontana Water Company's and IEUA's UWMPs, were used along with Fontana Water Company's Water System Master Plan Update (August 2008), to prepare this Water Supply Assessment.

### **SB610 (Costa)**

Existing law requires every urban water supplier to identify, as part of its UWMP, the existing and planned sources of water available to the supplier over a prescribed 5-year period. Existing law prohibits an urban water supplier that fails to prepare or submit its UWMP to the Department of Water Resources from receiving drought assistance from the state until the plan is submitted.

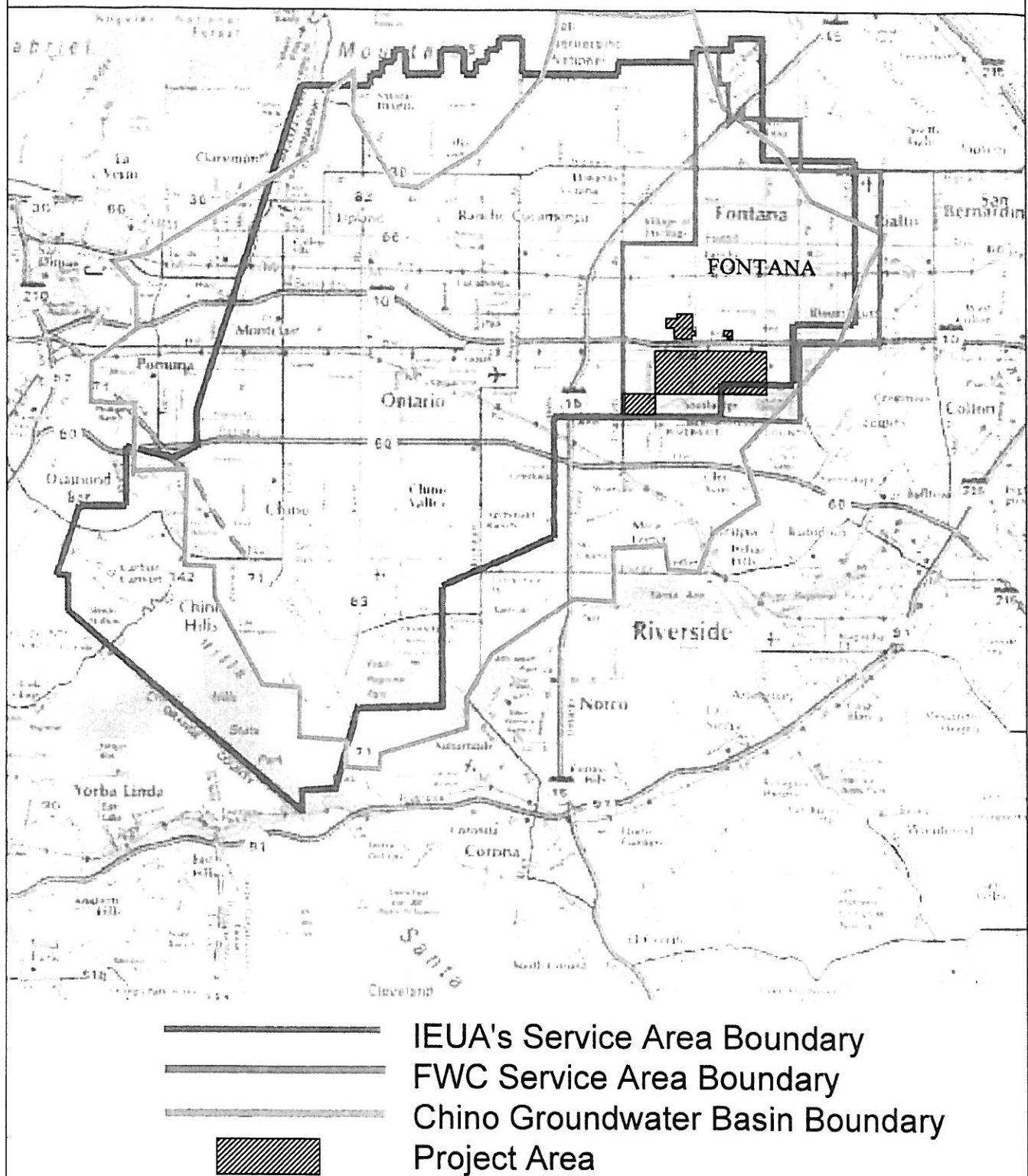
SB610 requires an urban water supplier to include in its UWMP a description of all water supply projects and programs that may be undertaken to meet total projected water use over the next 20 years. SB610 requires a city or county that determines a project is subject to the California Environmental Quality Act to identify any public water system that may supply water for the Project and to request those public water systems to prepare a specific water supply assessment. If the water demand for the proposed development has been

accounted for in a recently adopted urban water management plan, the water supplier may incorporate information contained in that plan to satisfy certain requirements of a water supply assessment. SB610 requires the assessment to include, along with other information, an identification of existing water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the proposed project and the quantities of water received in prior years pursuant to those entitlements, rights, and contracts.

SB610 also requires the public water system, or the city or county, as applicable, to submit its plans for acquiring additional water supplies if that entity concludes that water supplies are, or will be, insufficient.

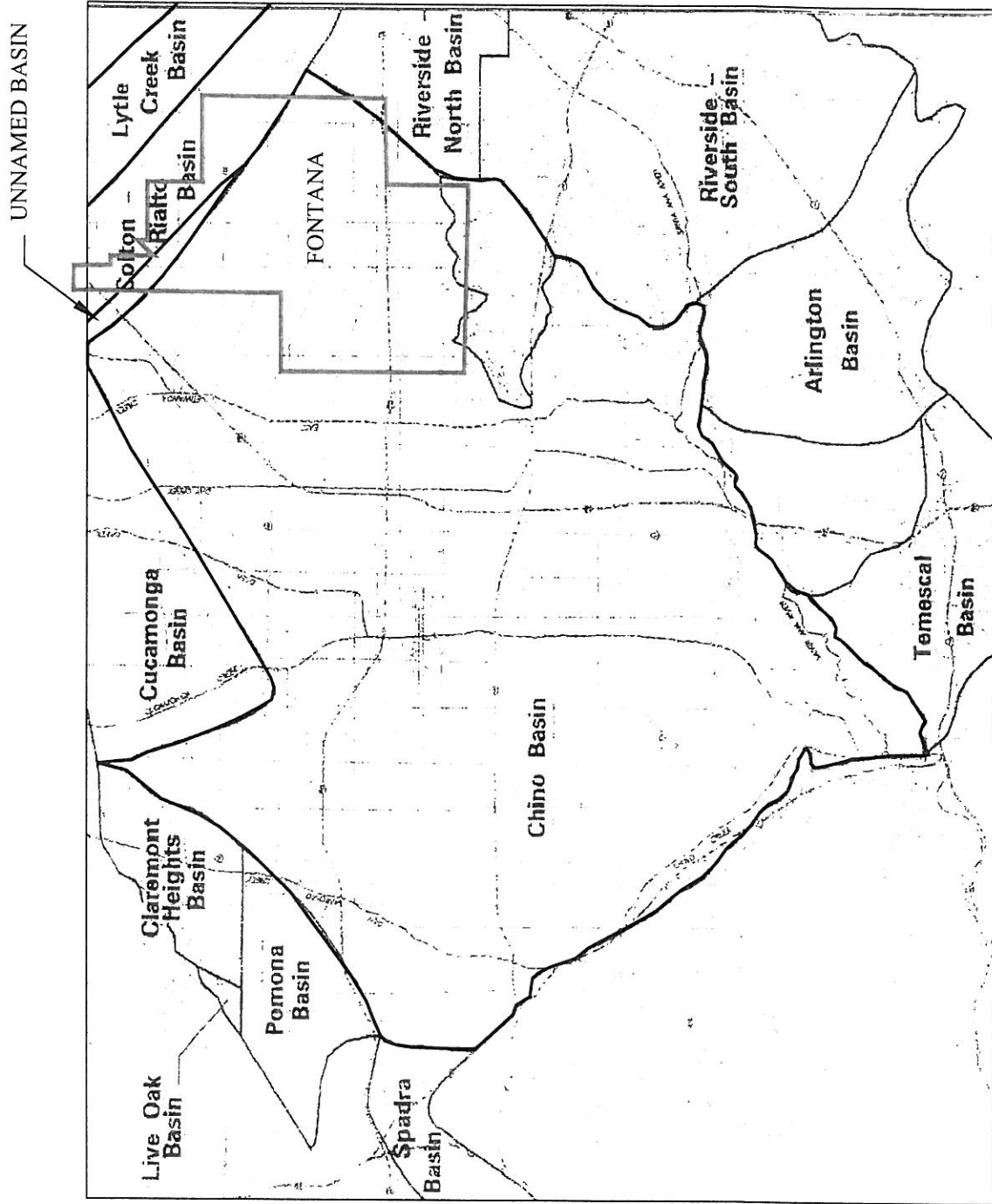
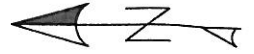
#### **SB221 (Kuehl)**

SB221 prohibits approval of a tentative map, or a parcel map for which a tentative map was not required, or a development agreement for a subdivision of property of more than 500 dwelling units, except as specified, including the design of the subdivision or the type of improvement, unless the legislative body of a city or county or the designated advisory agency provides written verification from the applicable public water system that a sufficient water supply is available or, in addition, a specified finding is made by the local agency that sufficient water supplies are, or will be, available prior to completion of the project. Sufficient water supply is the total water supply available during normal, single-dry, and multiple-dry years within a 20-year projection that will meet the projected demand of the proposed subdivision.



IEUA'S SERVICE AREA BOUNDARY, FWC SERVICE AREA BOUNDARY,  
CHINO GROUNDWATER BASIN BOUNDARY, AND PROJECT AREA





CHINO GROUNDWATER BASIN AND SURROUNDING BASINS

### **3.0 HISTORICAL WATER SUPPLIES AND USES IN THE FONTANA WATER COMPANY SERVICE AREA**

#### **HISTORICAL WATER SUPPLIES IN THE FONTANA WATER COMPANY SERVICE AREA**

Fontana Water Company is an investor owned public utility water company subject to the regulatory jurisdiction of the CPUC. Fontana Water Company provides public utility water service in most of the City of Fontana and in portions of the cities of Rialto and Rancho Cucamonga, and in adjoining unincorporated areas of San Bernardino County. The Company's CPUC-approved service area encompasses approximately 52 square miles bordered generally by the Riverside County line on the south, Etiwanda and Cherry Avenues on the west, Lytle Creek Wash and Linden Avenue on the east, and Highland and Summit Avenues on the north, as shown on Figure 1.

Fontana Water Company currently derives its water supply from 38 water production wells (five of these wells are awaiting installation of wellhead treatment facilities to remove groundwater contamination) and a surface water treatment plant, the Sandhill Water Treatment Plant. The water supply is produced from groundwater wells in the Chino Basin, Rialto Basin, Lytle Basin, and No-Man's Land (an unnamed basin between the Chino Basin and the Rialto Basin), and surface water from Lytle Creek. Fontana Water Company also purchases untreated SWP water from IEUA and San Bernardino Valley Municipal Water District (SBVMWD). The groundwater basins are shown on Figure 3. Fontana Water Company receives well water, surface water, or a combination of those sources at various points in its water distribution system.

Table 1 summarizes water rights held by Fontana Union Water Company (FUWC) which are subject to Fontana Water Company's irrevocable right to utilize, pursuant to court-approved agreements. Fontana Water Company is a principal shareholder of FUWC. Historical annual water supplies utilized by Fontana Water Company are summarized in Table 2 and Figure 4. The data shows that historical annual water supply production increased in response to increasing demands. Annual average water supply production increased from 26,439 AF in 1988 to 47,581 AF in 2008, with an average annual increase of approximately 1,057 AFY.

**TABLE 2 HISTORICAL ANNUAL WATER SUPPLY PRODUCTION BY FONTANA WATER  
COMPANY (AFY)**

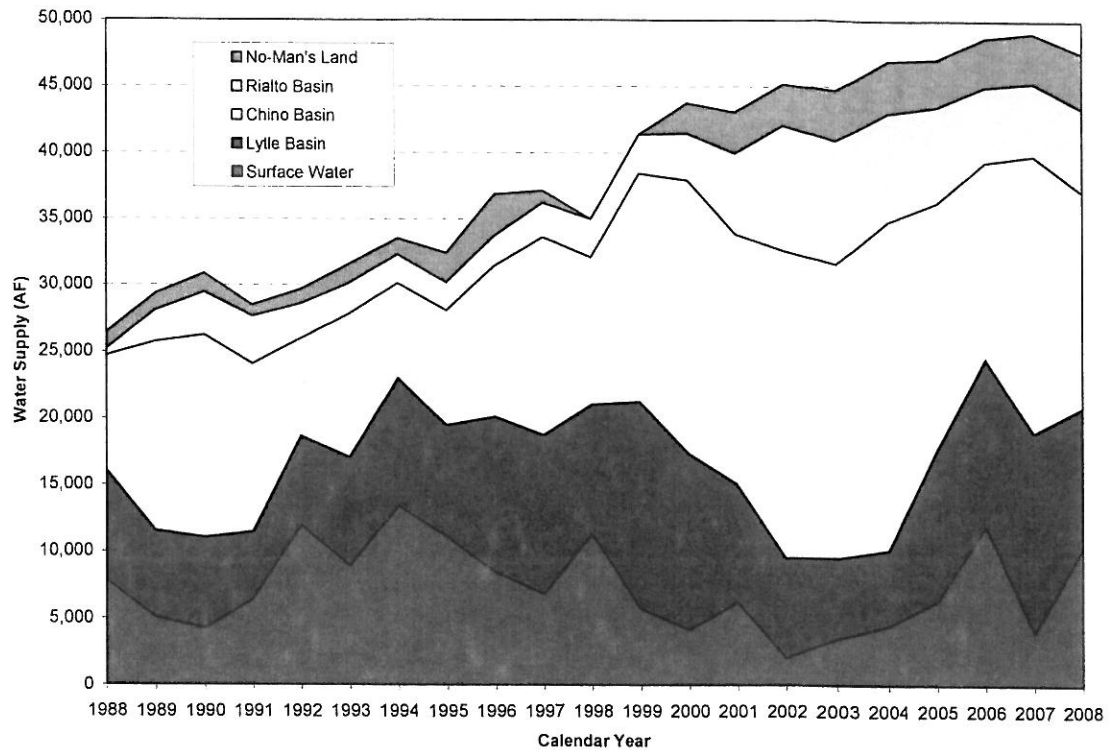
| Year | Groundwater    |                |                 |                      | Subtotal | SWP<br>Water | Surface<br>Water | Total  |
|------|----------------|----------------|-----------------|----------------------|----------|--------------|------------------|--------|
|      | Lytle<br>Basin | Chino<br>Basin | Rialto<br>Basin | No-<br>Man's<br>Land |          |              |                  |        |
| 1988 | 8,305          | 8,605          | 501             | 1,230                | 18,641   |              | 7,798            | 26,439 |
| 1989 | 6,493          | 14,185         | 2,328           | 1,279                | 24,285   |              | 5,078            | 29,363 |
| 1990 | 6,797          | 15,203         | 3,206           | 1,426                | 26,632   |              | 4,262            | 30,894 |
| 1991 | 5,049          | 12,602         | 3,555           | 837                  | 22,042   |              | 6,443            | 28,485 |
| 1992 | 6,666          | 7,328          | 2,614           | 1,061                | 17,669   |              | 11,997           | 29,666 |
| 1993 | 8,178          | 10,741         | 2,320           | 1,447                | 22,687   |              | 8,906            | 31,593 |
| 1994 | 9,607          | 7,102          | 2,171           | 1,261                | 20,141   |              | 13,424           | 33,564 |
| 1995 | 8,366          | 8,609          | 2,111           | 2,235                | 21,321   |              | 11,124           | 32,445 |
| 1996 | 11,726         | 11,319         | 2,271           | 3,137                | 28,453   |              | 8,426            | 36,880 |
| 1997 | 11,950         | 14,852         | 2,596           | 904                  | 30,302   |              | 6,829            | 37,131 |
| 1998 | 9,728          | 11,054         | 2,891           | 0                    | 23,673   |              | 11,342           | 35,015 |
| 1999 | 15,540         | 17,175         | 2,935           | 0                    | 35,650   |              | 5,734            | 41,384 |
| 2000 | 13,236         | 20,555         | 3,552           | 2,288                | 39,631   |              | 4,155            | 43,786 |
| 2001 | 8,869          | 18,766         | 6,106           | 3,123                | 36,864   |              | 6,235            | 43,098 |
| 2002 | 7,520          | 23,060         | 9,452           | 3,135                | 43,166   | 810          | 2,048            | 45,215 |
| 2003 | 6,029          | 22,110         | 9,321           | 3,783                | 41,243   | 1,895        | 3,689            | 44,932 |
| 2004 | 5,664          | 24,718         | 8,173           | 3,930                | 42,485   | 2,150        | 6,941            | 49,426 |
| 2005 | 11,424         | 18,499         | 7,252           | 3,550                | 40,725   | 465          | 6,352            | 47,077 |
| 2006 | 12,593         | 14,747         | 5,695           | 3,683                | 36,718   | 407          | 11,999           | 48,717 |
| 2007 | 15,021         | 20,857         | 5,493           | 3,750                | 45,121   | 0            | 3,980            | 49,101 |
| 2008 | 10,523         | 16,192         | 6,312           | 4,165                | 37,191   | 2,777        | 10,389           | 47,581 |

Notes:

“SWP Water” deliveries to Fontana Water Company began in 2002

“Surface Water” includes State Water Project deliveries (“SWP Water”)





**FIGURE 4 HISTORICAL ANNUAL FONTANA WATER COMPANY WATER SUPPLY PRODUCTION**

The following describes the sources of water supplies and water rights in more detail.

### **Chino Basin**

The Chino Basin is an important groundwater source for Fontana Water Company. In the last five years, Fontana Water Company produced approximately 14,700 AFY to 25,000 AFY from the Chino Basin, which accounts for one third to almost half of Fontana Water Company's total water supply.

The Chino Basin, in San Bernardino County, is the largest groundwater basin in the Upper Santa Ana River Watershed. The Chino Basin is bounded by the Rialto-Colton, Chino, San Jose, and Cucamonga faults, and by Puente Hills and the San Gabriel Mountains. The total surface area of the basin is approximately 154,000 acres (240 sq. miles).

The Chino Basin currently contains 5 million acre-feet (AF) of water in storage, with an additional unused storage capacity, based on historical water levels in the basin, of about 1 million AF. Currently, total groundwater production from the basin is approximately 165,000 AFY. Approximately 120,000 AFY is pumped for municipal and industrial purposes and approximately 45,000 AFY is pumped by 300 to 400 agricultural producers.

The Chino Basin was adjudicated under a Judgment (Chino Basin Judgment), entered on January 27, 1978 by the Superior Court for the County of San Bernardino. Fontana Water Company is a party to the Chino Basin Judgment and is classified as an appropriator. The Chino Basin Judgment established an average Safe Yield in the Chino Basin of 140,000 AFY (July 1 to June 30) and allocated water production rights to an “Appropriative Pool (49,834 AFY)” first, an “Overlying Agricultural Pool (82,800 AFY)”, and an “Overlying Non-Agricultural Pool (7,366 AFY)”. Table 3 presents the historical Chino Basin production by Pool.

Parties to the Chino Basin Judgment who are members of the Appropriative Pool, like Fontana Water Company, are authorized to produce groundwater in quantities necessary to meet their customers’ requirements for water for beneficial use. Such extractions result in pumping assessments by the Chino Basin Watermaster to pay for water to replenish the basin, through imported surface water recharge. Water to replenish the Chino Basin is purchased from Metropolitan Water District of Southern California (MWD) by IEUA in coordination with the Chino Basin Watermaster. Future additional supplemental sources of replenishment water are expected to include recycled water and increased conservation of storm water. In addition, water is reallocated to the Appropriative Pool for urban use from the Overlying Agricultural Pool when it is not used by agricultural producers. As agricultural production declines in the Chino Basin, the reallocation of water to the Appropriative Pool is expected to increase. Reliability of water purchased from IEUA to replenish the Chino Basin is discussed in Section 4.

**TABLE 3 HISTORICAL CHINO BASIN PRODUCTION BY POOL <sup>1</sup> (AF)**

| <b>Fiscal Year</b> | <b>Appropriative Pool</b> | <b>Overlying Agricultural Pool</b> | <b>Overlying Non-Agricultural Pool</b> | <b>Total</b> |
|--------------------|---------------------------|------------------------------------|----------------------------------------|--------------|
| 1974-75            | 70,312                    | 96,567                             | 8,878                                  | 175,757      |
| 1975-76            | 79,312                    | 95,349                             | 6,356                                  | 181,017      |
| 1976-77            | 72,707                    | 91,450                             | 9,198                                  | 173,355      |
| 1977-78            | 60,659                    | 83,934                             | 10,082                                 | 154,675      |
| 1978-79            | 60,597                    | 73,688                             | 7,127                                  | 141,412      |
| 1979-80            | 63,834                    | 69,369                             | 7,363                                  | 140,566      |
| 1980-81            | 70,726                    | 68,040                             | 5,650                                  | 144,416      |
| 1981-82            | 66,731                    | 65,117                             | 5,684                                  | 137,532      |
| 1982-83            | 63,481                    | 56,759                             | 2,395                                  | 122,635      |
| 1983-84            | 70,558                    | 59,033                             | 3,208                                  | 132,799      |
| 1984-85            | 76,912                    | 55,543                             | 2,415                                  | 134,870      |
| 1985-86            | 80,859                    | 52,061                             | 3,193                                  | 136,113      |
| 1986-87            | 84,662                    | 59,847                             | 2,559                                  | 147,068      |
| 1987-88            | 91,579                    | 57,865                             | 2,958                                  | 152,402      |
| 1988-89            | 93,617                    | 46,762                             | 3,619                                  | 143,998      |
| 1989-90            | 101,344                   | 48,420                             | 4,856                                  | 154,620      |
| 1990-91            | 86,658                    | 48,085                             | 5,407                                  | 140,150      |
| 1991-92            | 91,982                    | 44,682                             | 5,240                                  | 141,904      |
| 1992-93            | 86,367                    | 44,092                             | 5,464                                  | 135,923      |
| 1993-94            | 80,798                    | 44,298                             | 4,586                                  | 129,682      |
| 1994-95            | 93,419                    | 55,022                             | 4,327                                  | 152,768      |
| 1995-96            | 101,606                   | 43,639                             | 5,424                                  | 150,669      |
| 1996-97            | 110,163                   | 44,809                             | 6,309                                  | 161,281      |
| 1997-98            | 97,435                    | 43,345                             | 4,955                                  | 145,735      |
| 1998-99            | 107,723                   | 47,538                             | 7,006                                  | 162,267      |
| 1999-00            | 126,645                   | 44,401                             | 7,774                                  | 178,820      |
| 2000-01            | 113,437                   | 39,954                             | 8,084                                  | 161,475      |
| 2001-02            | 121,489                   | 39,494                             | 5,548                                  | 166,531      |
| 2002-03            | 120,557                   | 38,487                             | 4,853                                  | 163,897      |
| 2003-04            | 136,834                   | 41,978                             | 2,915                                  | 181,727      |
| 2004-05            | 127,811                   | 34,450                             | 2,327                                  | 164,588      |
| 2005-06            | 124,315                   | 33,900                             | 3,026                                  | 161,241      |
| 2006-07            | 130,826                   | 37,295                             | 3,369                                  | 171,491      |
| 2007-08            | 103,078                   | 30,910                             | 3,440                                  | 137,427      |

1) Source: Chino Basin Watermaster Annual Report, Fiscal Year 2007-08.

## **Lytle Creek Region**

The Lytle Creek Region consists of Lytle Creek and the Lytle Basin. The Lytle Creek watershed is approximately 46.4 square miles. The area of the Lytle Basin is approximately 22.3 square miles.

The 1897 McKinley Decree specifying surface water allocations and the January 28, 1924 Judgment by the Superior Court for the County of San Bernardino confirming the McKinley Decree and specifying allowed groundwater production, allow Fontana Water Company to divert or produce surface and groundwater from the Lytle Creek region in the amount of 3,480.78 miner's inches, or 69.6 cfs (~50,400 AFY). The amount includes 2,500 miner's inches, (~36,200 AFY) of allowable combined surface and groundwater extractions to augment deficiencies in surface water diversions. Fontana Water Company is allowed to extract and divert at least 1,300 miner's inches, or 26 cfs (~18,800 AFY) of groundwater from the Lytle Creek Region, depending on availability. Since the Lytle Basin groundwater and surface water supplies are highly variable and are not always fully available during dry years, Fontana Water Company has not always been able to divert its full allocation.

## **Rialto Basin**

The Rialto Basin is located within western San Bernardino County. The basin is approximately bounded by the Rialto-Colton and San Jacinto faults, the San Gabriel Mountains, and the Santa Ana River. The total surface area of the basin is approximately 23.4 sq. miles.

Fontana Water Company is entitled to produce water from the Rialto Basin with no extraction limit in most years. Certain producers in the Rialto Basin are subject to a Decree (Rialto Basin Decree), entered on December 22, 1961 by the Superior Court for the County of San Bernardino. Under specified conditions, production may be limited during certain months. Extractions for any given water year (October 1 to September 30) are affected by groundwater elevation measurements which are taken between March and May for three specific "index" wells (Duncan Well, Willow Street Well, and Boyd Well).

In addition to its irrevocable right to pump water pursuant to rights held by FUWC, Fontana Water Company can pump an additional 1,600 acre feet of water from the Rialto Basin during any period of pumping limitation, pursuant to a long term water rights lease with the City of Rialto.

### **No-Man's Land Basin**

There is no restriction on the quantity of groundwater Fontana Water Company is entitled to produce from the No Man's Land Basin. This unnamed basin (also referred to as No-Man's Land) is located between the Rialto and Chino Basins. The No-Man's Land Basin is hydrogeologically separate from the Chino and Rialto Basins. The geology of the No-Man's Land Basin is similar to that of both the Chino and Rialto Basins. Water production from this basin is not a part of either the Chino Basin Adjudication or the Rialto Basin Decree and is not subject to water production restrictions. Groundwater pumping rights in the No-Man's Land Basin are governed by the U.S. Bankruptcy Court confirmed Plan of Reorganization for FUWC which affects FUWC, Fontana Water Company, Cucamonga Valley Water District, and other parties.

### **IEUA**

IEUA, originally known as Chino Basin Municipal Water District, was formed by popular vote of its residents in June 1950, to become a member agency of the Metropolitan Water District (MWD) of Southern California for the purpose of importing supplemental water to augment local stream and groundwater supplies. Since its formation in 1950, IEUA has significantly expanded its services. These include production of recycled water, wholesaling of untreated imported water and recycled water supplies, sewage treatment, co-composting of manure and municipal biosolids, desalinization of groundwater supplies and disposal of non-reclaimable industrial wastewater and brine. Nevertheless, IEUA is not able to provide treated MWD water to retail water purveyors in its service area.

Fontana Water Company is a retail water agency within IEUA's service area. Fontana Water Company has upgraded (including construction of conventional pretreatment facilities and capacity expansion) its existing surface water treatment plant (the Sandhill Water Treatment Plant) to treat SWP water from IEUA and SBVMWD, in addition to surface water from Lytle Creek. The Sandhill Water Treatment Plant upgrades increased the plant's

capacity from 17 MGD to 29 MGD. Fontana Water Company can receive up to 24,000 AFY (through a 40 cfs connection) of untreated imported SWP water from IEUA and 5,000 AFY (through a 14 cfs connection) of untreated imported water from SBVMWD. IEUA's water management goals and implementation strategies, such as its imported water distribution policy, groundwater banking, conjunctive use programs, and use of recycled water, etc., improve the reliability of the water supplies utilized by Fontana Water Company. The following discussion of water sources, future water demands, and future water supplies in IEUA's service area illustrates that sufficient water is available for Fontana Water Company and the other purveyors within IEUA's service area in the future.

IEUA wholesales untreated water and provides industrial/municipal wastewater collection, treatment services, and other related services for the western portion of San Bernardino County. IEUA's service area is located in the southwestern section of San Bernardino County. The 242 square mile service area, which encompasses the Chino Groundwater Basin, consists of a relatively flat alluvial valley from east to west which slopes downward from north to south at a one to two percent grade.

IEUA's service area includes the cities of Chino, Chino Hills, Fontana, Montclair, Pomona, Ontario, Rancho Cucamonga and Upland. Approximately 790,000 people resided in IEUA's service area as of 2005. IEUA's service area, as shown in Figure 2, lies almost entirely within the Chino Groundwater Basin.

Water used in IEUA's service area comes from both local and imported sources. Local sources include local groundwater, surface water and, most recently, recycled water. IEUA purchases untreated imported water from MWD for wholesale redistribution to local retail water purveyors within its service area, including Fontana Water Company. The imported MWD water must first be treated by the local retail water purveyors before delivery to their potable water customers.

Total local groundwater production by Fontana Water Company and other local retail water agencies in IEUA's service area ranged from approximately 150,000 to 170,000 AFY from 1995 to 2005 according to IEUA's 2005 UWMP. These figures include production from the Chino Basin as well as the other local groundwater sources shown in Figure 3.

Fontana Water Company and a number of other retail water agencies in IEUA's service area that produce groundwater from the Chino Basin also obtain a portion of their water from local surface sources. The principal sources of surface water include San Antonio Canyon, Cucamonga Canyon, Day Creek, Deer Creek, Lytle Creek, and several smaller surface streams. Production from all such surface supplies ranged from approximately 9,000 to 27,000 AFY from 1995 to 2005 according to IEUA's 2005 UWMP.

MWD provides untreated imported water to IEUA. Fontana Water Company is able to purchase and receive up to 24,000 AFY of MWD imported SWP water from IEUA for treatment at Fontana Water Company's existing Sandhill Water Treatment Plant. Historical MWD deliveries to IEUA's service area are shown in Table 4. Untreated imported water for direct use has increased significantly in the past twenty years from approximately 9,729 AF of water in fiscal year 1988 to a peak of approximately 81,616 AF in fiscal year 2008. Additional imported water supplies from IEUA are used for groundwater replenishment thereby augmenting the annual yield and production from the Chino Basin.

Table 4 MWD Historical Water Purchases by IEUA <sup>1</sup> (AFY)

| Fiscal Year          | Appropriative Pool | Overlying (Agricultural)<br>Pool | Overlying (Non<br>Agricultural) Pool | Storage <sup>2</sup> | Total      |
|----------------------|--------------------|----------------------------------|--------------------------------------|----------------------|------------|
| 1953-54              | 3,135.00           |                                  |                                      |                      | 3,135.00   |
| 1954-55              | 4,820.50           |                                  |                                      |                      | 4,820.50   |
| 1955-56              | 5,033.30           |                                  |                                      |                      | 5,033.30   |
| 1956-57              | 5,983.60           |                                  |                                      |                      | 5,983.60   |
| 1957-58              | 6,850.30           |                                  |                                      |                      | 6,850.30   |
| 1958-59              | 4,363.70           | 41                               |                                      |                      | 4,404.70   |
| 1959-60              | 3,568.10           | 83                               |                                      |                      | 3,651.10   |
| 1960-61              | 4,908.60           | 459                              |                                      |                      | 5,367.60   |
| 1961-62              | 6,416.40           | 796                              |                                      |                      | 7,212.40   |
| 1962-63              | 6,865.20           | 1,195.00                         |                                      |                      | 8,060.20   |
| 1963-64              | 14,598.70          | 1,579.00                         |                                      |                      | 16,177.70  |
| 1964-65              | 18,993.50          | 2,699.00                         |                                      |                      | 21,692.50  |
| 1965-66              | 13,422.20          | 2,154.00                         |                                      |                      | 15,576.20  |
| 1966-67              | 10,071.70          | 1,072.00                         |                                      |                      | 11,143.70  |
| 1967-68              | 10,883.80          | 1,681.00                         |                                      |                      | 12,564.80  |
| 1968-69              | 8,565.20           | 134                              |                                      |                      | 8,699.20   |
| 1969-70              | 7,262.50           | 370                              |                                      |                      | 7,632.50   |
| 1970-71              | 8,583.80           | 462                              |                                      |                      | 9,045.80   |
| 1971-72              | 9,611.70           | 660                              |                                      |                      | 10,271.70  |
| 1972-73              | 8,592.60           | 634                              |                                      |                      | 9,226.60   |
| 1973-74              | 8,427.70           | 800                              |                                      |                      | 9,227.70   |
| 1974-75              | 8,841.00           | 933                              |                                      |                      | 9,774.00   |
| 1975-76              | 9,474.00           | 1,842.00                         |                                      |                      | 11,316.00  |
| 1976-77              | 11,096.00          | 1,698.00                         |                                      |                      | 12,794.00  |
| 1977-78              | 20,357.00          | 924                              |                                      |                      | 21,281.00  |
| 1978-79              | 10,361.60          | 817.3                            | 16,088.60                            |                      | 27,267.50  |
| 1979-80              | 11,196.00          | 69.4                             | 7,841.40                             | 10,677.60            | 29,784.40  |
| 1980-81              | 13,163.10          | 335.6                            | 17,861.90                            | 3,020.60             | 34,381.20  |
| 1981-82              | 7,837.40           | 588.1                            | 25,914.60                            | 2,453.70             | 36,793.80  |
| 1982-83              | 4,792.30           | 303.4                            | 21,797.50                            |                      | 26,893.20  |
| 1983-84              | 4,727.60           | 404.2                            | 21,230.00                            |                      | 26,361.80  |
| 1984-85              | 8,201.00           | 558.6                            | 21,001.60                            |                      | 29,761.20  |
| 1985-86              | 9,150.30           | 398.4                            | 24,701.00                            | 1,072.50             | 35,322.20  |
| 1986-87              | 11,673.60          | 368.7                            | 18,393.20                            | 3,522.60             | 33,958.10  |
| 1987-88              | 9,728.80           | 459                              | 12,245.10                            | 13,142.20            | 35,575.10  |
| 1988-89              | 20,247.20          | 175.3                            | 25,931.50                            |                      | 46,354.00  |
| 1989-90              | 15,773.00          | 117.8                            | 26,156.50                            | 26,616.50            | 68,663.80  |
| 1990-91              | 20,015.90          | 26.2                             | 28,071.00                            | 4,011.70             | 52,124.80  |
| 1991-92              | 31,924.50          | 152                              |                                      | 75,976.10            | 108,052.60 |
| 1992-93              | 29,407.00          | 94.4                             |                                      | 51,553.70            | 81,055.10  |
| 1993-94              | 28,897.10          |                                  |                                      | 28,046.90            | 56,944.00  |
| 1994-95              | 36,967.80          | 8.5                              |                                      | 1,579.50             | 38,555.80  |
| 1995-96              | 35,204.10          | 77.4                             |                                      | 4,408.80             | 39,690.30  |
| 1996-97              | 44,728.20          | 118.8                            |                                      | 5,058.70             | 49,905.70  |
| 1997-98              | 39,320.60          | 83.8                             |                                      | 11,895.10            | 51,299.50  |
| 1998-99              | 41,607.80          | 68.1                             |                                      | 8,414.10             | 50,090.00  |
| 1999-00              | 57,070.30          | 104.1                            |                                      | 5,332.10             | 62,506.50  |
| 2000-01              | 57,735.60          | 45.1                             |                                      | 11,742.50            | 69,523.20  |
| 2001-02              | 64,996.00          | 44                               |                                      | 9,006.30             | 74,046.30  |
| 2002-03              | 57,415.50          | 52.3                             |                                      | 13,449.90            | 70,917.70  |
| 2003-04              | 64,024.70          | 49.3                             |                                      | 7,582.00             | 71,656.00  |
| 2004-05              | 54,859.00          | 38.9                             | 8,931.70                             | 42,259.40            | 106,089.00 |
| 2005-06 <sup>3</sup> | 50,607.80          | 90.4                             |                                      | 36,227.80            | 98,869.20  |
| 2006-07 <sup>3</sup> | 52,869.10          | 89.7                             |                                      | 24,759.10            | 91,511.70  |
| 2007-08 <sup>3</sup> | 70,780.00          | 43.2                             |                                      |                      | 94,552.80  |
| 2008-09 <sup>3</sup> | 81,615.90          | 3                                |                                      |                      | 109,305.90 |

1) Source: IEUA 2005 Regional Urban Water Management Plan (November 2005).

2) Seasonal Storage Service Program and Cyclic Storage Account

3) Source: Metropolitan Water District of Southern California (<http://www.mwdh2o.com/mwdh2o/pages/operations/ops01.html>). Data includes full service, agricultural, local project, and/or storage program sales)



Water recycling involves treatment of wastewater to create a high quality, safe source of water for landscape irrigation, industrial uses, and groundwater recharge. Recycled water is a critical component of the Optimum Basin Management Plan developed by the Chino Basin Watermaster in 2000 to address water supply and quality issues in the Chino Basin. Recycled water will become an increasingly important source of local water supply for the region which Fontana Water Company plans to provide , when it is available, to customers in its service area who are able to use recycled water. Production of recycled water was approximately 68,000 AF in IEUA's service area in the year 2005, and is expected to increase to 104,000 AF by the year 2025. A recycled water marketing program was initiated by IEUA in 1999. Annual recycled water sales were about 8,000 AF in the year 2005, and are projected to be approximately 69,000 AF in the year 2025. Remaining future projected recycled water supplies will be used for groundwater recharge purposes and to meet Santa Ana River obligations.

The population within IEUA's service area is projected by the local retail water agencies (including Fontana Water Company) to grow from approximately 814,200 in 2005 to over 1,108,400 people by the year 2025 (Table 5). This represents an increase of approximately 300,000 people over a twenty-year period, an average annual growth rate of approximately 1.6%.

**TABLE 5 PROJECTED POPULATION IN IEUA'S SERVICE AREA <sup>1</sup>**

| <b>Year</b>       | <b>2005</b> | <b>2010</b> | <b>2015</b> | <b>2020</b> | <b>2025</b> |
|-------------------|-------------|-------------|-------------|-------------|-------------|
| <b>Population</b> | 814,168     | 894,800     | 982,600     | 1,050,500   | 1,108,400   |

*1) Source: IEUA 2005 Regional Urban Water Management Plan (November 2005)*

As a result of this projected regional population growth, water demand in IEUA's service area is expected to increase by approximately 40% over the twenty year period from 2005 to 2025. Table 6 presents the projected water demands for IEUA's service area. Total annual water use without conservation is expected to increase from approximately 244,200 AF in 2005 to approximately 341,400 AF by the year 2025 according to IEUA's 2005 UWMP.

The implementation of conservation programs is expected to reduce projected municipal and industrial demands within IEUA's service area. With full implementation of the California Urban Water Conservation Council's Best Management Practices, described in Fontana Water Company's CPUC Water Action Plan conservation measures and IEUA's 2005 Regional UWMP, IEUA and Fontana Water Company could reduce ultimate per capita water demands in its service area by at least 10% by 2015 and 20% by 2020.

**TABLE 6 PROJECTED WATER DEMANDS IN IEUA'S SERVICE AREA <sup>1</sup> (AFY)**

| <b>Year</b>                         | <b>2010</b>    | <b>2015</b>    | <b>2020</b>    | <b>2025</b>    |
|-------------------------------------|----------------|----------------|----------------|----------------|
| Municipal and Industrial            | 262,600        | 287,000        | 314,900        | 334,400        |
| Agricultural                        | 22,000         | 15,000         | 7,000          | 7,000          |
| <b>Total Demand</b>                 | <b>284,600</b> | <b>302,000</b> | <b>321,900</b> | <b>341,400</b> |
| <b>Total Demand w/ Conservation</b> | <b>258,340</b> | <b>273,300</b> | <b>290,410</b> | <b>308,000</b> |

1) Source: IEUA 2005 Regional Urban Water Management Plan (November 2005)

Projected water supplies within IEUA's service area include groundwater, surface water, recycled water, and untreated imported water purchased from MWD. Table 7 summarizes the available supplies and water demands under a normal year.

**TABLE 7 IEUA FUTURE WATER DEMAND/SUPPLY BALANCE IN NORMAL YEARS <sup>1</sup> (AFY)**

| <b>Year</b>                      | <b>2010</b>    | <b>2015</b>    | <b>2020</b>    | <b>2025</b>    |
|----------------------------------|----------------|----------------|----------------|----------------|
| Groundwater <sup>2</sup>         | 177,870        | 191,479        | 205,704        | 212,854        |
| Surface Water                    | 18,700         | 18,700         | 18,700         | 18,700         |
| Recycled Water                   | 39,000         | 49,000         | 58,000         | 69,000         |
| Imported Water                   | 68,800         | 74,300         | 80,600         | 82,500         |
| <b>Total Supply</b>              | <b>304,370</b> | <b>333,479</b> | <b>363,004</b> | <b>383,054</b> |
| <b>Total Demand <sup>3</sup></b> | <b>262,600</b> | <b>287,000</b> | <b>314,900</b> | <b>334,500</b> |
| <b>Surplus</b>                   | <b>41,770</b>  | <b>46,479</b>  | <b>48,104</b>  | <b>48,554</b>  |

1) Source: IEUA 2005 Regional Urban Water Management Plan (November 2005)

2) Includes groundwater from Chino Basin and other adjacent basins.

3) Includes water conservation

Total production from the Chino Basin and adjacent groundwater basins is projected to increase from approximately 178,000 AFY in 2010 to approximately 213,000 AFY in 2025 for normal years according to IEUA's 2005 UWMP, although the basin could accommodate much greater water production rates if necessary.

Based on IEUA's 2005 UWMP total production from surface water supplies within IEUA's service area is projected at approximately 18,700 AFY through the year 2025 for normal years according to IEUA's 2005 UWMP. Surface water flows are substantially greater in wet years and less during dry years.

Recycled water use within IEUA's service area in the year 2005 was approximately 8,000 AF. Recycled water use during normal years is expected to increase to approximately 69,000 AFY by 2025. Fontana Water Company is currently working with IEUA and the City of Fontana to design, construct, and operate the initial phase of a direct use recycled water distribution system in Fontana Water Company's service area. Fontana Water Company will be the recycled water purveyor for this and future recycled water projects within Fontana Water Company's service area.

The demand for direct delivery of untreated imported Colorado River and SWP water for the Chino Basin in normal years is projected to increase from approximately 60,200 AFY, currently, to approximately 82,500 AFY by the year 2025, an increase of 37%.

IEUA is developing a mix of water management strategies to meet the region's long-term needs. IEUA's water management goals are the following:

- Implement an effective conservation program that will maximize efficient water use and reuse in IEUA's service area;
- Continue development of a groundwater recovery program;
- Increase the safe storage capacity of the Chino Basin to 100,000 AFY and implement a conjunctive use/groundwater management program that provides dry year water supplies for the service area by 2008 (the increased safe storage capacity potential is 500,000 AFY);
- Achieve maximum use of all available storm water;
- Achieve maximum reuse of all available recycled water; and

- Minimize dependence on imported water supplies.

The water demands and supplies for IEUA's service area were analyzed by IEUA to assess the region's ability to meet demands given a repeat of California's severe 1987-1990 drought. Table 8 and Table 9 present the supply-demand balance for single and multiple year drought scenarios for the year 2010 and 2025. With the implementation of the local programs outlined above, the region is expected to meet 100% of its dry year demand.

**TABLE 8 COMPARISON OF 2010 WATER SUPPLY AND DEMAND IN IEUA'S SERVICE AREA IN NORMAL, SINGLE DRY, AND MULTIPLE DRY YEARS <sup>1</sup> (AFY)**

| Demand and Supply                                |                     | Normal Year | Single Dry Year | Multiple Dry Years |            |            |
|--------------------------------------------------|---------------------|-------------|-----------------|--------------------|------------|------------|
|                                                  |                     |             |                 | Dry Year 1         | Dry Year 2 | Dry Year 3 |
| <b>Water Supplies</b>                            | Groundwater         | 177,870     | 208,133         | 190,215            | 198,229    | 206,870    |
|                                                  | Imported Water      | 68,800      | 39,800          | 36,760             | 38,280     | 39,800     |
|                                                  | Surface Water       | 18,700      | 5,817           | 9,252              | 15,780     | 14,474     |
|                                                  | Recycled Water      | 39,000      | 39,000          | 26,308             | 34,287     | 42,900     |
|                                                  | <b>Total Supply</b> | 304,370     | 292,750         | 262,536            | 286,575    | 304,044    |
| <b>Total Demand</b>                              |                     | 262,600     | 262,600         | 243,236            | 252,918    | 262,600    |
| <b>Total Demand w/ Conservation <sup>2</sup></b> |                     | 262,600     | 236,340         | 218,912            | 227,626    | 236,340    |
| <b>Surplus</b>                                   |                     | 41,770      | 56,410          | 43,624             | 58,949     | 67,704     |

1) Source: IEUA 2005 Regional Urban Water Management Plan (November 2005).

2) Assumes zero conservation during a normal year.

**TABLE 9 COMPARISON OF 2025 WATER SUPPLY AND DEMAND IN IEUA'S SERVICE AREA IN NORMAL, SINGLE DRY, AND MULTIPLE DRY YEARS <sup>1</sup> (AFY)**

| Demand and Supply                                |                     | Normal Year | Single Dry Year | Multiple Dry Years |            |            |
|--------------------------------------------------|---------------------|-------------|-----------------|--------------------|------------|------------|
|                                                  |                     |             |                 | Dry Year 1         | Dry Year 2 | Dry Year 3 |
| <b>Water Supplies</b>                            | Groundwater         | 212,854     | 243,091         | 238,169            | 238,994    | 240,424    |
|                                                  | Imported Water      | 82,500      | 53,500          | 52,360             | 52,740     | 53,120     |
|                                                  | Surface Water       | 18,700      | 5,817           | 9,252              | 15,780     | 14,474     |
|                                                  | Recycled Water      | 69,000      | 69,000          | 62,400             | 67,830     | 73,480     |
|                                                  | <b>Total Supply</b> | 383,054     | 371,408         | 362,181            | 375,344    | 381,498    |
| <b>Total Demand</b>                              |                     | 334,500     | 334,500         | 322,740            | 326,660    | 330,580    |
| <b>Total Demand w/ Conservation <sup>2</sup></b> |                     | 334,500     | 301,050         | 290,466            | 293,994    | 297,522    |
| <b>Surplus</b>                                   |                     | 48,554      | 70,358          | 71,715             | 81,350     | 83,976     |

1) Source: IEUA 2005 Regional Urban Water Management Plan (November 2005).

2) Assumes zero conservation during a normal year.

## **SBVMWD**

SBVMWD was formed in 1954. It is an independent SWP contractor and is not a member agency of MWD. The District's services include providing wholesale distribution of untreated imported SWP water, and wastewater, stormwater disposal, recreation, and fire protection services.

SBVMWD, which covers approximately 325 square miles in southwestern San Bernardino County, serves a population of approximately 600,000. SBVMWD's service area includes the eastern two-thirds of the San Bernardino Valley, the Crafton Hills, and a portion of the Yucaipa Valley, and includes the cities and communities of San Bernardino, Colton, Fontana, Loma Linda, Redlands, Rialto, Bloomington, Highland, Grand Terrace, and Yucaipa.

Groundwater, from the Colton, Rialto, Bunker Hill, Yucaipa, and San Timoteo Basins, is the principal local source of supply in SBVMWD's service area. Other sources of water supply include surface water from Lytle Creek, the Santa Ana River, and Mill Creek as well as imported SWP water.

SBVMWD's contract entitlement for SWP was 1,677 AF in 1972, the initial year of deliveries, and was increased to a maximum entitlement of 102,600 AF in 1991. The entitlement is the fifth largest of all SWP contractors.

A portion of Fontana Water Company's service area is within SBVMWD's service area and currently can receive up to 5,000 AFY of imported untreated SWP water from SBVMWD for use in that portion of Fontana Water Company's service area. Fontana Water Company has upgraded its existing Sandhill Water Treatment Plant to treat approximately 29 MGD of Lytle Creek surface water and SWP water. The Sandhill Plant will treat the imported untreated SWP water from the SBVMWD in addition to treating available Lytle Creek surface water and SWP water from IEUA. Fontana Water Company expects to receive greater quantities of SWP water from SBVMWD as population growth and development increase in the SBVMWD portion of Fontana Water Company's service area.

## **HISTORICAL WATER USES IN THE FONTANA WATER COMPANY'S SERVICE AREA**

Water uses in Fontana Water Company's service area can be attributed to the following four sectors:

- Residential and Commercial
- Industrial
- Public Authorities
- Construction

Table 10 summarizes historical annual water uses by the four sectors in Fontana Water Company's service area. From 1988 to 2008, annual water uses in Fontana Water Company's service area increased from approximately 26,320 AFY to 43,800 AFY, for an average increase of 874 AF per year. The average annual percentage increase was 2.8%. Of the total water use, the residential and commercial sector accounts for 82.9%, industrial accounts for 7.0%, public authority accounts for 9.0%, and construction accounts for 1.2%.

Lost and unaccounted for water from the Fontana Water Company water system during 2008 was estimated to be approximately 8%.

**TABLE 10 HISTORICAL ANNUAL WATER USES BY SECTORS**

| Year           | Residential and Commercial |              | Industrial |             | Public Authorities |             | Construction |             | Total  |                     |
|----------------|----------------------------|--------------|------------|-------------|--------------------|-------------|--------------|-------------|--------|---------------------|
|                | AF                         | % of Total   | AF         | % of Total  | AF                 | % of Total  | AF           | % of Total  | AF     | Annual Increase (%) |
| 1988           | 22,375                     | 85.0%        | 1,307      | 5.0%        | 2,143              | 8.1%        | 489          | 1.9%        | 26,315 |                     |
| 1989           | 24,660                     | 85.7%        | 1,408      | 4.9%        | 2,153              | 7.5%        | 568          | 2.0%        | 28,790 | 9.4%                |
| 1990           | 26,598                     | 86.7%        | 1,255      | 4.1%        | 2,435              | 7.9%        | 388          | 1.3%        | 30,676 | 6.6%                |
| 1991           | 23,684                     | 86.4%        | 1,054      | 3.8%        | 2,509              | 9.1%        | 173          | 0.6%        | 27,420 | -10.6%              |
| 1992           | 24,394                     | 86.6%        | 1,120      | 4.0%        | 2,572              | 9.1%        | 86           | 0.3%        | 28,172 | 2.7%                |
| 1993           | 24,296                     | 86.5%        | 1,110      | 4.0%        | 2,625              | 9.3%        | 65           | 0.2%        | 28,095 | -0.3%               |
| 1994           | 25,362                     | 85.8%        | 1,341      | 4.5%        | 2,807              | 9.5%        | 41           | 0.1%        | 29,552 | 5.2%                |
| 1995           | 25,118                     | 81.3%        | 2,928      | 9.5%        | 2,757              | 8.9%        | 73           | 0.2%        | 30,877 | 4.5%                |
| 1996           | 26,899                     | 81.4%        | 3,134      | 9.5%        | 2,908              | 8.8%        | 114          | 0.3%        | 33,055 | 7.1%                |
| 1997           | 27,643                     | 79.2%        | 3,540      | 10.1%       | 3,261              | 9.3%        | 437          | 1.3%        | 34,882 | 5.5%                |
| 1998           | 25,827                     | 79.9%        | 3,486      | 10.8%       | 2,749              | 8.5%        | 267          | 0.8%        | 32,330 | -7.3%               |
| 1999           | 30,366                     | 79.1%        | 3,718      | 9.7%        | 3,643              | 9.5%        | 664          | 1.7%        | 38,390 | 18.7%               |
| 2000           | 32,629                     | 79.6%        | 3,800      | 9.3%        | 3,718              | 9.1%        | 835          | 2.0%        | 40,983 | 6.8%                |
| 2001           | 32,259                     | 79.7%        | 4,103      | 10.1%       | 3,535              | 8.7%        | 569          | 1.4%        | 40,466 | -1.3%               |
| 2002           | 34,447                     | 79.3%        | 4,134      | 9.5%        | 3,846              | 8.9%        | 989          | 2.3%        | 43,415 | 7.3%                |
| 2003           | 35,294                     | 80.9%        | 3,884      | 8.9%        | 3,723              | 8.5%        | 745          | 1.7%        | 43,646 | 0.5%                |
| 2004           | 36,997                     | 81.6%        | 3,562      | 7.9%        | 3,920              | 8.6%        | 886          | 2.0%        | 45,365 | 3.9%                |
| 2005           | 35,658                     | 81.4%        | 3,426      | 7.8%        | 3,998              | 9.1%        | 719          | 1.6%        | 43,801 | -3.4%               |
| 2006           | 38,522                     | 84.3%        | 2,284      | 5.0%        | 4,422              | 9.7%        | 470          | 1.0%        | 45,698 | 4.4%                |
| 2007           | 39,633                     | 84.9%        | 1,803      | 3.9%        | 4,754              | 10.2%       | 481          | 1.0%        | 46,671 | 2.1%                |
| 2008           | 37,169                     | 84.9%        | 1,746      | 4.0%        | 4,610              | 10.5%       | 275          | 0.6%        | 43,800 | -6.2%               |
| <b>Average</b> |                            | <b>82.9%</b> |            | <b>7.0%</b> |                    | <b>9.0%</b> |              | <b>1.2%</b> |        | <b>2.8%</b>         |

## **4.0 FUTURE WATER DEMANDS IN THE FONTANA WATER COMPANY SERVICE AREA WITH THE PROJECT**

In addition to Fontana Water Company's UWMP, a comprehensive Water System Master Plan for Fontana Water Company was completed in April 2005 and updated in August 2008. The Water System Master Plan included water demand forecasts for Fontana Water Company's service area for the next twenty years as well as at build out. These demand forecasts do not distinguish any particular demand for any specific project, but identify total demand for Fontana Water Company's service area. The demand for the Project area addressed by this water supply assessment is included in the water demand forecast.

In the water demand forecasts, water users in Fontana Water Company's service area include four sectors: residential/commercial, industrial, public authorities, and construction. Water demand for each sector was estimated by multiplying the projected number of water service connections and unit water use per connection for the sector. Water conservation savings were estimated using the same percentage as the IEUA's 2005 Regional UWMP. Pursuant to new State legislation enacted in November 2009, Fontana Water Company will be developing updated water conservation goals of 15% by 2015 and 20% by 2020 as part of Fontana Water Company's updated UWMP to be completed by December 31, 2010.

Water demand within the project boundary includes industrial/commercial, warehouse, and residential uses. Industrial/commercial water demand is estimated by multiplying planned acreage by the water use rate of 2,200 gpd/acre derived from recorded water use data in industrial/ commercial areas within Fontana Water Company's service area. Warehouse water demand is estimated by multiplying planned acreage by the water use rate of 350 gpd/acre. Residential water demand is estimated by multiplying the number of planned dwelling units by the water use rate of 668 gpd/du derived from recorded residential water use data in FWC's service area. As indicated in Fontana Water Company's 2008 Water System Master Plan Update, the residential water use rate is based on recorded residential water use data from January 1988 to December 2007 in Fontana Water Company's service area. Since the Project will include both new development and redevelopment of existing water uses, the water demand for the Project would be the net change in water demand within the Project boundary. The estimated water demand for the Project in normal years is summarized in Table 11a. At buildout, the net annual water demand for the Project is estimated to be approximately 1,690 acre-ft per year.



The projected water demand in normal years for Fontana Water Company's service area including the Project during the next twenty years is summarized in Table 11b. Note that it is projected the Project will be completed in 2030 and the net change in annual water demand at buildout (1,690 AFY) of the Project is evenly distributed from 2010 to 2030 on an annual basis.

**TABLE 11a PROJECT WATER DEMAND ESTIMATE AT BUILDOUT**

|                  | <b>Total Net Change in Buildout SF</b> | <b>Net Change in Buildout SF of Warehouse</b> | <b>Net Change in Buildout SF of Industrial/Commercial</b> | <b>Net Change in Dwelling Units</b> | <b>Total Net Change in Water Demand</b> |
|------------------|----------------------------------------|-----------------------------------------------|-----------------------------------------------------------|-------------------------------------|-----------------------------------------|
| Square Footage   | 28,100,035                             | 12,523,064 <sup>1</sup>                       | 15,576,971 <sup>2</sup>                                   | -397 units                          |                                         |
| Floor Area Ratio | 50%                                    | 50%                                           | 50%                                                       |                                     |                                         |
| Land Use (acre)  | 1,290.2                                | 575.0                                         | 715.2                                                     |                                     |                                         |
| Water Use Rate   |                                        | 350 gpd/acre                                  | 2,200 gpd/acre                                            | 668 gpd/du                          |                                         |
| Water Demand     |                                        | 225 AFY                                       | 1,762 AFY                                                 | -297 AFY                            | <b>1,690 AFY</b>                        |

Notes:

- 1) Net change in buildout SF of warehouse is the sum of the proposed buildout warehouse SF.
- 2) Net change in buildout SF of industrial/commercial is estimated by subtracting the net change of warehouse (12,523,064 sf) from the total net change in buildout SF (28,100,035 sf).

**TABLE 11b FUTURE WATER DEMANDS IN FONTANA WATER COMPANY'S SERVICE AREA WITH THE PROJECT IN NORMAL YEARS (AFY)**

| Year                                                    |                                   | 2010          | 2015          | 2020          | 2025          | 2030          |
|---------------------------------------------------------|-----------------------------------|---------------|---------------|---------------|---------------|---------------|
| <b>Project Demand</b>                                   | <b>Net Change in Water Demand</b> | 0             | 420           | 850           | 1,270         | 1,690         |
| <b>Fontana Water Company Demand without the Project</b> |                                   | 49,300        | 54,680        | 59,450        | 64,230        | 69,010        |
| <b>Total Demand with the Project</b>                    |                                   | <b>49,300</b> | <b>55,100</b> | <b>60,300</b> | <b>65,500</b> | <b>70,700</b> |
| <b>Total Demand w/ Conservation</b>                     |                                   | <b>46,800</b> | <b>49,600</b> | <b>54,300</b> | <b>59,000</b> | <b>63,600</b> |

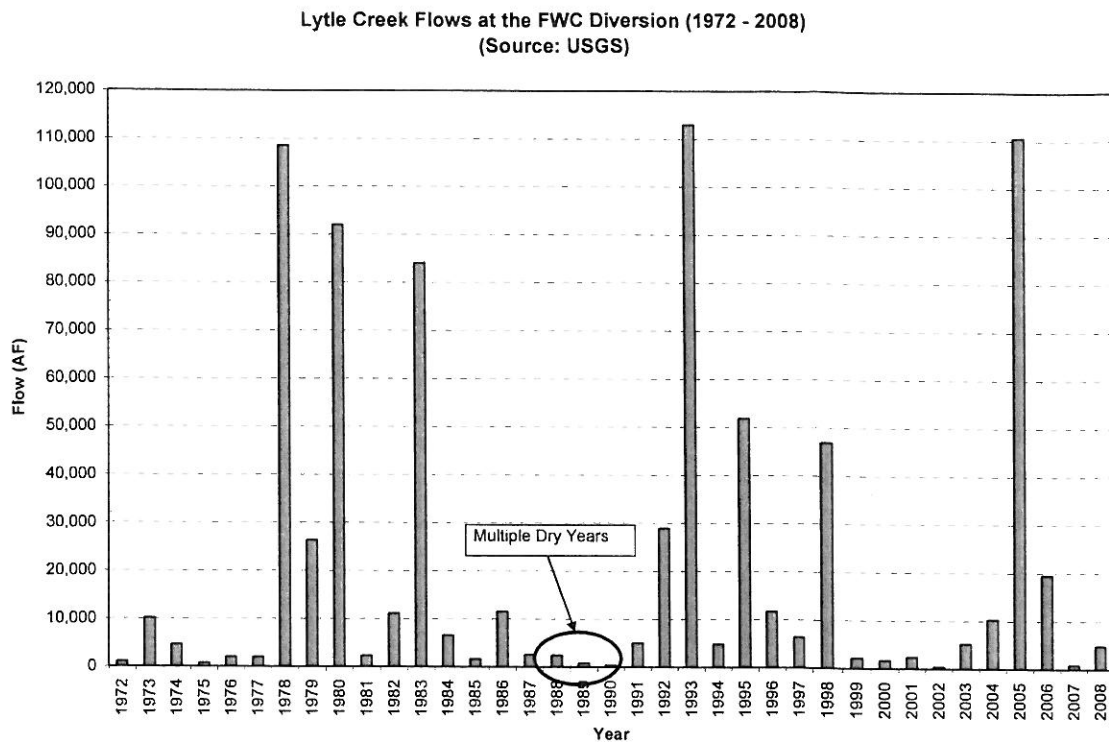
Note: It is projected the Project will be completed in 2030 and the net change in annual water demand at buildout (or 1,690 AFY) of the Project is evenly distributed from 2010 to 2030 on an annual basis.

## **5.0 FUTURE WATER SUPPLIES IN THE FONTANA WATER COMPANY SERVICE AREA**

Fontana Water Company's principal future water supplies for its service area are groundwater pumped from Chino Basin, Lytle Basin, Rialto Basin, and No-Man's Land, surface water from Lytle Creek, recycled water, and imported water from SBVMWD and IEUA. The following describes the potential yield from these sources.

### **LYTLE CREEK**

Fontana Water Company is entitled to divert up to 3,480.78 miner's inches (~50,400 AFY) from the Lytle Creek Region, including up to 2,500 miner's inches (~36,200 AFY) of combined surface and groundwater extractions to augment surface water diversions. Annual Lytle Creek flows from 1972 to 2008 based on United States Geological Survey (USGS) data are shown in Figure 5. USGS data from a Lytle Creek gaging station in the vicinity and upstream of Fontana Water Company's service area was used to determine the annual Lytle Creek flows. Based on USGS data, the driest three year period from 1972 to 2008 is the period 1988-1990. The flows for the period 1988-1990 are used in this Water Supply Assessment as the expected available water supply from Lytle Creek during a future multiple dry year period. Fontana Water Company's long-term average diversion of 7,000 AFY from Lytle Creek during normal years is used in this Water Supply Assessment as the expected surface water diversion available to Fontana Water Company during future normal years. However, Fontana Water Company's new Sandhill Water Treatment Plant upgrades will allow Fontana Water Company to divert much greater quantities of surface water flow in future years.



**FIGURE 5 HISTORICAL LYTLE CREEK FLOWS (1972 – 2008)**

Source: USGS 11062000 (Lytle C NR Fontana CA) gage station

## LYTLE BASIN

Fontana Water Company can pump and divert more than 18,800 AFY of groundwater from the Lytle Basin. However, the basin is subject to significant changes in groundwater elevation. This was demonstrated after the significant rainfall received in March of 1993. In the months following a series of storms during that very wet year, basin static water levels increased 200 feet in three months. This implies that basin static water levels could likewise decrease and thus affect groundwater production during sustained dry years. For the purpose of this Water Supply Assessment, Fontana Water Company's average groundwater production of approximately 11,000 AFY in normal years, will be available for pumping and

diversion by Fontana Water Company during normal years in the next twenty years. Fontana Water Company's average annual production of approximately 6,500 AFY during the historical drought period from 1988 to 1990 is estimated to be available during future multiple dry years.

#### **CHINO BASIN**

Fontana Water Company's average annual production from the Chino Basin from 1988 to 2008 was approximately 15,150 AFY. During the most recent three years, Fontana Water Company's average annual production was approximately 17,270 AFY. According to IEUA's 2005 Regional UWMP, total groundwater production in IEUA's service area in a normal year is estimated to increase from approximately 180,000 to 210,000 AFY by 2025 (see Table 7). The Chino Basin Judgment authorizes Fontana Water Company to produce all the water it requires from the Chino Basin for beneficial use by Fontana Water Company's public utility customers, subject to replenishment assessments, and more than ample water is present in the Chino Basin to allow Fontana Water Company to do so. Fontana Water Company will construct additional wells and associated infrastructure in the Chino Basin to match additional water demands with growth in its service area. Because of groundwater contamination in the Chino Basin from nitrate, perchlorate, and other substances, production of groundwater from affected wells may be interrupted until wellhead treatment is installed. Fontana Water Company has the necessary technical and financial resources available to allow Fontana Water Company to quickly respond to any such water quality incidents to assure continuity and reliability of water service.

#### **RIALTO BASIN**

Fontana Water Company and other pumpers subject to the 1961 Rialto Basin Decree are authorized to pump from the Rialto Basin without restriction, although extractions for any given year may be affected by the groundwater elevations in three key wells during March and May. Fontana Water Company's historical total groundwater production from the Rialto Basin is shown in Table 12.

From 1984 to 2000, average groundwater levels were close to or higher than 1,002.3 feet above MSL. It is reasonable to assume that 8,800 AFY, which is the average production

during a rainfall period corresponding to long-term rainfall averages, will be available for pumping by Fontana Water Company during normal years in the next twenty years. Fontana Water Company's historical annual production of approximately 2,000 AFY per well during the drought period from 1988 to 1990, which would equate to a total of approximately 8,000 AFY for the four wells currently located in the Rialto Basin, is estimated to be available during future droughts. In addition, Fontana Water Company has the right to pump an additional 1,600 AFY from the Rialto Basin pursuant to a "Standby Water Lease" agreement with the City of Rialto, if needed.

#### **NO-MAN'S LAND**

A US Bankruptcy Court confirmed Plan of Reorganization for FUWC allocated groundwater production from this basin and water production restrictions are not applicable. Based on available historical information about the basin, Fontana Water Company's average production of approximately 3,800 AFY, during a rainfall period corresponding to long-term rainfall averages, is expected to be available for pumping by Fontana Water Company during normal years in the next twenty years. Fontana Water Company's annual production of approximately 3,400 AFY, during the recent drought periods from 2000 to 2002 and from 2005 to 2008, is estimated to be available during future droughts.

#### **RECYCLED WATER**

Achieving maximum use of all available recycled water is one of Fontana Water Company's and IEUA's water management goals. Recycled water could be used for groundwater recharge and storage as well as direct use by customers who are equipped and able to use recycled water. Fontana Water Company strongly supports the use of recycled water and plans to provide recycled water to customers in its service area who are able to use it, when it is made available. In fact, San Gabriel Valley Water Company, of which Fontana Water Company is a division, presently serves recycled water to numerous customers in the Main San Gabriel Basin and Central Basin in Los Angeles County where San Gabriel Valley Water Company has commitments to deliver over 7,000 acre feet per year to customers in its service area.

In IEUA's "Recycled Water Facility Reports", dated September 2006, IEUA proposed construction of several recycled water lines throughout the City of Fontana,

including construction of 4,400 feet of a 48-inch diameter pipeline along Etiwanda Avenue and construction of 26,300 feet of 24-inch diameter pipeline in the southern portion of Fontana Water Company's service area.

Additional facilities will be required to accept delivery of recycled water from IEUA for delivery to Fontana Water Company's customers throughout the City of Fontana. These facilities will include additional pipelines, and possibly booster stations, and reservoirs. In addition, Fontana Water Company must make arrangements with the City of Fontana, the contracting agency with IEUA, to obtain available recycled water. The City of Fontana's "Feasibility Study to Serve Recycled Water in the City of Fontana" identifies recycled water needs in the southwestern portion of Fontana Water Company's service area. Fontana Water Company plans to design and construct a recycled water distribution system in the southwestern portion of its service area to meet those needs. Fontana Water Company anticipates delivering more than 1,700 AF of recycled water to schools, parks, and commercial customers, for irrigation and other uses. Recycled water will be provided by IEUA's Regional Water Recycling Plant 4. Construction of the phased project is scheduled to occur between 2010 and 2011.

**TABLE 12 HISTORICAL ANNUAL PRODUCTION FROM THE RIALTO BASIN (AFY)**

| <b>Year</b> | <b>Production by<br/>Fontana Water<br/>Company</b> |
|-------------|----------------------------------------------------|
| 1978        |                                                    |
| 1979        |                                                    |
| 1980        |                                                    |
| 1981        |                                                    |
| 1982        |                                                    |
| 1983        |                                                    |
| 1984        |                                                    |
| 1985        |                                                    |
| 1986        |                                                    |
| 1987        |                                                    |
| 1988        | 501                                                |
| 1989        | 2,328                                              |
| 1990        | 3,206                                              |
| 1991        | 3,555                                              |
| 1992        | 1,061                                              |
| 1993        | 2,320                                              |
| 1994        | 2,171                                              |
| 1995        | 2,111                                              |
| 1996        | 2,271                                              |
| 1997        | 2,596                                              |
| 1998        | 2,891                                              |
| 1999        | 2,935                                              |
| 2000        | 3,552                                              |
| 2001        | 6,106                                              |
| 2002        | 9,452                                              |
| 2003        | 9,321                                              |
| 2004        | 8,173                                              |
| 2005        | 7,252                                              |
| 2006        | 5,695                                              |
| 2007        | 5,493                                              |
| 2008        | 6,312                                              |

#### **IMPORTED WATER SUPPLIES**

As discussed previously, Fontana Water Company can purchase untreated SWP water from SBVMWD and imported water supplies from MWD (including Colorado River water,

SWP water, water storage, and water transfers) through IEUA. Fontana Water Company can currently purchase and receive up to 24,000 AFY of MWD imported SWP water from IEUA. Fontana Water Company can currently purchase up to 5,000 AFY of imported SWP water from SBVMWD and larger quantities as water use in the SBVMWD portion of Fontana Water Company's service area increases.

The SWP is a water storage and delivery system maintained and operated by the Department of Water Resources (DWR). MWD and SBVMWD hold long-term contracts with DWR for SWP water. MWD currently has a contractual 'Table A' amount of 1,911,500 AFY of SWP water ('Table A' represents the proportion of available SWP water allocated and delivered to each SWP contractor). SBVMWD currently has a contractual 'Table A' amount of 102,600 AFY of SWP water

State and federal resources and environmental protection agencies and a broad range of stakeholders have been involved in a multiyear planning process referred to as the CALFED process to develop programs to greatly improve the capacity and reliability of the SWP and the environmental conditions of the San Francisco Bay -Sacramento River Delta area (Bay-Delta). The Bay-Delta is a part of the SWP water delivery system. The Bay-Delta cooperating agencies approved a Record of Decision in August 2000 for a Programmatic Environmental Impact Report/Impact Statement for a multi-year improvement program. The improvement program includes projects related to SWP conveyance capacity, water quality, and operation of the SWP. Those programs are, of course, subject to environmental review and public input is required.

According to DWR's "The State Water Project Delivery Reliability Report 2007" (August 2008), the delivery reliability of SWP water is approximately 63 percent, on average, over the next 20 years. The DWR report incorporated future impacts on water deliveries as a result of climate change and potential limited pumping of the SWP to protect salmon, smelt, and other species in the Sacramento-San Joaquin Delta and Central Valley areas. The long term impact of these restrictions is not known in detail at this time. The US Department of the Interior recently announced a scientific review which could greatly alleviate the impacts of such restrictions on SWP deliveries. In addition, the Sierra Nevada watershed, source of much of the water for the SWP, has recently had consecutive critically dry years.



In response to these water supply conditions MWD has implemented its “Water Supply Allocation Plan” at a “Regional Shortage Level 2” for Fiscal Year 2009/2010 to reduce its wholesale water deliveries by ten percent. In addition, MWD has developed a “Five-Year Supply Plan” which includes various programs to enhance supplies through conservation, Colorado River transactions, SWP transactions, near-term Delta actions, groundwater recovery, and local resource enhancement programs. MWD staff reported at a June 2009 MWD Board of Directors Committee meeting that it is estimated MWD’s Calendar Year 2009 water demands will be approximately 2.05 million acre feet (AF) and MWD’s Calendar Year 2009 water supplies will approximately 2.16 million AF, resulting in approximately 0.11 million AF in surplus water for Calendar Year 2009. These estimates of water demand and supply include the anticipated water deliveries from the Colorado River and the SWP, use of water in storage in the MWD system and implementation of the Water Supply Allocation Plan and the Five-Year Supply Plan.

MWD is engaged in both short and long term efforts to address SWP water availability including implementation of the Five-Year Supply Plan which is anticipated to result in an additional 502,000 acre-feet per year of MWD water supplies by the year 2010 and an additional 602,000 to 808,000 acre-feet per year of MWD water supplies between 2011 and 2014, continuation or revision of the Water Supply Allocation Plan, participation in court challenges to the restrictions of pumping operations of the SWP, and participation in several planning programs to develop short term and long term improvements to the Sacramento-San Joaquin Delta and SWP water conveyance systems to reduce impacts on the ecosystem while allowing export of water through the SWP to meet future water demands.

MWD Replenishment Water, the category of water service used for groundwater replenishment with imported water in the Chino Basin, has been unavailable since May 2007 due to the current drought and limitations on SWP water availability. MWD has indicated that Replenishment Water may be available in approximately 3 out of 10 years in the future under current SWP operating conditions.

In addition, MWD is currently updating its Integrated Resources Plan to evaluate water supply availability considering the recent constraints discussed elsewhere in this Water Supply Assessment and develop a water resource strategy to meet future demands including anticipated replenishment demands. For the purpose of protecting and preserving the groundwater supplies within the Chino Basin, IEUA, the Chino Basin Watermaster

(CBWM), the Chino Basin Water Conservation District (CBWCD), and the San Bernardino County Flood Control District (SBCFCD) jointly sponsor the Chino Basin Recycled Water Groundwater Recharge Program. The program consists of infrastructure and pipelines that direct stormwater run-off, imported SWP water, and IEUA recycled water to groundwater recharge sites within the Chino Basin. The Chino Basin Recycled Water Groundwater Recharge Program will assist in mitigating future water shortages in California due to potential limits on imported SWP water.

### **Imported Water from SBVMWD**

Fontana Water Company can currently receive up to 5,000 AFY of imported water supplies from SBVMWD. Fontana Water Company expects to receive greater quantities of SWP water from SBVMWD as population and water use increase in the SBVMWD portion of Fontana Water Company's service area

The delivery reliability of SWP water from SBVMWD is similar to the previous discussion of SWP deliveries from IEUA and MWD except that for the foreseeable future, SBVMWD's contractual amount of 102,600 AFY of "Table A" SWP water is well in excess of pumping demands in the SBVMWD service area. Although Fontana Water Company expects to receive greater quantities of SWP water from SBVMWD in the future, it has been conservatively assumed that Fontana Water Company will receive up to 5,000 AFY of SWP water from SBMWD in the next twenty years. The reliability analysis in DWR's "The State Water Project Delivery Reliability Report 2007" shows that if Fontana Water Company can receive up to 5,000 AFY of SWP water during wet years from SBVMWD then Fontana Water Company can obtain approximately 3,150 AF (or 5,000 AFY x 63 percent), at least, during normal years, approximately 300 AF (or 5,000 AFY x 6 percent), at least, during a single dry year, and approximately 1,700 AF (or 5,000 AFY x 34 percent), at least, during multiple dry years. Imported water provided by SBVMWD will be treated at Fontana Water Company's Sandhill Water Treatment Plant, which is discussed in the following section on imported water from IEUA.

### **Imported Water from IEUA**

Fontana Water Company's upgraded Sandhill Water Treatment Plant can treat imported water from IEUA and SBVMWD and local surface water from Lytle Creek. The

Sandhill Water Treatment Plant, which has a capacity of up to 29 MGD, includes a 40 cfs (approximately 24,000 AFY) connection with IEUA to receive untreated SWP water. Based on IEUA's 2005 Regional UWMP, Fontana Water Company is projected to receive approximately 3 percent of IEUA's imported water supplies by the year 2010, and approximately 16 percent of IEUA's imported water supplies by the year 2025. The new source will allow Fontana Water Company greater flexibility in managing its water supply sources both short and long term, as well as in normal and dry years. Also, the upgraded surface water treatment plant allows Fontana Water Company to treat and maximize the use of turbid Lytle Creek storm water flows that could not be used in the past.

## **WATER SUPPLY SUMMARY**

Based on the above discussion of the available water supply sources, the water supply-demand balance in Fontana Water Company's service area in normal, single dry, and multiple dry years during the next twenty years are summarized in Table 13, Table 14, and Table 15.

The Chino Basin is an important source of groundwater for Fontana Water Company now and will continue to be in the future. In addition, the Chino Basin Watermaster's Optimum Basin Management Program will greatly increase the basin's safe yield through recharge of imported water, additional local storm water, and recycled water. Fontana Water Company will increase its dry year production from the Chino Basin. Based on pump capacity information from the Fontana Water Company's 2008 Water System Master Plan Update, Fontana Water Company's Chino Basin wells have a total pumping capacity of approximately 29,082 gpm (~46,910 AFY). Based on the Master Plan Update, Fontana Water Company is planning to increase its pumping capacity in the Chino Basin through construction of four additional new 2,000 gpm wells in the near future, with a total expected capacity of approximately 8,000 gpm (~12,900 AFY). Fontana Water Company is also planning to construct four new wells to replace four existing wells, which will provide a net increase in production of approximately 2,560 gpm (~4,130 AFY) of additional capacity over existing capacity. In addition, Fontana Water Company plans to install wellhead treatment on existing Chino Basin wells to remove perchlorate contamination and restore

approximately 6,500 gpm (~10,480 AFY) of groundwater production capacity. The Water System Master Plan Update also recommends that Fontana Water Company install at least three additional 2,000 gpm wells, or a total capacity of approximately 6,000 gpm (~9,680 AFY), to provide water supply in case of emergency interruptions of water service due to migration of contamination, loss of power, physical damage to electrical power supply equipment, or failure of a water transmission pipeline. Fontana Water Company's total pumping capacity from the Chino Basin will be approximately 52,142 gpm, or approximately 84,100 AFY (46,910 AFY + 12,900 AFY + 4,130 AFY + 10,480 AFY + 9,680 AFY) after the new wells, replacement wells, and the required wellhead treatment facilities have been constructed.

Tables 13, 14 and 15 show that the water supplies available to Fontana Water Company will be sufficient to meet all present and future water supply requirements in Fontana Water Company's service area with the Project for at least the next twenty years.

**TABLE 13 FUTURE WATER SUPPLIES IN FONTANA WATER COMPANY'S SERVICE AREA IN  
NORMAL YEARS (AFY)**

| Year                                                 |                            | 2010   | 2015   | 2020   | 2025   | 2030   |
|------------------------------------------------------|----------------------------|--------|--------|--------|--------|--------|
| <b>Total Water Demand with the Project</b>           |                            | 49,300 | 55,100 | 60,300 | 65,500 | 70,700 |
| <b>Total Water Demand w/ Conservation</b>            |                            | 46,800 | 49,600 | 54,300 | 59,000 | 63,600 |
| <b>Water<br/>Supplies</b>                            | Surface Water              | 7,000  | 7,000  | 7,000  | 7,000  | 7,000  |
|                                                      | Lytle Basin                | 11,000 | 11,000 | 11,000 | 11,000 | 11,000 |
|                                                      | Chino Basin                | 25,000 | 25,000 | 25,000 | 25,000 | 25,000 |
|                                                      | Rialto Basin               | 7,000  | 7,000  | 7,000  | 7,000  | 7,000  |
|                                                      | No-Man's Land              | 3,800  | 3,800  | 3,800  | 3,800  | 3,800  |
|                                                      | Recycled Water             | 2,600  | 3,400  | 4,000  | 4,300  | 4,300  |
|                                                      | Imported Water from SBVMWD | 2,000  | 2,000  | 2,000  | 4,000  | 4,000  |
|                                                      | Imported Water from IEUA   | 18,000 | 18,000 | 18,000 | 18,000 | 18,000 |
|                                                      | <b>Total</b>               | 76,400 | 77,200 | 77,800 | 80,100 | 80,100 |
| <b>Surplus Water Supplies (without Conservation)</b> |                            | 27,100 | 22,100 | 17,500 | 14,600 | 9,400  |

**TABLE 14 COMPARISON OF 2010 WATER SUPPLY AND DEMAND IN FONTANA WATER  
COMPANY'S SERVICE AREA IN NORMAL, SINGLE DRY, AND MULTIPLE DRY YEARS (AFY)**

| Demand and Supply                                    |                            | Normal<br>Year | Single Dry<br>Year <sup>1</sup> | Multiple Dry Years <sup>1</sup> |               |               |
|------------------------------------------------------|----------------------------|----------------|---------------------------------|---------------------------------|---------------|---------------|
|                                                      |                            |                |                                 | Dry Year<br>1                   | Dry Year<br>2 | Dry Year<br>3 |
| <b>Total Water Demand with the Project</b>           |                            | 49,300         | 51,000                          | 51,000                          | 53,500        | 51,600        |
| <b>Total Water Demand w/ Conservation</b>            |                            | 46,800         | 48,400                          | 48,400                          | 50,700        | 48,900        |
| <b>Water<br/>Supplies</b>                            | Surface Water              | 7,000          | 3,500                           | 3,500                           | 2,000         | 2,000         |
|                                                      | Lytle Basin                | 11,000         | 8,000                           | 8,000                           | 6,500         | 5,000         |
|                                                      | Chino Basin                | 25,000         | 57,200                          | 57,200                          | 57,200        | 57,200        |
|                                                      | Rialto Basin               | 7,000          | 6,000                           | 6,000                           | 6,000         | 6,000         |
|                                                      | No-Man's Land              | 3,800          | 3,400                           | 3,400                           | 3,100         | 2,300         |
|                                                      | Recycled Water             | 2,600          | 2,600                           | 2,600                           | 2,600         | 2,600         |
|                                                      | Imported Water from SBVMWD | 2,000          | 1000                            | 1,000                           | 1,000         | 1,000         |
|                                                      | Imported Water from IEUA   | 18,000         | 2,000                           | 2,000                           | 2,000         | 2,000         |
|                                                      | <b>Total</b>               | 76,400         | 83,700                          | 83,700                          | 80,400        | 78,100        |
| <b>Surplus Water Supplies (without Conservation)</b> |                            | 27,100         | 32,700                          | 32,700                          | 26,900        | 26,500        |

*1) Based on Fontana Water Company's historical water uses during the identified multiple dry years (1988-1990), it is estimated that a single dry year water demand is about 3.5% higher than normal year demand, dry year 2 demand is about 4.8% higher than dry year 1 demand, while dry year 3 demand is about 3.5% lower than dry year 2 demand.*

**TABLE 15 COMPARISON OF TWENTY YEAR PROJECTION (2025) OF WATER SUPPLY AND DEMAND IN FONTANA WATER COMPANY'S SERVICE AREA IN NORMAL, SINGLE DRY, AND MULTIPLE DRY YEARS (AFY)**

| Demand and Supply                                    |                            | Normal<br>Year | Single Dry<br>Year | Multiple Dry Years |               |               |
|------------------------------------------------------|----------------------------|----------------|--------------------|--------------------|---------------|---------------|
|                                                      |                            |                |                    | Dry Year<br>1      | Dry Year<br>2 | Dry Year<br>3 |
| <b>Total Water Demand with the Project</b>           |                            | 70,700         | 73,200             | 73,200             | 76,800        | 74,100        |
| <b>Total Water Demand w/ Conservation</b>            |                            | 63,600         | 65,900             | 65,900             | 69,100        | 66,700        |
| <b>Water<br/>Supplies</b>                            | Surface Water              | 7,000          | 3,500              | 3,500              | 2,000         | 2,000         |
|                                                      | Lytle Basin                | 11,000         | 8,000              | 8,000              | 6,500         | 5,000         |
|                                                      | Chino Basin                | 25,000         | 68,500             | 68,500             | 68,500        | 68,500        |
|                                                      | Rialto Basin               | 7,000          | 6,000              | 6,000              | 6,000         | 6,000         |
|                                                      | No-Man's Land              | 3,800          | 3,400              | 3,400              | 3,100         | 2,300         |
|                                                      | Recycled Water             | 4,300          | 4,300              | 4,300              | 4,300         | 4,300         |
|                                                      | Imported Water from SBVMWD | 4,000          | 1,000              | 1,000              | 2,000         | 2,000         |
|                                                      | Imported Water from IEUA   | 18,000         | 2,000              | 2,000              | 2,000         | 2,000         |
| <b>Total</b>                                         |                            | 80,100         | 96,700             | 96,700             | 94,400        | 92,100        |
| <b>Surplus Water Supplies (without Conservation)</b> |                            | 9,400          | 23,500             | 23,500             | 17,600        | 18,000        |



## **J. Hydrology and Water Quality Technical Appendix**

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# Southwest Industrial Park (SWIP) Specific Plan HYDROLOGY AND WATER QUALITY TECHNICAL APPENDIX

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*Prepared For:*

City of Fontana  
8353 Sierra Avenue  
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*Prepared By:*



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JN 65-100340



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## 1.0 INTRODUCTION

The following study represents the Hydrology and Water Quality Technical Appendix prepared as part of the *Fontana Southwest Industrial Park (SWIP) Specific Plan*. The SWIP project site is generally bounded by I-10 to the north, Philadelphia Avenue to the south, Citrus Avenue to the east and Etiwanda Avenue to the west in the City of Fontana, San Bernardino County, California (See **Figures 1 and 2** for a Regional and Project Vicinity Map). The project site encompasses approximately 3100 acres. This report is a technical engineering evaluation intended to support the *Master Planning and Infrastructure Program* for the SWIP Specific Plan project on issues related to drainage, surface hydrology, and water quality.

The project consists of the revitalization of South Fontana. The proposed project involves industrial, commercial, and residential redevelopment.

All assessments and technical analyses in this report are in compliance with the local drainage policies and requirements for the City of Fontana, Santa Ana Regional Water Quality Control Board (SARWQCB), San Bernardino County, and the California Environmental Quality Act (CEQA) of 1970, as amended. The hydrology analysis and drainage assessments have been prepared at a preliminary engineering level based upon available information. No detailed hydrology or hydraulics modeling has been performed.

### 1.1 Background and History

Currently, the existing SWIP boundary is approximately 1845 acres. The project area is currently zoned for light and general industrial land uses. The proposed Fontana Southwest Industrial Park (SWIP) project would expand the existing boundary to approximately 3100 acres. Surrounding neighborhoods include the Southridge Specific Plan to the South, the Fontana Gateway Specific Plan to the west and Light industrial and General Industrial to the north, east and west. The SWIP Specific Plan will address land use compatibility issues ensuring that a more cohesive development pattern is achieved.

Federal, state and local drainage laws and regulations govern the evaluation of impacts to surface water drainage. For this evaluation, impacts to surface water drainage would be considered significant if the project alters the drainage patterns of the site, which would result in substantial erosion, siltation, or increase runoff that would result in increased flooding. An increase in the amount of runoff could be considered a significant cause of erosion due to the concentration of flows.

The City of Fontana has been designated a regulated Small Municipal Storm Sewer System (MS4) by the United States Environmental Protection Agency (USEPA) pursuant to 40 CFR§122.32(a) (1) because it is an urbanized area as defined by the Bureau of Census. Therefore, the City is required to comply with the Phase II regulations of the National Pollutant Discharge Elimination System (NPDES). There are two options. One is to obtain an individual permit addressing specific compliance provisions and the other is to file a Notice of Intent (NOI) to comply with the State Water Resources Board (SWRB) Small MS4 General Permit.

This permit regulates urban storm water runoff from areas under the jurisdiction of the permittees, including storm water runoff, snowmelt runoff, and surface runoff and drainage flow into the Santa Ana River and its tributaries.

To implement its obligations, City of Fontana has adopted a Municipal Storm Water Management Plan (MSWMP), which consists of a variety of measures, including prohibition or regulation of specific types of discharges, inspections, avoidance of sewage spills, public education, controls on new development and redevelopment, site maintenance practices and construction site management practices.

City of Fontana is a co-permittee for the Area-wide Urban Storm Water Permit, issued by the Santa Ana River Water Quality Control Board (SARWQCB) pursuant to the National Pollution Discharge Elimination System (NPDES) program under Section 402(p) of the federal Clean Water Act. This permit is referred as NPDES No. CAS618036/Order No. R8-2002-0012.

Dischargers whose projects disturb one or more acres of soil or whose projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity. Construction activity subject to this permit includes clearing, grading and disturbances to the ground such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility.

The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP should contain a site map(s) which shows the construction site perimeter, existing and proposed buildings, lots, roadways, storm water collection and discharge points, general topography both before and after construction, and drainage patterns across the project. The SWPPP must list Best Management Practices (BMPs) the discharger will use to protect storm water runoff and the placement of those BMPs. Additionally, the SWPPP must contain a visual monitoring program; a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment.

## **1.2 Development Planning for Storm Water Management**

The requirement to implement a program for development planning was based on federal and state statutes including (Section 402 9p) of the Clean Water Act and the California Water Code. The Clean Water Act amendments of 1987 established a framework for regulating storm water discharges from municipal, industrial, and construction activities under the NPDES program. The primary objectives of the municipal storm water program requirements are to:

1. Effectively prohibit non-storm water discharges, and
2. Reduce the discharge of pollutants from the storm water conveyance system to the "Maximum Extent Practicable".

For this evaluation, impacts to storm water quality would be considered significant if the project did not attempt to address storm water pollution to the maximum extent practicable. Currently, there are no definitive water quality standards for individual pollutants. Therefore, impacts to storm water quality would be considered less than significant if they meet the requirements of the WQMP.

The Storm Water Quality Management Plan (SWQMP) requirements for commercial/institutional developments include the following:

1. Post development peak storm discharge rates shall not exceed the estimated pre-development rate for developments where increased peak storm water discharge rate would result in increased potential for downstream erosion.
2. Conserve natural areas by using cluster development, limiting clearing and grading of native vegetation, maximize trees and other vegetation, promote natural vegetation, and preserve riparian area and wetlands.
3. Minimize storm water pollutants of concern by incorporating BMPs or combinations of BMPs best suited to maximize the reduction of pollutant loadings in runoff to the maximum extent practicable.
4. Protect slopes and channels to decrease the potential for erosion and the subsequent impacts to storm water runoff.
5. Provide storm drain system stenciling and signage.
6. Properly design outdoor material storage areas.
7. Properly design trash storage areas.
8. Provide proof of ongoing BMP maintenance.
9. Comply with SUSMP standards for design of structural or treatment control BMPs.
10. Properly design loading/unloading dock areas.
11. Properly design repair/maintenance bays.
12. Properly design vehicle/equipment wash areas.
13. Design parking areas to reduce impervious land coverage in order to encourage the infiltration and treatment of runoff before it enters the storm drain system.

**Figure 1 – Regional Vicinity Map**

**Figure 2 – Project Vicinity Map**

## 2.0 EXISTING CONDITIONS

### 2.1 City of Fontana Master Plan of Drainage

In 1992 the City of Fontana developed a Master Plan of Drainage for the entire City and the Fontana Sphere of Influence. The study was divided into several areas with additional sub-drainage areas. The drainage areas include; Area North of 1-15, North Fontana, South Fontana, Project 3-3 and Project 3-4. The Southwest Industrial Park (SWIP) lies in the South Fontana Drainage Area. This drainage area is located southerly of the West Fontana Channel and northerly of the ridge line of the Jurupa Mountains. This area drains to the San Sevaine Channel via the I-10 channel and the Declez Chanel and major storm drains in Randall Avenue, San Bernardino Avenue and Valley Boulevard. Several smaller storm drains join the San Sevaine Channel directly.

There are existing reinforced concrete pipe (RCP) storm drains in both Beech and Hemlock Avenue that extend south from Slover Avenue to Jurupa Avenue that drain to Declez Channel. The South Fontana Master Strom Drain Plan Exhibit prepared by Hall & Foreman, Inc shows proposed storm drain facilities along Calabash Ave, Banana Ave, Almond Ave, Cherry Ave, Redwood Ave and Live Oak Ave (DZ Drainage System). The exhibit is included in **Appendix A**. The size alignment and configuration of storm drain shown on the exhibit are conceptual. The cost estimate for construction of the DZ drainage system was approximately 5 million (1992).

The MPD storm facilities are planned for 25-year storm events and the combination of the storm drain facilities and the street drainage capacity will provide the required 100-year flood protection.

Currently the City of Fontana has a development fee schedule. The City currently charges \$4,998 per net acre of residential, commercial and industrial for storm drain development. Storm water compliance fee ranges from \$350 to \$1,400 (depending on the size of the project) for all new construction inspection.

### 2.2 Existing Land Use

The City of Fontana established drainage pattern is street flow and some storm drain in a south west direction towards the San Sevaine and Declez Flood Control facilities which are owned and maintained by San Bernardino County Flood Control District (SBCFCD).

The Southwest Industrial Park (SWIP) area consists of a mixture of industrial, commercial, and residential land uses. Refer to **Table 2.1** and **Figure 3** for a detailed existing land use distribution. The existing land use distribution is consistent with the General Plan (2003).

| <b>Table 2.1 – Existing Condition Land Use Distribution</b> |                       |                      |                   |
|-------------------------------------------------------------|-----------------------|----------------------|-------------------|
| <b>Buildout Summary</b>                                     |                       |                      |                   |
| <b>District</b>                                             | <b>Land Use</b>       | <b>Area (sq. ft)</b> | <b>Area (ac.)</b> |
| Freeway Industrial Commercial                               | Commercial            | 742,262              | 17.04             |
|                                                             | Industrial            | 2,978,633            | 68.38             |
|                                                             | Residential           | 4,334,220            | 99.5              |
|                                                             | Miscellaneous         | 279,655              | 6.42              |
|                                                             | Vacant Land           | 2,590,510            | 59.47             |
|                                                             | Development to Remain | 3,613,300            | 82.95             |
|                                                             | Industrial            | 1,494,979            | 34.32             |



| <b>Table 2.1 – Existing Condition Land Use Distribution</b> |                       |                      |                   |
|-------------------------------------------------------------|-----------------------|----------------------|-------------------|
| <b>Buildout Summary</b>                                     |                       |                      |                   |
| <b>District</b>                                             | <b>Land Use</b>       | <b>Area (sq. ft)</b> | <b>Area (ac.)</b> |
| Jurupa North Research and Development                       | Commercial            | 899,078              | 20.64             |
|                                                             | Residential           | 7,225,733            | 165.88            |
|                                                             | Miscellaneous         | 831,125              | 19.08             |
|                                                             | Vacant Land           | 5,813,953            | 133.47            |
|                                                             | Development to Remain | 8,171,420            | 187.59            |
| Jurupa South Industrial                                     | Industrial            | 2,870,168            | 65.89             |
|                                                             | Commercial            | 81,457               | 1.87              |
|                                                             | Miscellaneous         | 607,226              | 13.94             |
|                                                             | Vacant Land           | 758,815              | 17.42             |
|                                                             | Residential           | 182,081              | 4.18              |
|                                                             | Development to Remain | 18,843,620           | 432.59            |
| Slover Central Manufacturing/Industrial                     | Industrial            | 1,626,966            | 37.35             |
|                                                             | Commercial            | 290,110              | 6.66              |
|                                                             | Residential           | 1,547,251            | 35.52             |
|                                                             | Miscellaneous         | 355,450              | 8.16              |
|                                                             | Vacant Land           | 3,600,234            | 82.65             |
|                                                             | Development to Remain | 11,037,233           | 253.38            |
| Slover East Industrial                                      | Industrial            | 1,092,920            | 25.09             |
|                                                             | Residential           | 592,416              | 13.60             |
|                                                             | Miscellaneous         | 1,260,626            | 28.94             |
|                                                             | Vacant Land           | 2,084,782            | 47.86             |
|                                                             | Development to Remain | 11,508,552           | 264.20            |
| Slover West Industrial                                      | Industrial            | 2,827,915            | 64.92             |
|                                                             | Commercial            | 740,084              | 16.99             |
|                                                             | Residential           | 4,561,168            | 104.71            |
|                                                             | Miscellaneous         | 281,833              | 6.47              |
|                                                             | Vacant Land           | 1,640,905            | 37.67             |
|                                                             | Development to Remain | 2,543,033            | 58.38             |
| Speedway Industrial                                         | Industrial            | 2,227,223            | 51.13             |
|                                                             | Commercial            | 1,548,558            | 35.55             |
|                                                             | Residential           | 88,427               | 2.03              |
|                                                             | Vacant Land           | 1,023,660            | 23.50             |
|                                                             | Miscellaneous         | 193,406              | 4.44              |
|                                                             | Development to Remain | 416,434              | 9.56              |
| SWIP Residential Trucking                                   | Residential           | 3,820,212            | 87.70             |
|                                                             | Vacant Land           | 12,197               | 0.28              |
|                                                             | Miscellaneous         | 84,071               | 1.93              |

**Figure 3 – Existing Land Use Map**

## 2.3 Hydrologic Parameters

An existing conditions qualitative analysis was prepared for the project area. Hydrologic parameter calculations to evaluate impacts from the existing condition which is consistent with the general plan update (2003) were evaluated based on a comparison of tributary area, and proposed change in percent impervious.

The type of land use and vegetation or ground cover affects the infiltration rate. Impervious values were determined using *San Bernardino County Hydrology Manual*. **Table 2.2** provides a summary of the land uses and the corresponding impervious values used for the analysis.

| <b>Table 2.2 – Percent Impervious Values</b> |                                  |                         |
|----------------------------------------------|----------------------------------|-------------------------|
| <b>Hydrology Manual</b>                      | <b>SWIP Land use Designation</b> | <b>Impervious Cover</b> |
| Commercial                                   | Commercial – Retail              | 0.90                    |
|                                              | Commercial – Office              | 0.90                    |
|                                              | Commercial - Service             | 0.90                    |
| Industrial                                   | Light Industrial                 | 0.90                    |
| Apartments                                   | Live/Work                        | 0.80                    |
| Industrial                                   | Manufacturing                    | 0.90                    |
| 5-7 DU/ac                                    | Residential                      | 0.50                    |
| 8-10 DU/ac                                   | Residential                      | 0.60                    |
| Natural or Public Park                       | Vacant Land                      | 0.10                    |
| Commercial                                   | Warehouse                        | 0.90                    |
| Condominiums                                 | Flex Tech                        | 0.65                    |

Drainage patterns were determined using information obtained from existing Master Plan of Drainage (1992) and USGS quad maps.

### 2.3.1 Existing Watershed Description

The Specific Plan Area does not currently have a system of organized storm drain facilities. There are reinforced concrete pipe (RCP) storm drains in both Beech and Hemlock Avenue that extend south from Slover Avenue to 1,300 feet north of Jurupa Avenue. The Southwest Industrial Park lies in the South Fontana Drainage area as shown on the Master Plan of Drainage. Most of the study area drains to the Declez Channel via storm drain facilities. A portion of the study area drains to the San Sevaine Channel via existing storm drain system.

San Sevaine Channel lies on the west end of the specific plan area. It provides drainage for the San Gabriel Mountains and a substantial part of the city north of 1-10 freeway. The channel is improved where it traverses the Southwest Industrial Park Plan Area. A small part of the Southwest Industrial Park Specific Plan area is within a FEMA flood zone AE. Zone AE is an area with a 1% (100-yr flood) chance of flooding and the Base Flood Elevations (BFE) have been determined from detailed analyses.

The Declez Channel generally follows the base of the Jurupa Mountains on the north slope. The channel is fully improved and discharges to the San Sevaine Channel approximately one mile south of the City of Fontana, in Riverside County.

In many areas, City streets are designed to accommodate 25-year storm flows within the right-of-way. **Table 2.3** provides the existing condition area characteristics. In order to simplify comparison of the existing and proposed specific plan land uses, the SWIP area was divided into 17 sub areas (within 4 watersheds; A, B, C, D) in order to compare land use characteristics between the alternatives. In most cases the area represents the tributary area to the existing storm drain facility. The sub areas were delineated using the existing Master Plan of Drainage and USGS quad map. The areas listed correspond with **Figure 4**. The existing City flood control structures are also shown on Figure 4.

| <b>Table 2.3 – Existing Area Characteristics</b> |                   |                      |
|--------------------------------------------------|-------------------|----------------------|
| <b>Areas</b>                                     | <b>Area (ac.)</b> | <b>Impervious, C</b> |
| 1A                                               | 116.29            | 0.52                 |
| 2A                                               | 485.96            | 0.51                 |
| 3A                                               | 199.01            | 0.50                 |
| 4A                                               | 195.88            | 0.49                 |
| 5A                                               | 204.82            | 0.49                 |
| 6A                                               | 281.67            | 0.48                 |
| 7A                                               | 292.06            | 0.52                 |
| 8A                                               | 193.01            | 0.55                 |
| 9A                                               | 395.63            | 0.56                 |
| 1B                                               | 141.51            | 0.54                 |
| 2B                                               | 160.27            | 0.54                 |
| 3B                                               | 160.38            | 0.54                 |
| 4B                                               | 45.09             | 0.54                 |
| 5B                                               | 74.29             | 0.54                 |
| 6B                                               | 41.71             | 0.54                 |
| 1C                                               | 144.37            | 0.71                 |
| 1D                                               | 48.98             | 0.56                 |

**Note:** % Impervious was based on area average.  
Land use was based on existing build out infrastructure.

The existing condition SWIP area consists of residential, industrial and commercial land uses. This study is intended only as a planning level investigation to determine proposed land use alternative project impacts to hydrology and water quality.

**Figure 4 – Existing Condition Drainage Map**

## **2.4 Floodplain Mapping**

The City of Fontana is a participant in the National Flood Insurance Program (NFIP). Communities participating in the NFIP must adopt and enforce minimum floodplain management standards, including identification of flood hazards and flooding risks. Participation in the NFIP allows communities to purchase low cost insurance protection against losses from flooding.

Most of the study area is outside the 1% chance (100-year) flooding. However, certain portions of the study limits are within the floodway and lie in Zone AE, whose base flood elevations are determined. **Figure 5** shows the FEMA flood zones for the SWIP study area.

**Figure 5 – FEMA Flood Zones**

## **2.5 Storm Water Quality**

As indicated in Section 1.2, storm water quality is a significant concern in Southern California. This section discusses typical pollutants found in storm water runoff and discusses the types of contaminants that may be found in existing storm water runoff.

### **2.5.1 Nonpoint Source Pollutants**

A net effect of urbanization can be to increase pollutant export. However, an important consideration in evaluating storm water quality from the project is to assess if it impairs the beneficial use to the receiving waters. Nonpoint source pollutants have been characterized by the following major categories in order to assist in determining the pertinent data and its use. Receiving waters can assimilate a limited quantity of various constituent elements, however there are thresholds beyond which the measured amount becomes a pollutant and results in an undesirable impact. Background of these standard water quality categories provides an understanding of typical urbanization impacts.

*Sediment* - Sediment is made up of tiny soil particles that are washed or blown into surface waters. It is the major pollutant by volume in surface water. Suspended soil particles can cause the water to look cloudy or turbid. The fine sediment particles also act as a vehicle to transport other pollutants including nutrients, trace metals, and hydrocarbons. Construction sites are typically the largest source of sediment for urban areas under development.

*Nutrients* - Nutrients are a major concern for surface water quality. Phosphorous and nitrogen are of special concern because they can cause algal blooms and excessive vegetative growth. Of the two, phosphorus is usually the limiting nutrient that controls the growth of algae in lakes. The orthophosphorous form of phosphorus is readily available for plant growth. The ammonium form of nitrogen can also have severe effects on surface water quality. The ammonium is converted to nitrate and nitrite forms of nitrogen in a process called nitrification. This process consumes large amounts of oxygen, which can impair the dissolved oxygen levels in water. The nitrate form of nitrogen is very soluble and is found naturally at low levels in water. When nitrogen fertilizer is applied to lawns or other areas in excess of plant needs, nitrates can leach below the root zone, eventually reaching ground water. Orthophosphate from auto emissions also contributes phosphorus in areas with heavy automobile traffic. As a general rule of thumb, nutrient export is greatest from development sites with the most impervious areas. Other problems resulting from excess nutrients are 1) surface algal scums, 2) water discolorations, 3) odors, 4) toxic releases, and 5) overgrowth of plants. Common measures for nutrients are total nitrogen, organic nitrogen, total Kjeldahl nitrogen (TKN), nitrate, ammonia, total phosphate, and total organic carbon (TOC).

*Trace Metals* - Trace metals are primarily a concern because of their toxic effects on aquatic life and their potential to contaminate drinking water supplies. The most common trace metals found in urban runoff are lead, zinc, and copper. Fallout from automobile emissions is also a major source of lead in urban areas. A large fraction of the trace metals in urban runoff are attached to sediment and this effectively reduces the level, which is immediately available for biological uptake and subsequent bioaccumulation. Metals associated with the sediment settle out rapidly and accumulate in the soils. Also, urban runoff events typically occur over a shorter duration, which reduces the amount of exposure, which could be toxic to the aquatic environment. The toxicity of trace metals in runoff varies with the hardness of the receiving water. As total hardness of the water increases, the threshold concentration levels for adverse effects increases.



*Oxygen-Demanding Substances* - Aquatic life is dependent on the dissolved oxygen (DO) in the water and when organic matter is consumed by microorganisms then DO is consumed in the process. A rainfall event can deposit large quantities of oxygen demanding substance in lakes and streams. The biochemical oxygen demand of typical urban runoff is on the same order of magnitude as the effluent from an effective secondary wastewater treatment plant. A problem from low DO results when the rate of oxygen-demanding material exceeds the rate of replenishment. Oxygen demand is estimated by direct measure of DO and indirect measures such as biochemical oxygen demand (BOD), chemical oxygen demand (COD), oils and greases, and total organic carbon (TOC).

*Bacteria* - Bacteria levels in undiluted urban runoff exceed public health standards for water contact recreation almost without exception. Studies have found that total coliform counts exceeded EPA water quality criteria at almost every site and almost every time it rained. The coliform bacteria that are detected may not be a health risk in them, but are often associated with human pathogens.

*Oil and Grease* - Oil and grease contain a wide variety of hydrocarbons some of which could be toxic to aquatic life in low concentrations. These materials initially float on water and create the familiar rainbow-colored film. Hydrocarbons have a strong affinity for sediment and quickly become absorbed to it. The major source of hydrocarbons in urban runoff is through leakage of crankcase oil and other lubricating agents from automobiles. Hydrocarbon levels are highest in the runoff from parking lots, roads, and service stations. Residential land uses generate less hydrocarbons export, although illegal disposal of waste oil into storm waters can be a local problem.

*Other Toxic Chemicals* - Priority pollutants are generally related to hazardous wastes or toxic chemicals and can be sometimes detected in storm water. Priority pollutant scans have been conducted in previous studies of urban runoff, which evaluated the presence of over 120 toxic chemicals and compounds. The scans rarely revealed toxins that exceeded the current safety criteria. The urban runoff scans were primarily conducted in suburban areas not expected to have many sources of toxic pollutants (with the possible exception of illegally disposed or applied household hazardous wastes). Measures of priority pollutants in storm water include - 1) phthalate (plasticizer compound), 2) phenols and creosols (wood preservatives), 3) pesticides and herbicides, 4) oils and greases, and 5) metals.

### **2.5.2 Physical Characteristics of Surface Water Quality**

Standard parameters, which can assess the quality of storm water, provide a method of measuring impairment. A background of these typical characteristics assists in understanding water quality requirements. The quantity of a material in the environment and its characteristics determine the degree of availability as a pollutant in surface runoff. In an urban environment, the quantity of certain pollutants in the environment is a function of the intensity of the land use. For instance, a high density of automobile traffic makes a number of potential pollutants (such as lead and hydrocarbons) more available. The availability of a material, such as a fertilizer, is a function of the quantity and the manner in which it is applied. Applying fertilizer in quantities that exceed plant needs leaves the excess nutrients available for loss to surface or ground water.

The physical properties and chemical constituents of water traditionally have served as the primary means for monitoring and evaluating water quality. Evaluating the condition of water through a water quality standard refers to its physical, chemical, or biological characteristics. Water quality parameters for storm water comprise a long list and are classified in many ways. In many cases, the concentration of an urban pollutant, rather than the annual load of that pollutant, is needed to assess

a water quality problem. Some of the physical, chemical or biological characteristics that evaluate the quality of the surface runoff are outlined below:

*Dissolved Oxygen* - Dissolved oxygen in the water has a pronounced effect on the aquatic organisms and the chemical reactions that occur. It is one of the most important biological water quality characteristics in the aquatic environment. The dissolved oxygen concentration of a water body is determined by the solubility of oxygen, which is inversely related to water temperature, pressure, and biological activity. Dissolved oxygen is a transient property that can fluctuate rapidly in time and space. Dissolved oxygen represents the status of the water system at a particular point and time of sampling. The decomposition of organic debris in water is a slow process and the resulting changes in oxygen status respond slowly also. The oxygen demand is an indication of the pollutant load and includes measurements of biochemical oxygen demand or chemical oxygen demand.

*Biochemical Oxygen Demand (BOD)* - The biochemical oxygen demand (BOD) is an index of the oxygen-demanding properties of the biodegradable material in the water. Samples are taken from the field and incubated in the laboratory at 20°C, after which the residual dissolved oxygen is measured. The BOD value commonly referenced is the standard 5-day values. These values are useful in assessing stream pollution loads and for comparison purposes.

*Chemical Oxygen Demand* - The chemical oxygen demand (COD) is a measure of the pollutant loading in terms of complete chemical oxidation using strong oxidizing agents. It can be determined quickly because it does not rely on bacteriological actions as with BOD. COD does not necessarily provide a good index of oxygen demanding properties in natural waters.

*Total Dissolved Solids (TDS)* - TDS concentration is determined by evaporation of a filtered sample to obtain residue whose weight is divided by the sample volume. The TDS of natural waters varies widely. There are several reasons why TDS is an important indicator of water quality. Dissolved solids affect the ionic bonding strength related to other pollutants such as metals in the water. TDS are also a major determinant of aquatic habitat. TDS affects saturation concentration of dissolved oxygen and influences the ability of a water body to assimilate wastes. Eutrophication rates depend on total dissolved solids.

*pH* - The pH of water is the negative log, base 10, of the hydrogen ion ( $H^+$ ) activity. A pH of 7 is neutral; a pH greater than 7 indicates alkaline water; a pH less than 7 represents acidic water. In natural water, carbon dioxide reactions are some of the most important in establishing pH. The pH at any one time is an indication of the balance of chemical equilibrium in water and affects the availability of certain chemicals or nutrients in water for uptake by plants. The pH of water directly affects fish and other aquatic life and generally toxic limits are pH values less than 4.8 and greater than 9.2.

*Alkalinity* - Alkalinity is the opposite of acidity, representing the capacity of water to neutralize acid. Alkalinity is also linked to pH and is caused by the presence of carbonate, bicarbonate, and hydroxide, which are formed when carbon dioxide is dissolved. A high alkalinity is associated with a high pH and excessive solids. Most streams have alkalinities less than 200 mg/l and ranges of alkalinity of 100-200mg/l seem to support well-diversified aquatic life.

*Specific Conductance* - The specific conductivity of water, or its ability to conduct an electric current, is related to the total dissolved ionic solids. Long term monitoring a project waters can develop a

relationship between specific conductivity and TDS. Its measurement is quick and inexpensive and can be used to approximate TDS. Specific conductivities in excess of 2000  $\mu\text{ohms/cm}$  indicate a TDS level too high for most freshwater fish.

*Turbidity* - The clarity of water is an important indicator of water quality that relates to the ability of photosynthetic light to penetrate. Turbidity is an indicator of the property of water that causes light to become scattered or absorbed. Suspended clays and other organic particles cause turbidity. It can be used as an indicator of certain water quality constituents such as predicting the sediment concentrations.

*Nitrogen (N)* - Sources of nitrogen in storm water are from the additions of organic matter to water bodies or chemical additions. Ammonia and nitrate are important nutrients for the growth of algae and other plants. Excessive nitrogen can lead to eutrophication since nitrification consumes dissolved oxygen in the water. Nitrogen occurs in many forms. Organic Nitrogen breaks down into ammonia, which eventually becomes oxidized to nitrate-nitrogen, a form available for plants. High concentrations of nitrate-nitrogen (N/N) in water can stimulate growth of algae and other aquatic plants, but if phosphorus (P) is present, only about 0.30 mg/l of nitrate-nitrogen is needed for algal blooms. Some fish life can be affected when nitrate-nitrogen exceeds 4.2 mg/l. There are a number of ways to measure the various forms of aquatic nitrogen. Typical measurements of nitrogen include Kjeldahl nitrogen (organic nitrogen plus ammonia); ammonia; nitrite plus nitrate; nitrite; and nitrogen in plants. The principal water quality criteria for nitrogen focus on nitrate and ammonia.

*Phosphorus (P)* - Phosphorus is an important component of organic matter. In many water bodies, phosphorus is the limiting nutrient that prevents additional biological activity from occurring. The origin of this constituent in urban storm water discharge is generally from fertilizers and other industrial products. Orthophosphate is soluble and is considered to be the only biologically available form of phosphorus. Since phosphorus strongly associates with solid particles and is a significant part of organic material, sediments influence concentration in water and are an important component of the phosphorus cycle in streams. The primary methods of measurement include detecting orthophosphate and total phosphorus.

### **2.5.3 Existing Storm Water Quality**

The project site lacks any measured data on storm water runoff quality. In the absence of site-specific data, expected storm water quality can be qualitatively discussed by relating typical pollutants to specific land uses.

The SWIP Specific Plan area lies within Santa Area River, Reach 3. This reach has been listed on the 2006 CWA Section 303(d) list with the main pollutant being Pathogens.

Currently, the SWIP area contains industrial buildings, commercial buildings, and residential dwellings. The expected existing pollutants in the existing condition storm water runoff from the developed areas of Fontana are oil and grease from automobile use. Pollutants associated with residential, commercial and industrial development include trash, heavy metals, nutrients, bacteria, oil and grease, and household hazardous wastes.

### 3.0 PROPOSED PROJECT

A qualitative analysis was performed to determine the impacts on hydrology, floodplain mapping and water quality for the SWIP project. To evaluate the impacts of the land use alternatives for the project area, the analysis was based on a comparison of tributary area, and proposed change in percent impervious over the existing general plan.

#### 3.1 Proposed Land Uses

The proposed project would consist of a combination of new uses, expansion of certain existing uses and rehabilitation of the existing industrial areas. The proposed land use concept was categorized into 8 districts. **Figure 6** shows the proposed land use. **Table 3.1** provides a detailed breakdown of the proposed land use.

| Table 3.1 – Proposed Condition Land Use Distribution |                       |               |            |
|------------------------------------------------------|-----------------------|---------------|------------|
| Buildout Summary                                     |                       |               |            |
| District                                             | Land Use              | Area (sq. ft) | Area (ac.) |
| Freeway Industrial Commercial                        | Commercial - Retail   | 1,638,793     | 35.65      |
|                                                      | Commercial - Office   | 546,264       | 11.88      |
|                                                      | Warehouse             | 2,731,321     | 59.42      |
|                                                      | Commercial - Service  | 546,264       | 11.88      |
|                                                      | Development to Remain | 478,645       | 10.99      |
| Jurupa North Research and Development                | Commercial - Office   | 1,219,865     | 28.00      |
|                                                      | Light Industrial      | 3,252,974     | 74.68      |
|                                                      | Live/ Work            | 813,243       | 18.67      |
|                                                      | Flex Tech             | 813,243       | 18.67      |
|                                                      | Commercial - Service  | 2,033,109     | 46.67      |
| Jurupa South Industrial                              | Development to Remain | 392,934       | 9.39       |
|                                                      | Warehousing           | 1,799,899     | 41.32      |
|                                                      | Light Industrial      | 449,975       | 10.33      |
| Slover Central Manufacturing/Industrial              | Development to Remain | 7,241,326     | 166.24     |
|                                                      | Warehousing           | 2,597,004     | 59.62      |
|                                                      | Manufacturing         | 1,113,002     | 25.55      |
| Slover East Industrial                               | Development to Remain | 960,325       | 22.59      |
|                                                      | Warehousing           | 1,257,686     | 28.87      |
|                                                      | Light Industrial      | 754,612       | 17.32      |
|                                                      | Commercial - Service  | 503,074       | 11.55      |
| Slover West Industrial                               | Development to Remain | 1,025,461     | 22.96      |
|                                                      | Warehousing           | 3,518,167     | 80.77      |
|                                                      | Light Industrial      | 1,507,786     | 34.61      |
| Speedway Industrial                                  | Development to Remain | 88,068        | 2.55       |
|                                                      | Warehousing           | 762,191       | 17.50      |
|                                                      | Light Industrial      | 1,016,255     | 23.33      |
|                                                      | Commercial - Service  | 762,191       | 17.50      |
| SWIP Residential Trucking                            | Development to Remain | 31,508        | 1.13       |
|                                                      | Residential           |               |            |

**Figure 6 – Proposed Land Use Map**

### 3.2 Hydrologic Parameters

Proposed evaluation for the different land uses were analyzed in a similar manner to the existing condition i.e. comparison of tributary area, and proposed change in percent impervious. Hydrologic parameter used in the analysis, such as impervious values for the land uses, is presented in the *San Bernardino County Hydrology Manual*. Refer to Table 2-2 for the land uses and impervious values used in this study.

#### 3.2.1 Proposed Watershed Description

Development within the SWIP area will alter the natural drainage that currently exists. This would occur as a result of the improvements of streets and the impervious surface created by parking lots and building within the developed areas.

For this analysis it was assumed that the proposed watershed would be the same as the existing. The drainage pattern for the areas flows generally to the south towards the San Sevaine and Declez Channel. Storm flow conveyance in the project area is generally within the existing streets. The hydrology parameters evaluation presented here is meant to show net changes as a result of the proposed specific plan only and not a full hydrologic analysis. A more detailed analysis would be required to assess exact facility impacts. **Table 3.2** shows the area characteristics for the proposed condition. The areas listed correspond with **Figure 7**.

| <b>Table 3.2 – Proposed Conditions Percent Impervious</b> |                   |                      |
|-----------------------------------------------------------|-------------------|----------------------|
| <b>Sub area</b>                                           | <b>Area (ac.)</b> | <b>Impervious, C</b> |
| 1A                                                        | 116.29            | 0.76                 |
| 2A                                                        | 485.96            | 0.80                 |
| 3A                                                        | 199.01            | 0.81                 |
| 4A                                                        | 195.88            | 0.83                 |
| 5A                                                        | 204.82            | 0.83                 |
| 6A                                                        | 281.67            | 0.83                 |
| 7A                                                        | 292.06            | 0.80                 |
| 8A                                                        | 193.01            | 0.87                 |
| 9A                                                        | 395.63            | 0.88                 |
| 1B                                                        | 141.51            | 0.63                 |
| 2B                                                        | 160.27            | 0.63                 |
| 3B                                                        | 160.38            | 0.63                 |
| 4B                                                        | 45.09             | 0.63                 |
| 5B                                                        | 74.29             | 0.63                 |
| 6B                                                        | 41.71             | 0.63                 |
| 1C                                                        | 144.37            | 0.90                 |
| 1D                                                        | 48.98             | 0.87                 |

The areas and the composite impervious values for the proposed condition were compared to the existing condition analysis to identify any impacts on the drainage facilities due to the proposed Fontana Southwest Industrial Park (SWIP) Area.

**Figure 7 – Proposed Condition Drainage Map**

### **3.3 Floodplain Mapping**

Portions of the SWIP area lies in zones identified as having a 1% chance of flooding and whose base flood elevations (BFE) have been identified. These areas include area 1B and 3B. Mitigation measures are discussed in **Section 4.3**

### **3.4 Storm Water Quality**

The general water quality of the project site is expected to deteriorate as a result of the proposed project. This is due to the proposed increase in impervious area. **Section 4.0** details the proposed mitigation to address future and existing water quality issues in the Fontana SWIP Specific Plan area.



#### 4.0 PROPOSED IMPACTS AND SUGGESTED MITIGATION

Mitigation would reduce impacts as a result of the development and revitalization of City of Fontana and the approved Sphere of Influence. The following section discusses both storm water conveyance and storm water quality mitigation measures.

##### 4.1 Hydrologic and Hydraulic Impacts

The Southwest Industrial Park Specific Plan project would result in an increase in the amount of impervious areas for the proposed land use. **Table 4.1** shows the area average imperviousness for each condition and the percent increase for the existing and proposed land uses for SWIP area. The potential for hydrologic impacts of the proposed project would require mitigation. The majority of the flows may be contained in the streets; however a storm drain system maybe needed at certain locations to carry the runoff and avoid flooding the neighborhoods.

The hydrologic parameter comparison of the percentage impervious presented here is meant to show expected net changes as a result of the SWIP project. A more detailed analysis would be required to assess exact facility impacts. In order to mitigate the additional runoff due to increase imperviousness within the SWIP area, implementation of the MPD is recommended.

| Table 4.1 – Comparison Area Characteristics |                       |                          |            |
|---------------------------------------------|-----------------------|--------------------------|------------|
| Area                                        | Exist - Impervious, C | Proposed – Impervious, C | % Increase |
| 1A                                          | 0.52                  | 0.76                     | 31.45      |
| 2A                                          | 0.51                  | 0.80                     | 36.42      |
| 3A                                          | 0.50                  | 0.81                     | 38.38      |
| 4A                                          | 0.49                  | 0.83                     | 41.20      |
| 5A                                          | 0.49                  | 0.83                     | 41.29      |
| 6A                                          | 0.48                  | 0.83                     | 41.53      |
| 7A                                          | 0.52                  | 0.80                     | 34.52      |
| 8A                                          | 0.55                  | 0.87                     | 36.49      |
| 9A                                          | 0.56                  | 0.88                     | 36.53      |
| 1B                                          | 0.54                  | 0.63                     | 14.29      |
| 2B                                          | 0.54                  | 0.63                     | 14.29      |
| 3B                                          | 0.54                  | 0.63                     | 14.29      |
| 4B                                          | 0.54                  | 0.63                     | 14.29      |
| 5B                                          | 0.54                  | 0.63                     | 14.29      |
| 6B                                          | 0.54                  | 0.63                     | 14.29      |
| 1C                                          | 0.71                  | 0.90                     | 21.11      |
| 1D                                          | 0.56                  | 0.87                     | 35.63      |

The results of this analysis indicate that there is an overall average increase of 28.25% in percent impervious due to the proposed SWIP project.

This increase in imperviousness will lead to increase runoff within the City of Fontana and may require mitigation to avoid impacting the existing storm drain and flood control facilities. Detailed analysis during the tentative map preparations would determine the need for mitigation. Mitigation may include detention or retention basins and additional storm drains within the existing streets. The

basins can be designed on either a local or regional basis to control peak flows depending on the capacity of the existing offsite facilities (Declez Channel and San Sevaine Channel). The storm drain system is discussed in **Section 5.0**.

#### **4.2 Floodplain Impacts**

Development occurring in the FEMA Flood zones and floodway identified in the proposed condition would be required to meet FEMA standards referenced in the City of Fontana's Municipal Code. Encroachments shall be prohibited, including fill, new construction, substantial improvements and other new developments within a floodway. Proposed development occurring within a floodplain will require a Conditional Letter of Map Revision (CLOMR) to be filed with the Federal Insurance Administrator. Upon completion of the proposed encroachments FEMA will issue a Letter of Map Revision (LOMR).

#### **4.3 Water Quality Impacts**

The SWIP Specific Plan within the City of Fontana would increase in impervious areas, resulting in impacts to storm water quality. The project could affect pollutant loading within the San Sevaine and Declez Channel. Mitigation for water quality impacts is recommended following the guidelines from the MSWMP. The following sections describe recommended Best Management Practices (BMP's) for the proposed project.

City of Fontana has adopted a Municipal Storm Water Management Plan (MSWMP), which consists of variety of measures. The City requires

- A National Pollution Discharge Elimination System (NPDES) General Construction Permit must be obtained from SARWQCB for construction projects involving a ground disturbance of at least 1 acre.
- Applicants shall prepare and submit a Notice of Intent (NOI) to comply with the Construction General Permit to the California State Water Resources Board.
- All dischargers must prepare, retain at the Construction site, and implement a Storm Water Pollution Prevention Plan (SWPPP) prior to issuance of a grading permit.
- A Storm Water Quality Management Plan (SWQMP) must be approved prior to any issuance of building permits. SWQMP specifies the Best Management Practices (BMPs) to be incorporated into the project design.

A SWQMP is required for development and redevelopment;

- For projects that fall under the eight Permit-specified categories listed in Table 1-1 in the Model WQMP Guidance for San Bernardino County. (Category Projects)
- For projects that have a precise plan of development (e.g. all commercial or industrial projects, residential projects < 10 DU and all other land development projects with potential for significant adverse water quality impacts).

The City may require development of a SWQMP for any projects other than the requirement listed above. It is assumed that each project within the SWIP Specific Plan area will require a separate SWQMP and associated mitigation.

#### **4.3.1 Post-Construction Source Control BMPs**

Examples of source control BMPs for storm water problems include control of air pollutants, enforcement of anti-litter ordinances, educational programs (to limit fertilizer and pesticide use by home gardeners and dumping of waste motor oil in storm drains), street and storm drain maintenance practices, spill prevention and cleanup, and BMPs for erosion control.

#### **4.3.2 Post-Construction Treatment Control**

Examples of treatment control BMPs for storm water include infiltration, wet ponds, extended detention basins, biofilters (such as grassy swales), media filtration (e.g., a settling basin followed by a sand filter), oil/water separators, and constructed wetlands. Because of differences in efficiency among BMPs, combinations of different methods often provide the best treatment.

#### **4.3.3 Construction**

The USEPA's guidance for the issuance of storm water NPDES permits (USEPA 1993) treats construction projects as a subset of industrial discharges. The State Board treats industrial and construction discharges separately, and has issued a statewide construction NPDES permit. The permit applies to construction projects resulting in land disturbance of one acre or greater; the area requirement affects both one-time disturbances and phased projects that cumulatively disturb more than one acre. (A court decision may result in application of the NPDES program to smaller projects, but guidance is not yet available). The permit does not apply to routine or emergency maintenance work sponsored by public agencies, to dredging and/or filling permitted by the U.S. Army Corps of Engineers, or to projects on Indian lands or within the Lake Tahoe Basin. Project proponents are required to:

- Prepare a Storm water Pollution Prevention Plan (SWPPP) before construction begins;
- File a Notice of Intent (NOI) with the State Board before construction begins; and
- File a Notice of Termination with the State Board once construction is complete.

These requirements are summarized as follows:

Notice of Intent: The NOI certifies that the applicant will comply with conditions in the statewide general NPDES permit. It is not a permit application and does not require approval, although an annual fee must be submitted with it.

Storm water Pollution Prevention Plan: The SWPPP is directed toward construction staff; it describes erosion and runoff control measures to be used during and after construction, and a plan to inspect and maintain these control measures. The SWPPP may be revised during construction in response to changed conditions, or if the properly installed BMPs are ineffective in preventing sediment transport off the site. Revisions to the SWPPP are also required if there are changes in activities which could result in a significant amount of pollutants discharged in storm water.

Notice of Termination: The State Board must be notified (via a Notice of Termination form) once construction is complete. It must also be notified if a change of ownership occurs during construction. In this case, a revised NOI must be submitted, and the SWPPP must be revised by the new owner to reflect any changes in construction conditions.

The general construction permit requires that the project owner arrange for maintenance of drainage/storm water control facilities after project completion; maintenance may be done by private parties or by a public agency such as a community service district. Municipalities may require maintenance agreements. Construction project proponents may request to be placed under individual NPDES permits rather than the general permit. The Regional Board may issue individual storm water NPDES permits to construction projects when more stringent controls are necessary to protect water quality. As noted above, individual construction projects may also be regulated under a municipality's NPDES management program.

## 5.0 STORM DRAIN COST ESTIMATE

As discussed in **Section 4**, the proposed project would increase in imperviousness which leads to increase in runoff within the project area. Existing drainage is primarily in the street and existing storm drains along Beech and Hemlock Ave. One possible alternative to address the impacts of the proposed project is to implement the proposed planned facilities as identified in the Master Plan of Drainage. Detailed hydrology & hydraulics and storm drain design has not been conducted for the SWIP area; however since the land use used in the MPD is similar to the SWIP, implementation of the MPD is recommended. The system described here represents one possible solution.

Construction cost estimates for the proposed storm drain facilities were generated by Hall and Foreman Inc., in the Master Storm Drainage Plan Study (1992). The costs presented in this study are based upon 2009 dollars. The costs include drainage improvements (Storm drains, junction structures and catch basins etc.) and 15% contingency. **Table 5.1** shows the updated cost for each system. Figure 7 shows the proposed MPD facilities.

| <b>Table 5.1 – Construction Cost</b> |                    |                    |                            |
|--------------------------------------|--------------------|--------------------|----------------------------|
| <b>Drainage System</b>               | <b>Street Name</b> | <b>1992 - Cost</b> | <b>2009 - Current Cost</b> |
| DZ -9                                | Catania Ave.       | \$691,783          | \$1,166,965                |
| DZ -10                               | Poplar Ave.        | \$835,763          | \$1,409,844                |
| DZ – 11                              | Live Oak Ave.      | \$648,600          | \$1,094,120                |
| DZ -12                               | Redwood Ave.       | \$641,125          | \$1,081,510                |
| DZ -13                               | Cherry Ave.        | \$638,250          | \$1,076,661                |
| DZ – 14                              | Almond Ave.        | \$648,600          | \$1,094,120                |
| DZ -15                               | Banana Ave.        | \$711,735          | \$1,200,622                |
| DZ - 16                              | Calabash Ave       | \$687,979*         | \$1,160,548                |
| <b>Total Cost</b>                    |                    | <b>\$5,503,835</b> | <b>\$9, 284,390</b>        |

Note: \* - Cost Average (Not provided in MPD)  
 ENR Cost Index for 1992 (5059) and March 2009 (8534).

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## **K. Traffic Analysis**

# **SOUTHWEST INDUSTRIAL PARK (SWIP) PROJECT TRAFFIC ANALYSIS**



Prepared for

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## EXECUTIVE SUMMARY

This study analyzes the forecast traffic conditions associated with the proposed Southwest Industrial Park (SWIP) Specific Plan project located in City of Fontana. The proposed Specific Plan identifies 10 Districts where land use planning is refined to help guide future development in a cohesive manner. For the purposed of the traffic analysis, trip generation is identified for 15 zones, generally coinciding with the Districts. The proposed project site is generally defined as the area between the Interstate 10 (I-10) freeway and Jurupa Avenue and the area between Etiwanda Avenue and Sierra Avenue. Regional access is provided via interchanges with I-10, Interstate 15 (I-15), and State Route 60 (SR-60).

When accounting for displaced land uses, the proposed project is forecast to generate approximately 219,929 net new daily trips, which include approximately 21,091 a.m. net new peak hour trips and approximately 22,880 p.m. net new peak hour trips.

Since the collection of baseline traffic data for this analysis, improvements have been implemented at the following locations:

- Cypress Avenue overcrossing providing vehicular connectivity between Slover Avenue and Valley Boulevard over I-10;
- Sierra Avenue/Jurupa Street intersection improvements; and
- Jurupa Avenue widening to a 6-lane roadway between Sierra Avenue to Poplar Avenue with traffic signals at Sierra Avenue, Cypress Avenue, Citrus Avenue, and Poplar Avenue.

Both the Cherry Avenue/I-10 and the Citrus Avenue/I-10 interchanges are in construction phase as of September 2011, with completion of construction anticipated in the year 2013.

Improvements are identified at the following roadway segments to achieve acceptable operations at the deficient roadway segments for forecast existing with project conditions:

- Mulberry Avenue;
- Beech Avenue;
- Jurupa Street between Etiwanda Avenue and Mulberry Avenue;
- Mulberry Avenue between Slover Avenue and Jurupa Street;
- Jurupa Street between Mulberry Avenue and Cherry Avenue;
- Beech Avenue between Slover Avenue and Jurupa Avenue;
- Citrus Avenue between I-10 Eastbound Ramps and Santa Ana Avenue; and
- Citrus Avenue between Santa Ana Avenue and Jurupa Street.

Improvements are identified at the following study intersections to achieve acceptable operations at the deficient intersections for forecast existing with project conditions:

- Etiwanda Avenue/San Bernardino Avenue;
- Etiwanda Avenue/East Airport Drive-Slover Avenue;
- Etiwanda Avenue/Jurupa Street;



- Mulberry Avenue/Slover Avenue;
- Mulberry Avenue/Santa Ana Avenue;
- Mulberry Avenue/Jurupa Street;
- Banana Avenue/Valley Boulevard;
- Cherry Avenue/Valley Boulevard;
- Cherry Avenue/Slover Avenue;
- Cherry Avenue/Jurupa Street;
- Beech Avenue/Valley Boulevard;
- Beech Avenue/Slover Avenue;
- Beech Avenue/Santa Ana Avenue;
- Beech Avenue/Jurupa Street;
- Citrus Avenue/Valley Boulevard;
- Citrus Avenue/Slover Avenue;
- Citrus Avenue/Santa Ana Avenue;
- Citrus Avenue/Jurupa Street;
- Sierra Avenue/Slover Avenue;
- Sierra Avenue/Jurupa Street; and
- Armstrong Road/SR-60 Eastbound Ramps.

Roadway segment improvements are identified at the following roadway segments to achieve acceptable operations at the deficient roadway segments for forecast year 2030 with project conditions:

- Mulberry Avenue;
- Beech Avenue;
- Cypress Avenue;
- Jurupa Street between Etiwanda Avenue and Mulberry Avenue;
- Mulberry Avenue between Slover Avenue and Jurupa Street;
- Country Village Road between Philadelphia Avenue and SR-60 Westbound Ramps;
- Jurupa Street between Mulberry Avenue and Cherry Avenue;
- San Bernardino Avenue between Cherry Avenue and Fontana Avenue;
- Jurupa Street between Cherry Avenue and Citrus Avenue;
- Beech Avenue between Slover Avenue and Jurupa Street;
- Citrus Avenue between I-10 Eastbound Ramps and Santa Ana Avenue;
- Citrus Avenue between Santa Ana Avenue and Jurupa Street; and

- Jurupa Street between Citrus Avenue and Sierra Avenue.

Improvements are identified at the following study intersections to achieve acceptable operations at the deficient intersections for forecast year 2030 with project conditions:

- I-15 Southbound Ramps/Jurupa Street;
- Etiwanda Avenue/San Bernardino Avenue;
- Etiwanda Avenue/East Airport Drive-Slover Avenue;
- Etiwanda Avenue/Jurupa Street;
- Commerce Way/Ontario Mills Parkway;
- Mulberry Avenue/Slover Avenue;
- Mulberry Avenue/Santa Ana Avenue;
- Mulberry Avenue/Jurupa Street;
- Banana Avenue/Valley Boulevard;
- Cherry Avenue/San Bernardino Avenue;
- Cherry Avenue/Valley Boulevard;
- Cherry Avenue/Slover Avenue;
- Cherry Avenue/Santa Ana Avenue;
- Cherry Avenue/Jurupa Street;
- Beech Avenue/Valley Boulevard;
- Beech Avenue/Slover Avenue;
- Beech Avenue/Santa Ana Avenue;
- Beech Avenue/Jurupa Street;
- Citrus Avenue/Valley Boulevard;
- Citrus Avenue/Slover Avenue;
- Citrus Avenue/Santa Ana Avenue;
- Citrus Avenue/Jurupa Street;
- Sierra Avenue/Slover Avenue;
- Sierra Avenue/Jurupa Street; and
- Armstrong Road/SR-60 Eastbound Ramps.

## **INTRODUCTION**

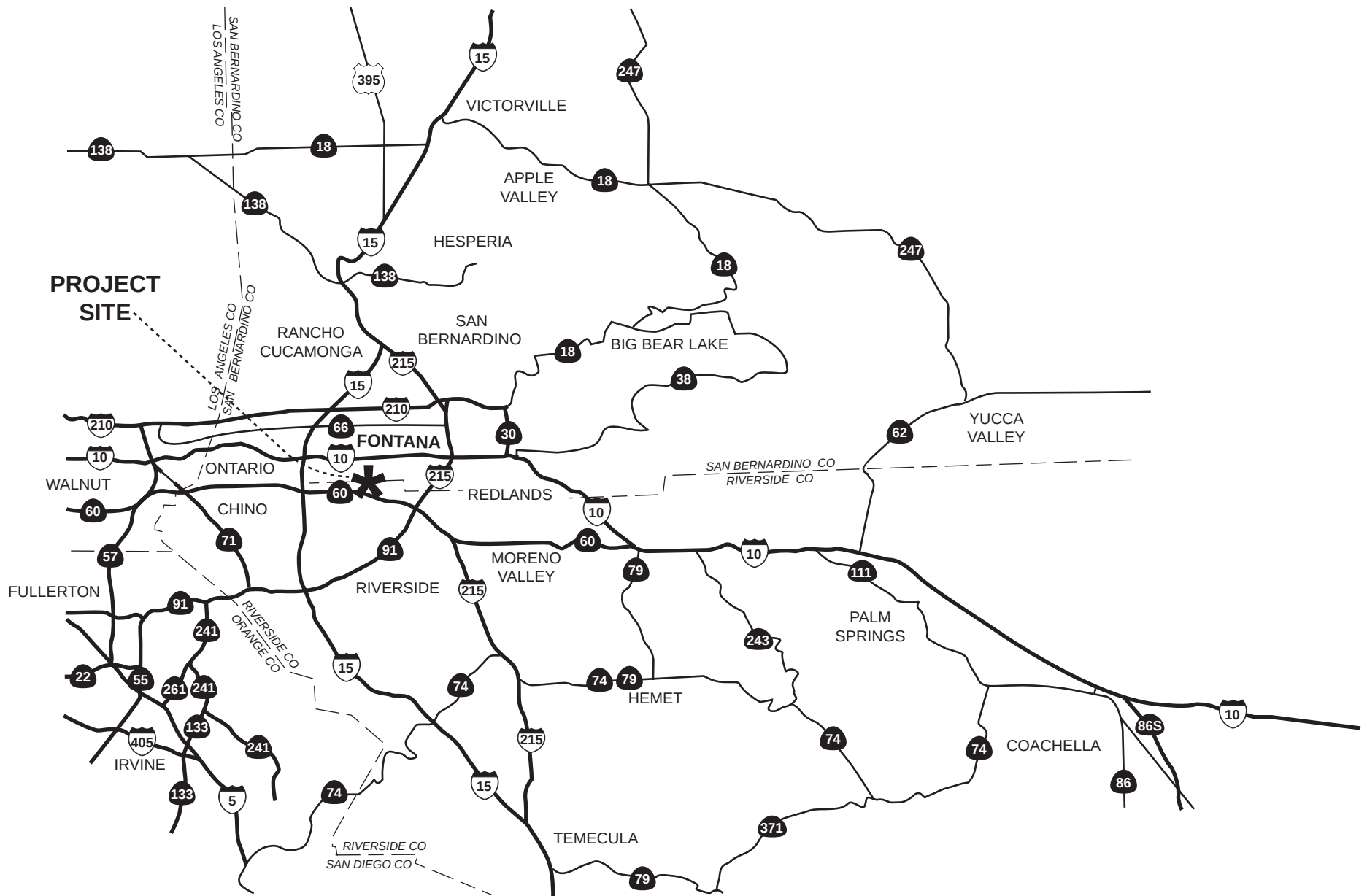
This study analyzes the forecast traffic conditions associated with the proposed Southwest Industrial Park (SWIP) Specific Plan project located in City of Fontana. The proposed Specific Plan identifies 10 Districts where land use planning is refined to help guide future development in a cohesive manner. For the purposes of the traffic analysis, trip generation is identified for 15 sub-zones, generally coinciding with the Districts. Roadway and intersection analysis has been prepared to identify improvements to support buildout of the Specific Plan and guide planning efforts to facilitate infrastructure improvements.

The proposed project site is generally defined as the area between the Interstate 10 (I-10) freeway and Jurupa Avenue and the area between Etiwanda Avenue and Sierra Avenue. Regional access is provided via interchanges with I-10, Interstate 15 (I-15), and State Route 60 (SR-60). Exhibit 1 shows the regional location of the project site. Exhibit 2 shows the project site location.

### **Study Area**

The study evaluates the following forty-five (45) intersections in the vicinity of the project site:

1. I-15 Southbound Ramps/Jurupa Street;
2. I-15 Northbound Ramps/Jurupa Street;
3. Etiwanda Avenue/San Bernardino Avenue;
4. Etiwanda Avenue/I-10 Westbound Ramps;
5. Etiwanda Avenue/I-10 Eastbound Ramps;
6. Etiwanda Avenue/East Airport Drive-Slover Avenue;
7. Etiwanda Avenue/Jurupa Street;
8. Etiwanda Avenue/Marlay Avenue;
9. Etiwanda Avenue/Philadelphia Avenue;
10. Etiwanda Avenue/SR-60 Westbound Off-Ramp;
11. Etiwanda Avenue/SR-60 Eastbound On-Ramp;
12. Commerce Drive-I-10 Westbound Ramps/Valley Boulevard;
13. Mulberry Avenue/Slover Avenue;
14. Mulberry Avenue/Santa Ana Avenue;
15. Mulberry Avenue/Jurupa Street;
16. Mulberry Avenue/Marlay Avenue;
17. Mulberry Avenue-Country Village Road/Philadelphia Avenue;
18. Country Village Road/SR-60 Westbound Ramps;
19. Country Village Road/SR-60 Eastbound Ramps;
20. Banana Avenue/San Bernardino Avenue;



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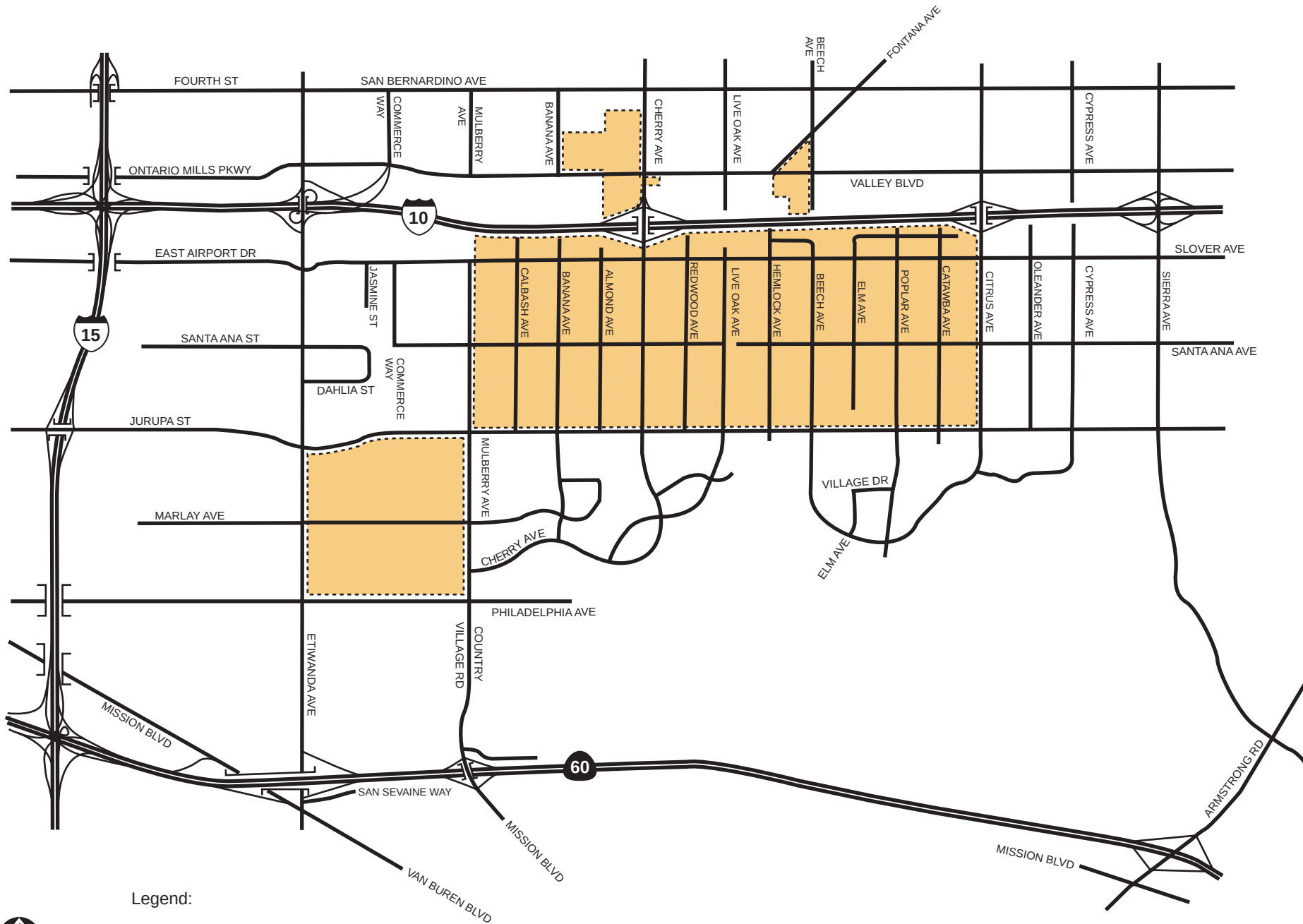


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## Regional Project Location

Exhibit 1

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SWIP Project Location



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## SWIP Project Site Location

Exhibit 2

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21. Banana Avenue/Valley Boulevard;
22. Cherry Avenue/San Bernardino Avenue;
23. Cherry Avenue/Valley Boulevard;
24. Cherry Avenue/I-10 Westbound Ramps (In Construction Phase);
25. Cherry Avenue/I-10 Eastbound Ramps (In Construction Phase);
26. Cherry Avenue/Slover Avenue;
27. Cherry Avenue/Santa Ana Avenue;
28. Cherry Avenue/Jurupa Street;
29. Fontana Avenue/Valley Boulevard;
30. Beech Avenue/Valley Boulevard;
31. Beech Avenue/Slover Avenue;
32. Beech Avenue/Santa Ana Avenue;
33. Beech Avenue/Jurupa Street;
34. Citrus Avenue/Valley Boulevard;
35. Citrus Avenue/I-10 Westbound Ramps (In Construction Phase);
36. Citrus Avenue/I-10 Eastbound Ramps (In Construction Phase);
37. Citrus Avenue/Slover Avenue;
38. Citrus Avenue/Santa Ana Avenue;
39. Citrus Avenue/Jurupa Street;
40. Sierra Avenue/Slover Avenue;
41. Sierra Avenue/Santa Ana Avenue;
42. Sierra Avenue/Jurupa Street;
43. Armstrong Road/Sierra Avenue;
44. Armstrong Road/SR-60 Westbound Ramps; and
45. Armstrong Road/SR-60 Eastbound Ramps.

The Cherry Avenue/I-10 and the Citrus Avenue/I-10 interchanges have recently been analyzed extensively to address the needs of the interchange improvements through standard Caltrans procedures. Design plans have been prepared based on the following Project Reports:

- I-10/Cherry Avenue Interchange Improvements Project Report (February 2009); and
- I-10/Citrus Avenue Interchange Improvements Project Report (August 2008).

Both the Cherry Avenue/I-10 and the Citrus Avenue/I-10 interchanges are in construction phase as of September 2011, with completion of construction anticipated in the year 2013. Since these interchanges were recently analyzed, and design plans are being implemented to accommodate long-range traffic volumes, this report does not duplicate analysis efforts.



Additionally, this study evaluates operations at the following roadway segments:

- Fourth Street-San Bernardino Avenue between I-15 and Fontana Avenue;
- Valley Boulevard between Etiwanda Avenue and Sierra Avenue;
- East Airport Drive between I-15 and Etiwanda Avenue;
- Slover Drive between Etiwanda Avenue and Sierra Avenue;
- Jurupa Street between I-15 and Sierra Avenue;
- Philadelphia Avenue between I-15 and Mulberry Avenue-Country Village Road;
- Etiwanda Avenue between San Bernardino Avenue and SR-60;
- Mulberry Avenue between Slover Avenue and Philadelphia Avenue;
- Country Village Road between Philadelphia Avenue and SR-60;
- Cherry Avenue between San Bernardino Avenue and Jurupa Street;
- Beech Avenue between Slover Avenue and Santa Ana Avenue;
- Citrus Avenue between San Bernardino Avenue and Jurupa Street;
- Sierra Avenue between Slover Avenue and Armstrong Road; and
- Armstrong Road between Sierra Avenue and SR-60.

The study roadways and intersections are primarily located within the City of Fontana, however, some of the study facilities are shared jurisdiction, or fully within jurisdiction of the following agencies:

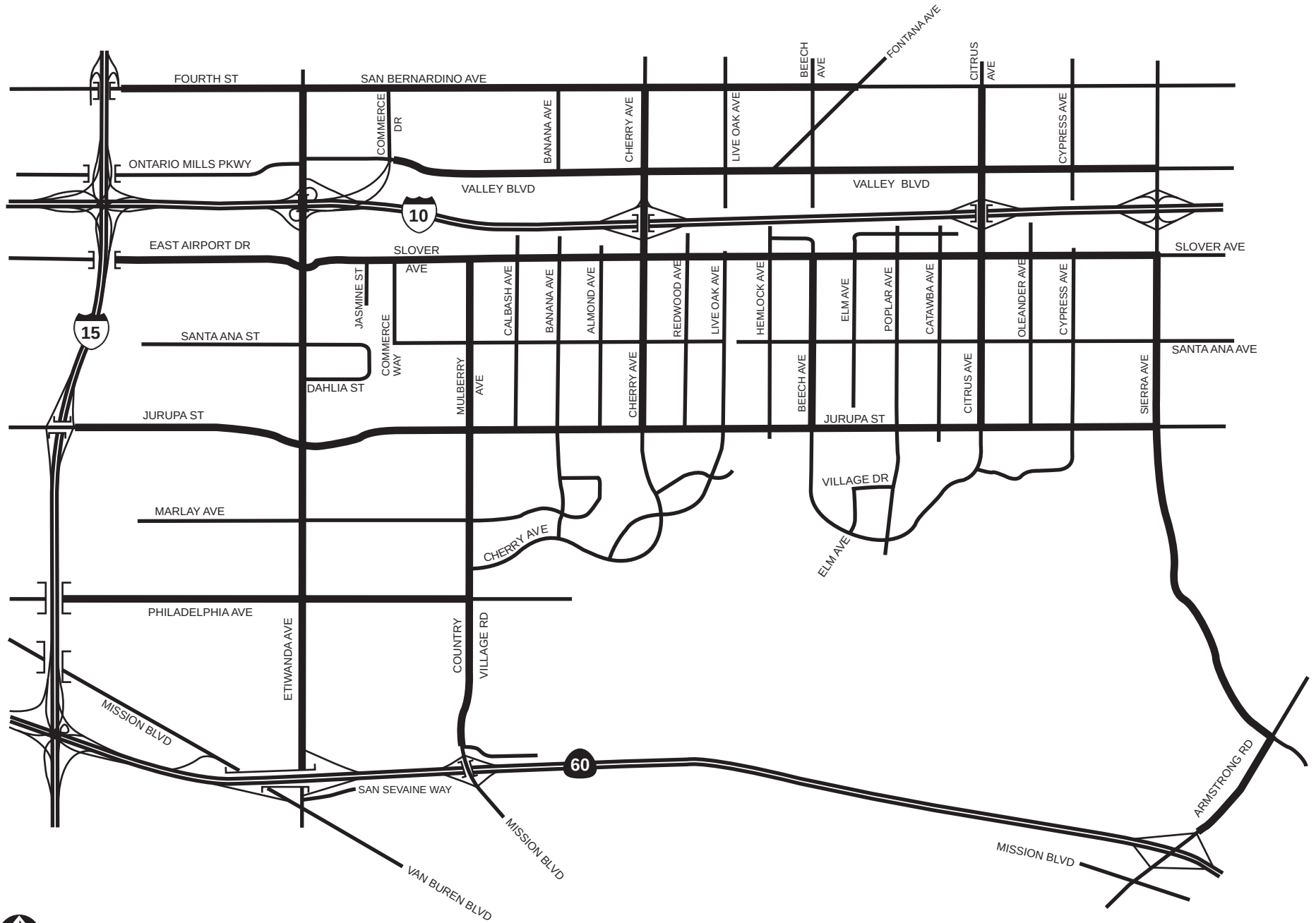
- Caltrans;
- City of Ontario;
- City of Jurupa Valley;
- County of San Bernardino; and
- County of Riverside.

Exhibits 3 and 4 show the locations of the study intersections and roadway segments, which are analyzed for the following study scenarios:

- Existing Conditions;
- Forecast Existing With Project Conditions;
- Forecast Year 2030 Without Project Conditions; and
- Forecast Year 2030 With Project Conditions.

### **Roadway Segment Analysis Methodology**

Level of service (LOS) is commonly used as a qualitative description of roadway segment operation and is based on the capacity of the roadway segment and the volume of traffic using the roadway segment. The City of Fontana utilizes the Volume-to-Capacity (V/C) analysis methodology to determine the operating LOS of the roadway segments.



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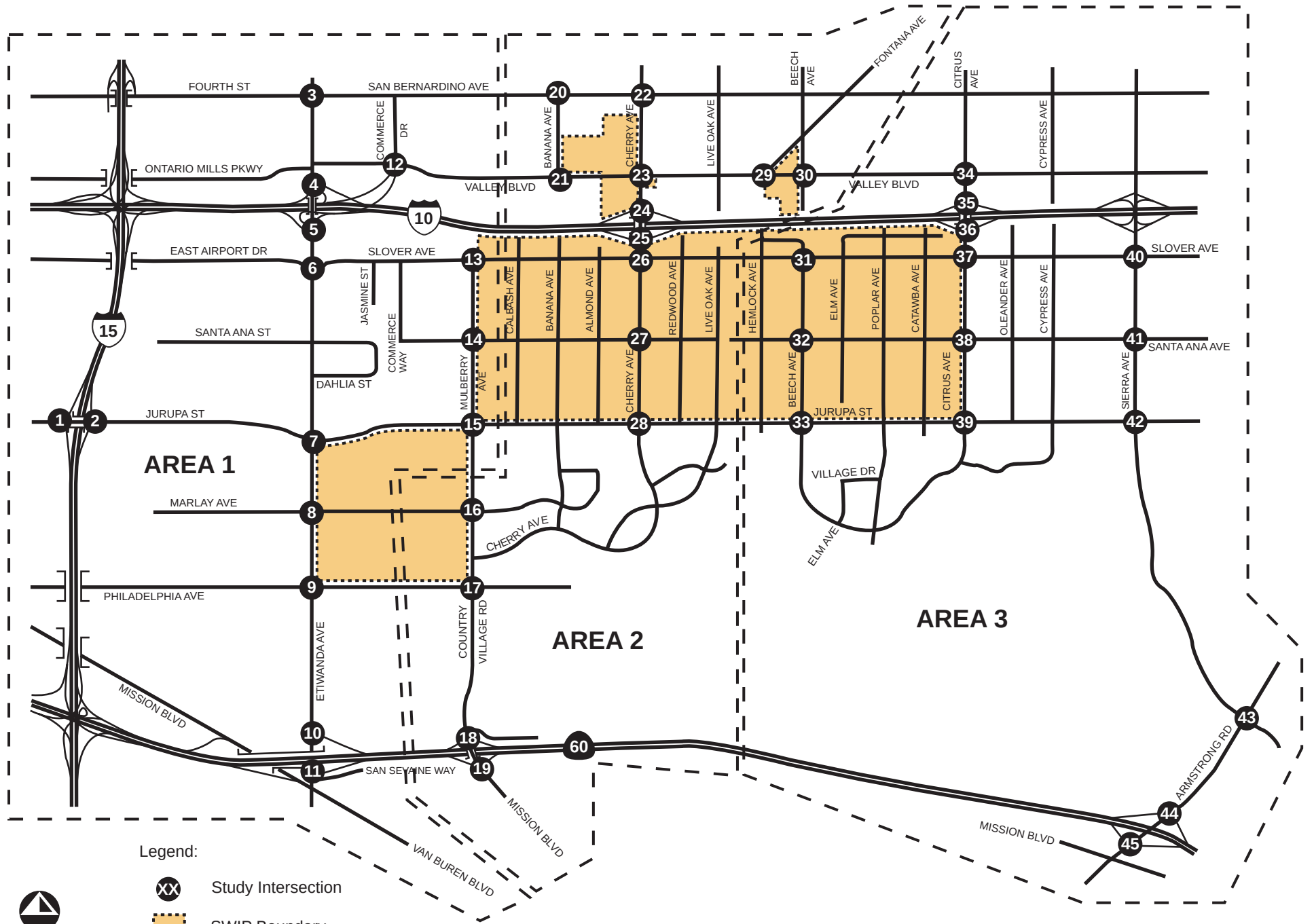
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Study Roadway Segment

## Study Roadway Segment Locations

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Study Intersection



SWIP Boundary

Study Area Boundary



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## Study Intersection Locations

Exhibit 4

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The V/C analysis methodology describes the operation of a roadway segment using a range of LOS from LOS A (free-flow conditions) to LOS F (severely congested conditions), based on the corresponding Volume/Capacity (V/C) ratios shown in Table 1.

**Table 1**  
**V/C & LOS Ranges**

| Roadway Segment    |     |
|--------------------|-----|
| V/C Ratio          | LOS |
| $\leq 0.60$        | A   |
| $> 0.61 \leq 0.70$ | B   |
| $> 0.71 \leq 0.80$ | C   |
| $> 0.81 \leq 0.90$ | D   |
| $> 0.91 \leq 1.00$ | E   |
| $> 1.00$           | F   |

**Source:** 1990 Transportation Research Board.

The City of Fontana roadway capacities used in this analysis to determine V/C ratios are shown in Table 3.

**Table 2**  
**City of Fontana Roadway Segment Classification and Capacity**

| Facility Type        | Number of Lanes | LOS D Capacity (Vehicles) | LOS E Capacity (Vehicles) |
|----------------------|-----------------|---------------------------|---------------------------|
| Eight-Lane Major     | 8               | 65,800                    | 72,000                    |
| Major                | 6               | 48,600                    | 54,000                    |
| Primary <sup>1</sup> | 4               | 32,400                    | 36,000                    |
| Secondary            | 4               | 21,600                    | 24,000                    |
| Collector            | 2               | 10,800                    | 12,000                    |
| Industrial           | 2               | 10,800                    | 12,000                    |

**Source:** City of Fontana General Plan Update (October 2001).

<sup>1</sup> = Modified Primary with 5 lanes assumes LOS E capacity equal to 45,000.

The City of Ontario roadway capacities used in this analysis to determine V/C ratios are shown in Table 3.

**Table 3**  
**Roadway Segment Classification and Capacity**

| Facility Type                   | Number of Lanes | LOS E Capacity (Vehicles) |
|---------------------------------|-----------------|---------------------------|
| Principal Arterial              | 6               | 49,000                    |
| Principal Arterial <sup>1</sup> | 5               | 41,000                    |
| Principal Arterial              | 4               | 33,000                    |
| Minor Arterial                  | 6               | 49,000                    |
| Minor Arterial                  | 4               | 33,000                    |
| Collector                       | 4               | 33,000                    |
| Collector                       | 2               | 12,500                    |

**Source:** The Ontario Plan Draft Environmental Impact Report (April 2009).

<sup>1</sup> = Modified Primary with 5 lanes assumes LOS E capacity equal to 41,000.

### Intersection Analysis Methodology

The City of Fontana utilizes the *Highway Capacity Manual (HCM)* intersection analysis methodology to analyze the operation of unsignalized intersections. The *HCM* analysis methodology describes the operation of an intersection using a range of LOS from LOS A (free-flow conditions) to LOS F (severely congested conditions), based on the corresponding stopped delay experienced per vehicle for unsignalized intersections shown in Table 4.

**Table 4**  
**LOS & Delay Ranges**

| LOS | Delay (seconds/vehicle)  |                            |
|-----|--------------------------|----------------------------|
|     | Signalized Intersections | Unsignalized Intersections |
| A   | $\leq 10.0$              | $< 10.0$                   |
| B   | $> 10.0 \leq 20.0$       | $> 10.0$ to $< 15.0$       |
| C   | $> 20.0 \leq 35.0$       | $> 15.0$ to $< 25.0$       |
| D   | $> 35.0 \leq 55.0$       | $> 25.0$ to $< 35.0$       |
| E   | $> 55.0 \leq 80.0$       | $> 35.0$ to $< 50.0$       |
| F   | $> 80.0$                 | $> 50.0$                   |

**Source:** 2000 *Highway Capacity Manual*.

Level of service is based on the average stopped delay per vehicle for all movements of signalized intersections and all-way stop-controlled intersections; for one-way or two-way stop-controlled intersections, LOS is based on the worst stop-controlled approach.

### Performance Criteria

The *Caltrans Guide for the Preparation of Traffic Impact Studies (Caltrans, December 2002)* provides a target LOS of the “transition between LOS C and LOS D.”

The San Bernardino Associated Governments *Congestion Management Program for San Bernardino County (SANBAG, December 2007)* indicates “In no case shall the LOS standards established be below the level of service E, or the current level, whichever is farthest from level of service A.” Therefore, the SANBAG target for traffic operations is LOS E or better.

The Ontario Plan Mobility Element provides Goal M1 to provide “A system of roadways that meets the mobility needs of a dynamic and prosperous Ontario,” with a target operation of LOS E for all intersections.

The City of Fontana Circulation Element provides goals and policies to develop a balanced transportation system that meets the mobility needs of current and future residents with safe and efficient movement of vehicles, people and goods. Goal #1, Policy #12 indicates the following:

*All streets and intersections design after the adoption of the General Plan will be planned to function at level of service (LOS) C or better, wherever possible. Improvements to existing streets will be designed to LOS C standards whenever feasible.*

Since the entirety of the project study area consists of roadways planned, constructed, and managed since the adoption of the current General Plan, achieving the LOS C target is considered a notable burden and is beyond feasibility. Typically ensuring LOS C within the built environment as suggested requires roadway widening that is detrimental to commercial activities, property rights, and includes substantial costs to implement. The City of Fontana Circulation Element also includes the statement that “Level of Service D is typically considered the worst acceptable level in an urbanized area”.

Due to the overriding benefits/consideration of building within this developed area, Transportation Demand Management strategies and policies will also be implemented as a cost effective alternative to increasing capacity and will deliver better environmental outcomes, improved public health, stronger communities and livable cities. The City of Fontana has a fully functional, staffed Traffic Management Center to achieve these goals.

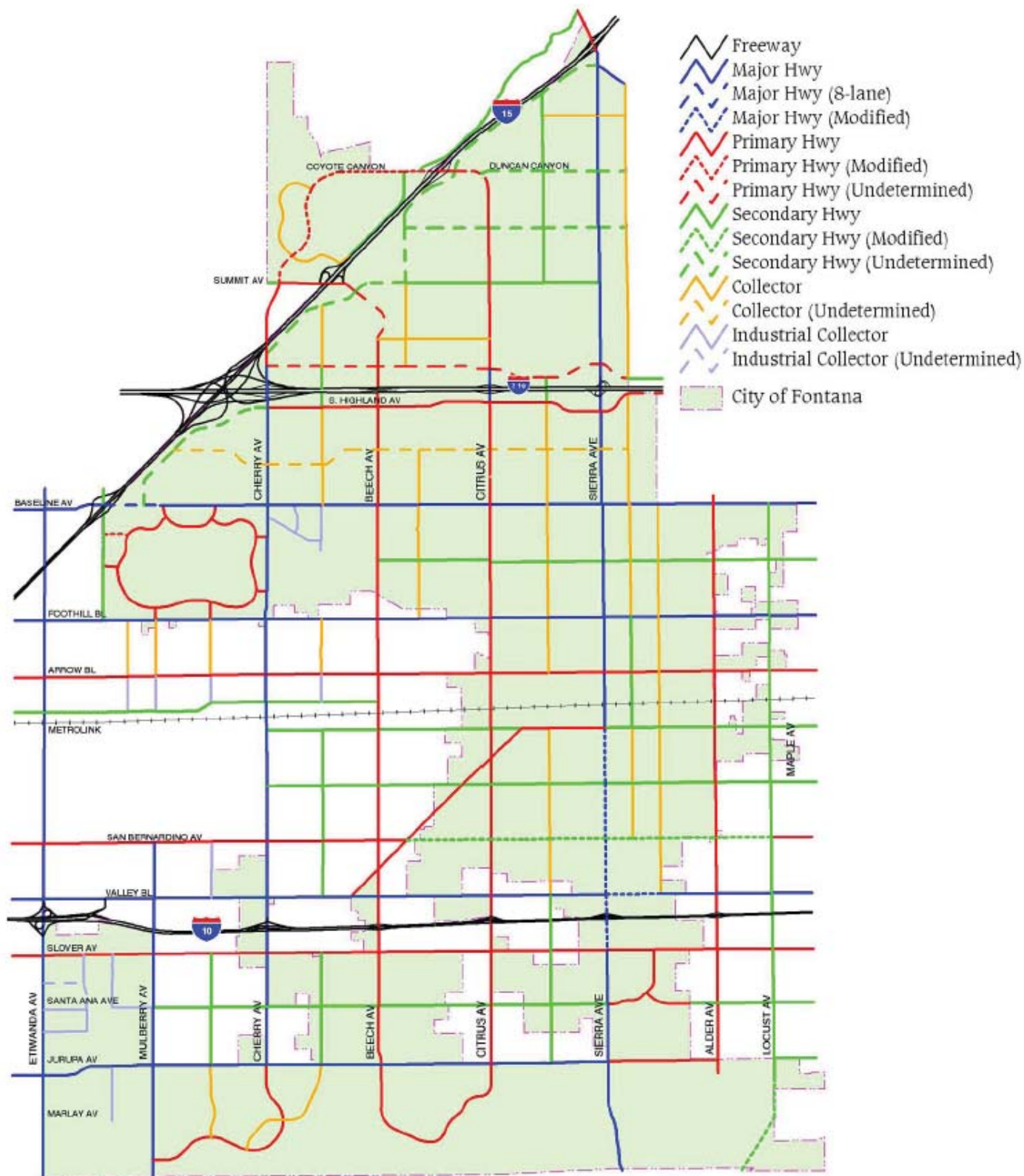
Based on discussions with City staff, and consistent with the City of Fontana Circulation Element and the *Fontana Business Center Traffic Impact Analysis (Meyer, Mohaddes Associates, Inc., April 2003)*, this study utilizes an LOS target of LOS D or better for roadway segment and intersection operation.

### **Consistency With General Plan Circulation Element**

This traffic analysis conservatively does not assume implementation roadway improvements identified in the Circulation Element such as widening and extension of Mulberry Avenue northerly over Interstate 10 to Valley Boulevard. Instead, the analysis has been prepared to determine which items of the Circulation Element need to be implemented to provide acceptable roadway and intersection operations. Where improvements are identified beyond that assumed in the Circulation Element, the recommendation provides indication the measure is in excess of roadway improvements previously envisioned in the study area. Exhibit 5 shows the Circulation Element as included in the City of Fontana General Plan (Adopted 2003). Exhibit 6 shows the Designated Truck Routes included in the City of Fontana General Plan (Adopted 2003).



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Source: City of Fontana General Plan (Adopted 2003).



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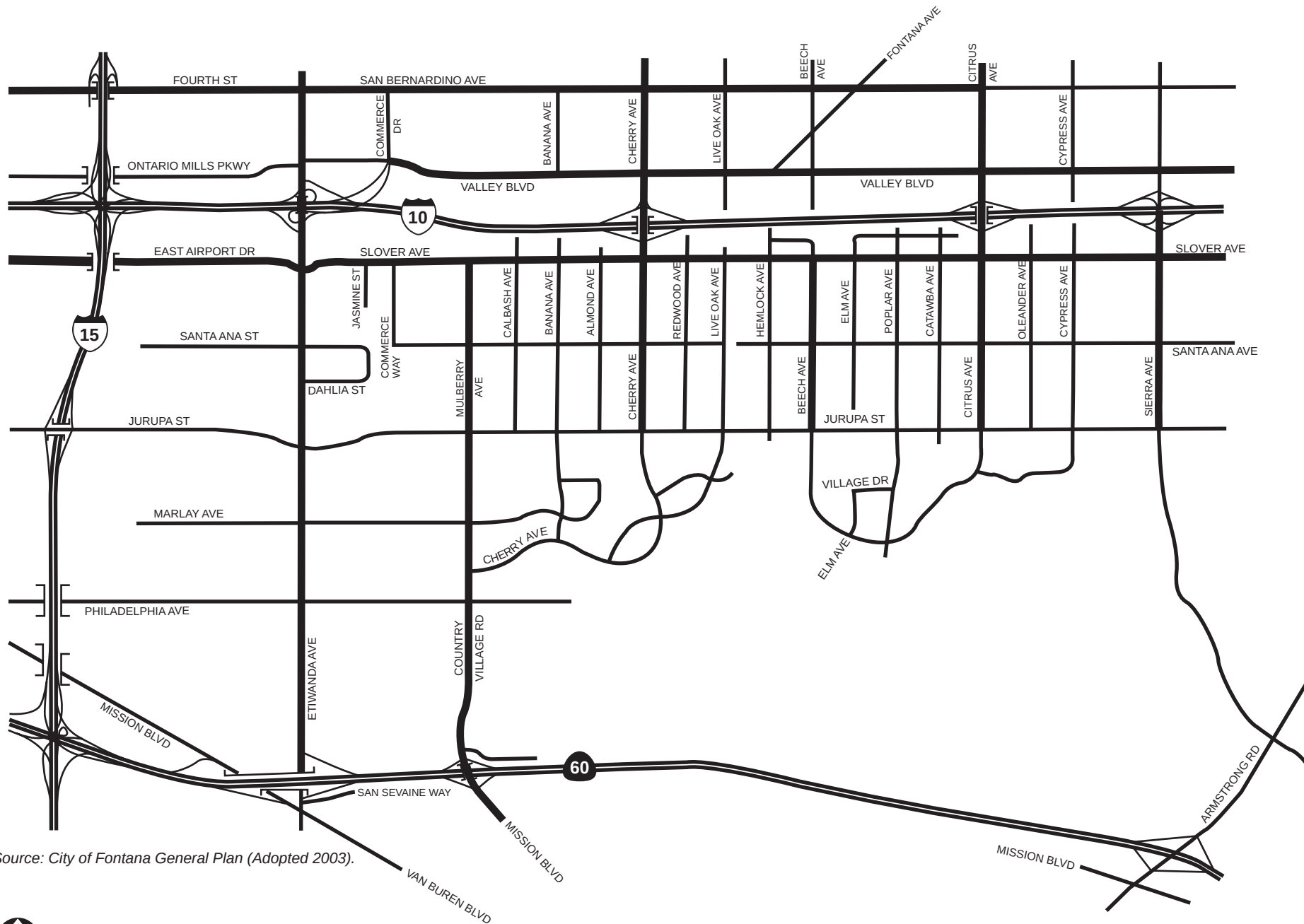


## City of Fontana General Plan Circulation Master Plan

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Exhibit 5

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Source: City of Fontana General Plan (Adopted 2003).



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Legend:

— Designated Truck Route

## City of Fontana Truck Routes

Exhibit 6

In accordance with City staff direction, the existing intersection movement counts were recorded by vehicle axle classification, to which the following San Bernardino Associated Governments (SANBAG) provided passenger car equivalent (PCE) factors were applied:

- Bus = 1.5 PCE;
- 2-axle = 1.5 PCE;
- 3-axle = 2 PCE; and
- 4-axle or more = 3 PCE.

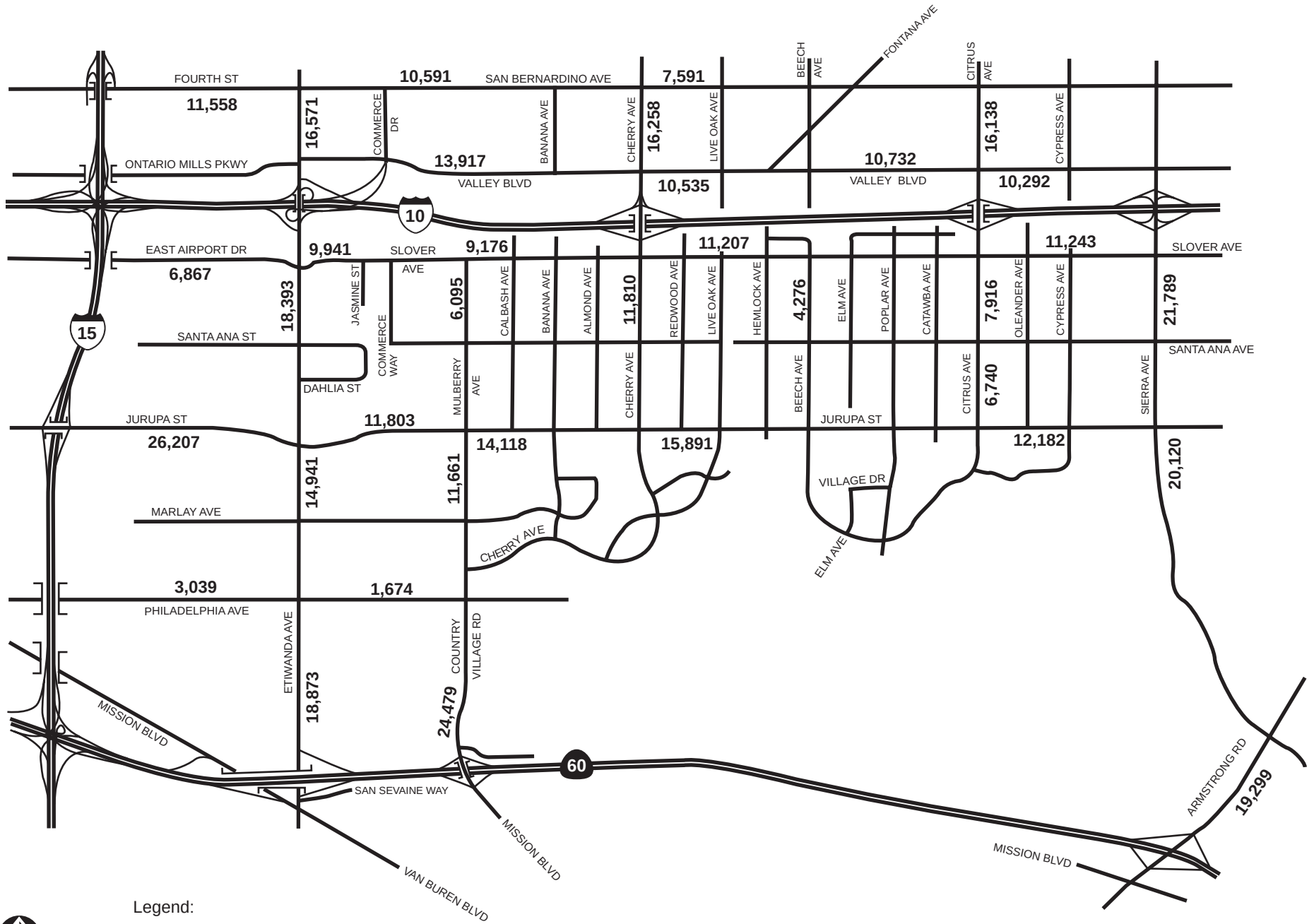
### **Existing Conditions Peak Hour Traffic Volumes**

To determine the existing operation of the study roadways and intersections, average daily traffic (ADT) volumes for the roadway circulation system and intersection movement counts were collected in February 2009. Additionally, traffic counts were obtained from City of Fontana staff for ten of the 45 study intersections and grown one percent per year to reflect year 2009 conditions. Detailed traffic count data is contained in Appendix A.

Exhibit 7 shows existing ADT volumes for the study roadways. Exhibits 8 through 10 show existing PCE-adjusted a.m. peak hour and p.m. peak hour volumes at the study intersections. Exhibits 11 through 13 show existing conditions study intersection geometry. Exhibit 14 shows existing conditions roadway segment geometry.

### **Existing Conditions Roadway Segment LOS**

Table 5 summarizes existing roadway segment ADT volumes and corresponding LOS.



Legend:

XX,XXX Roadway Segment ADT



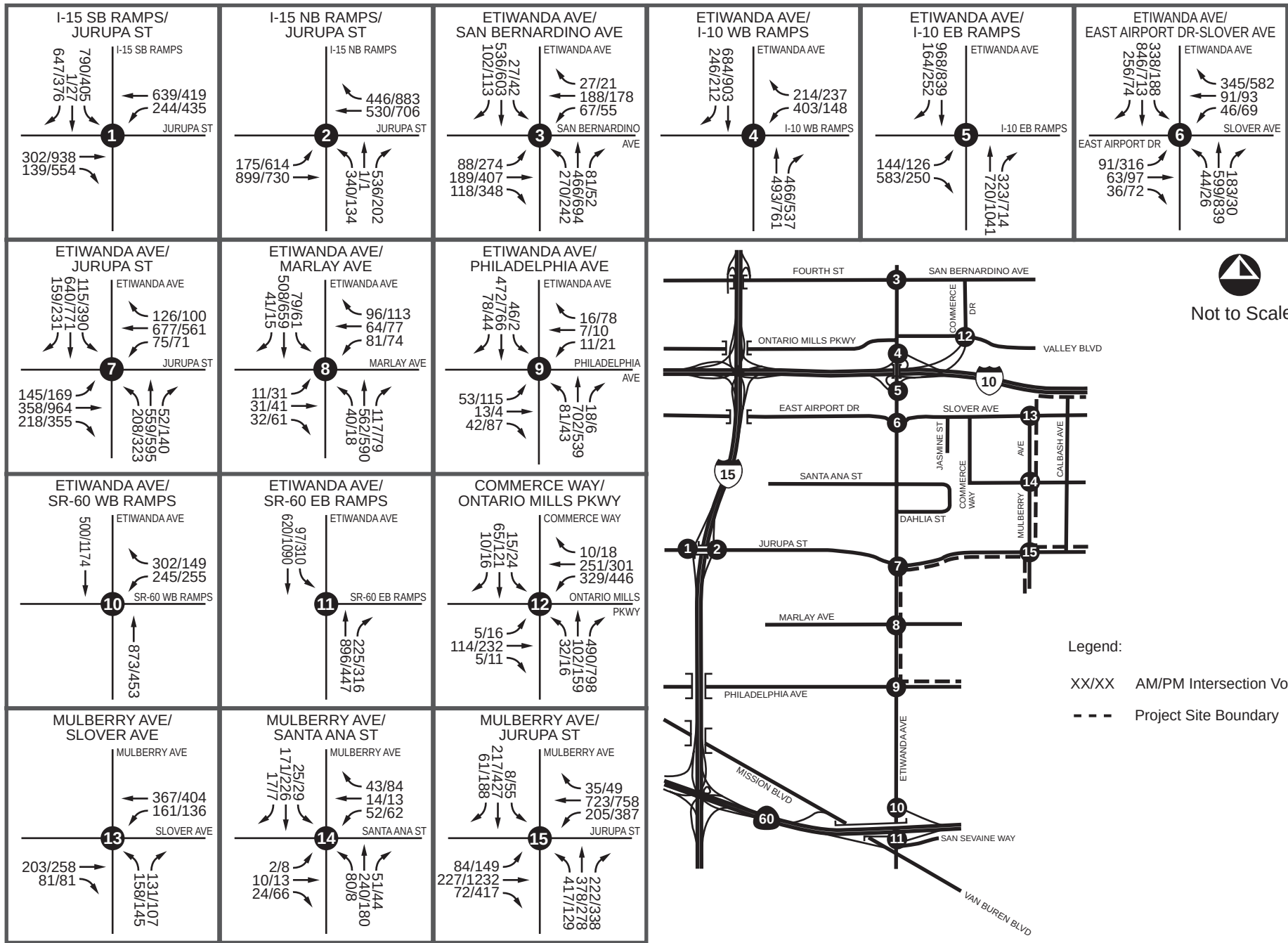
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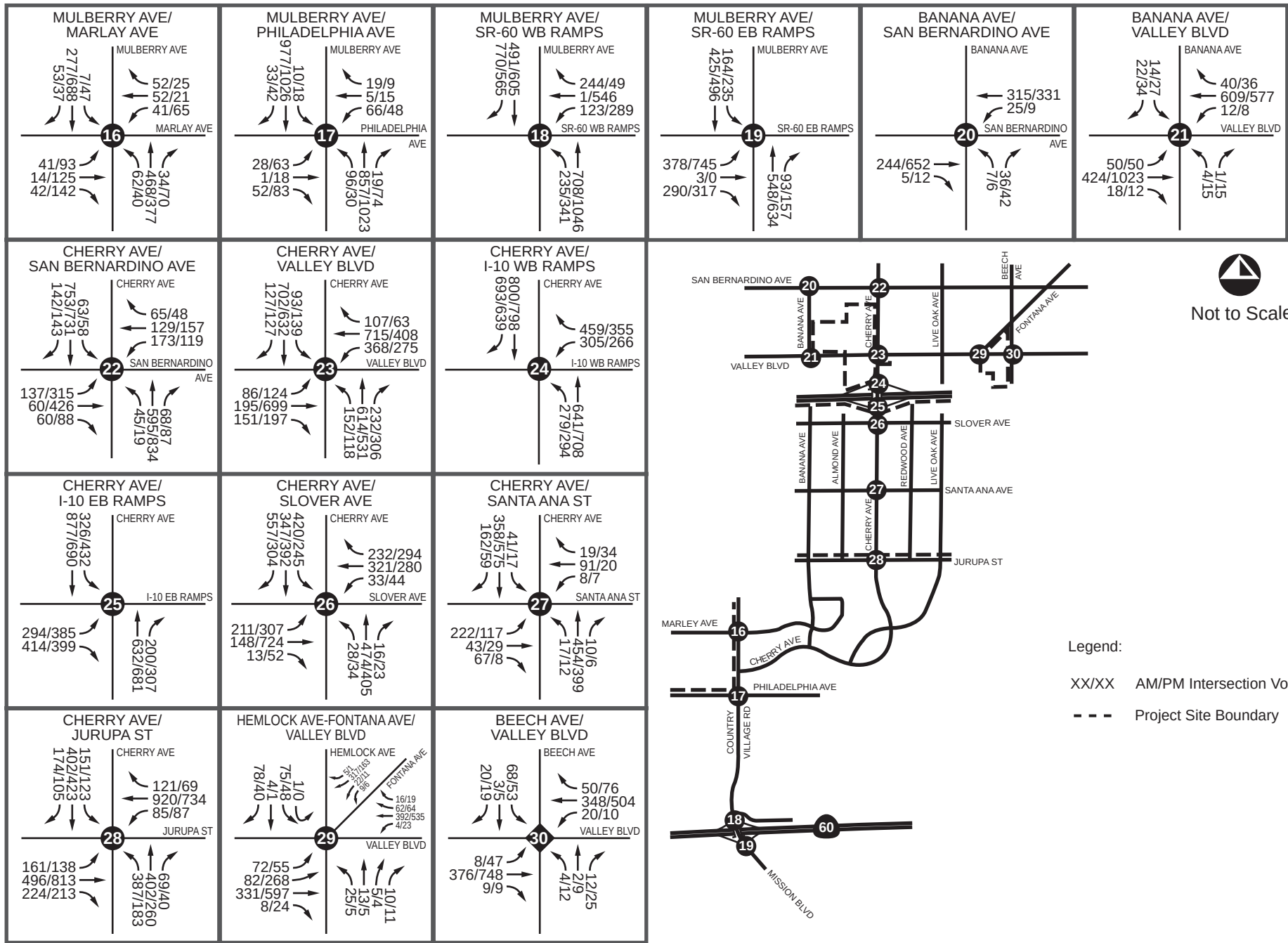


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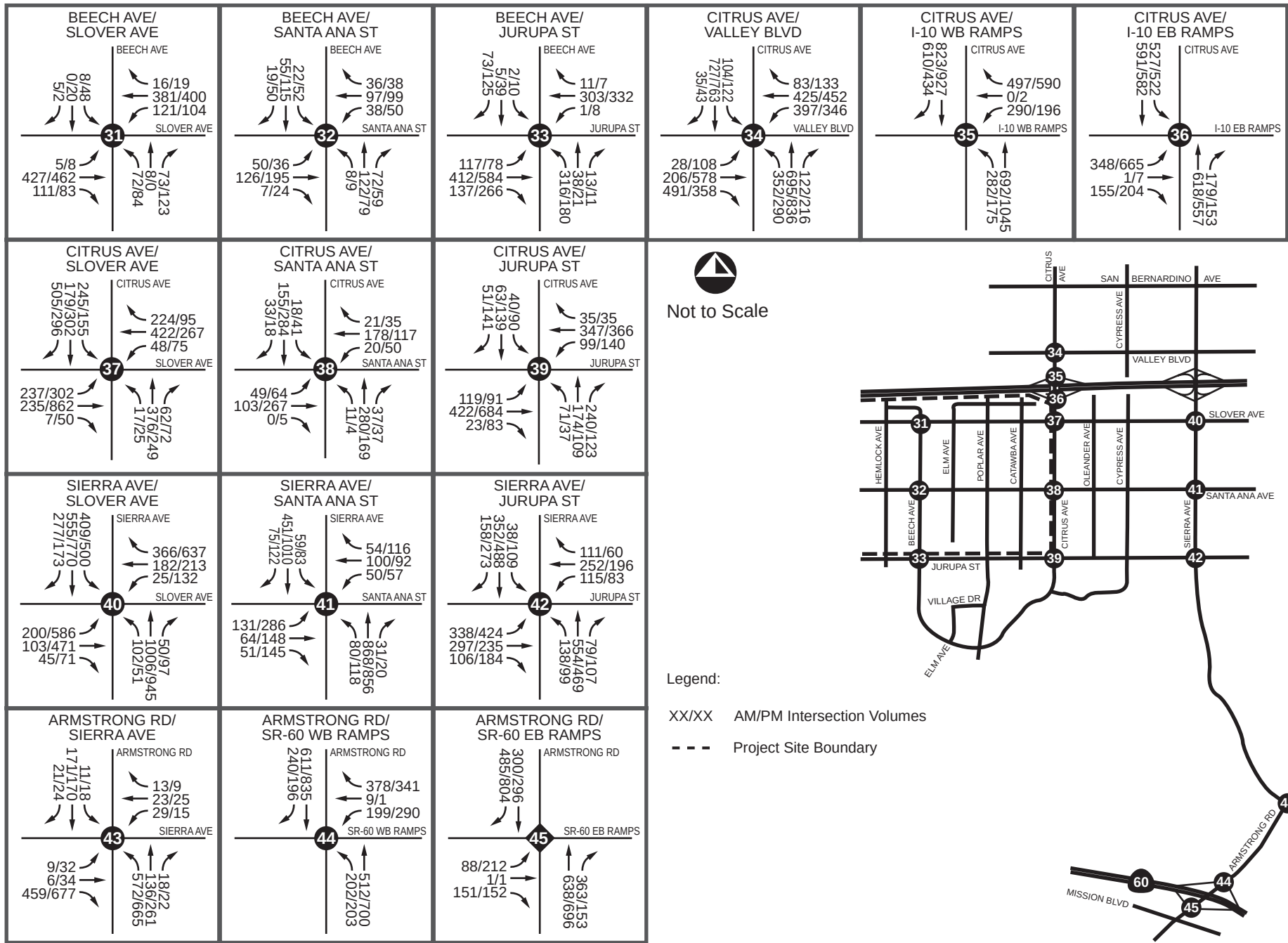
Existing Roadway Segment ADT

Exhibit 7

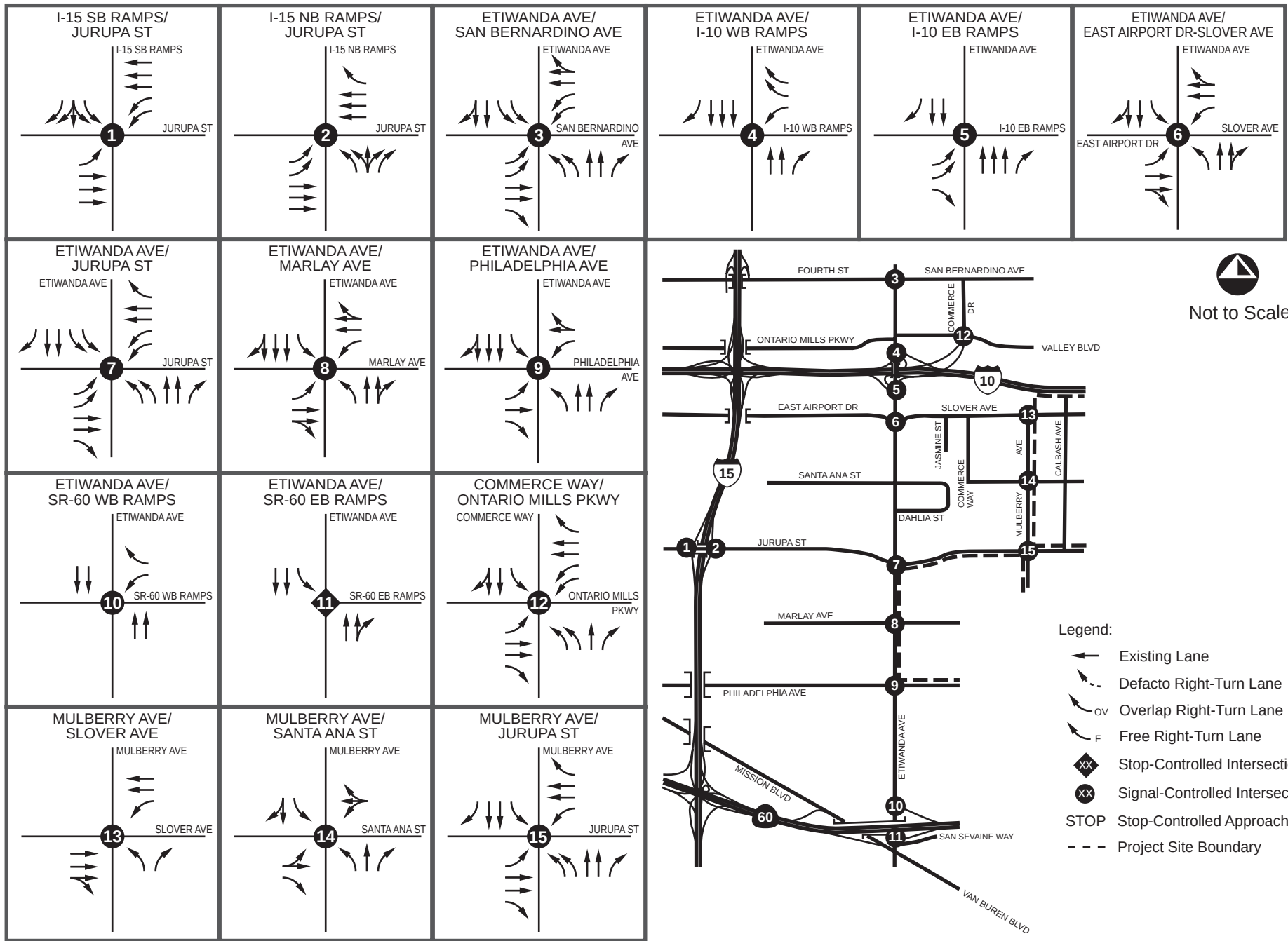


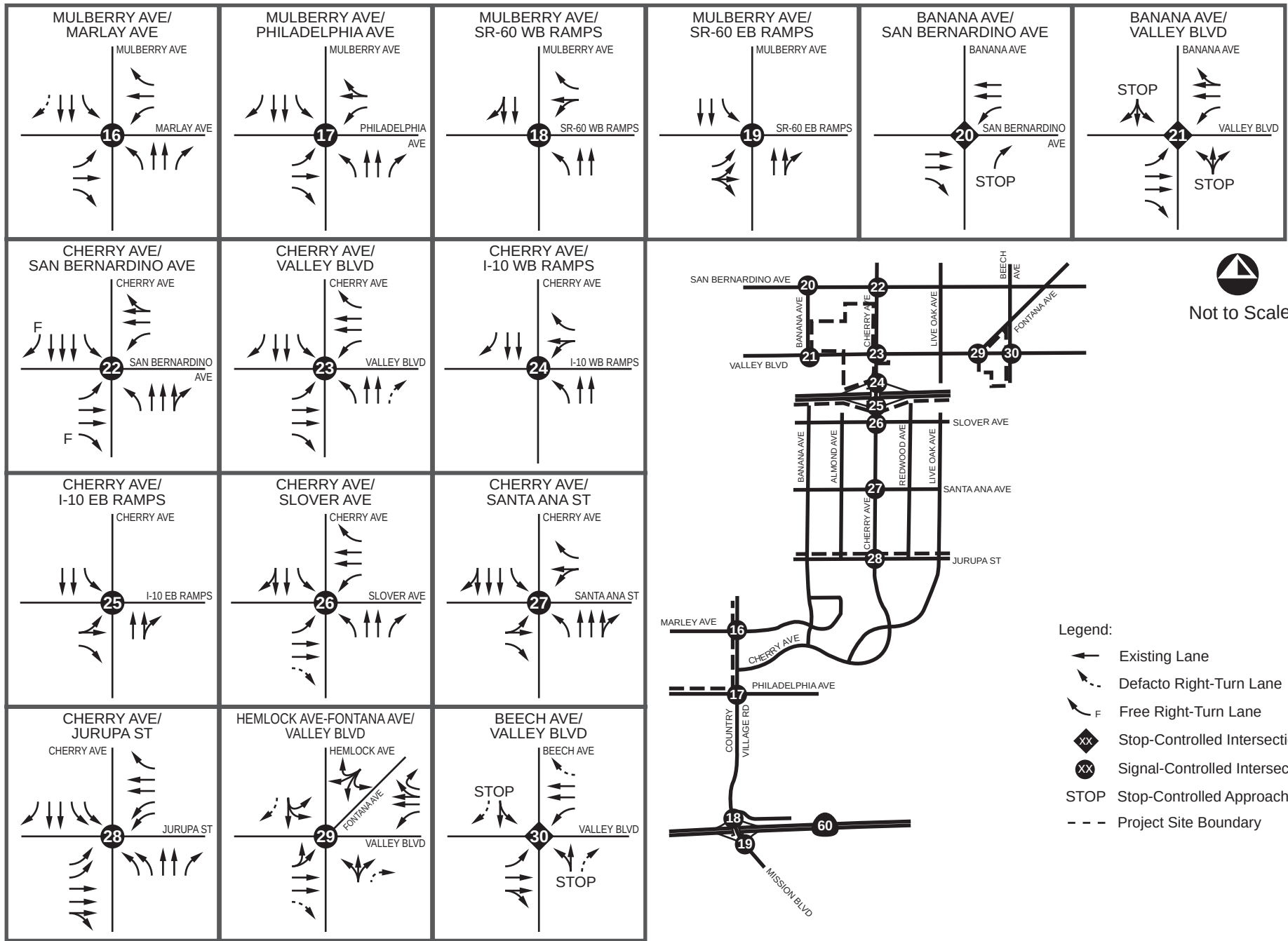






## Area 3 - Existing Conditions AM/PM Peak Hour Intersection Volumes

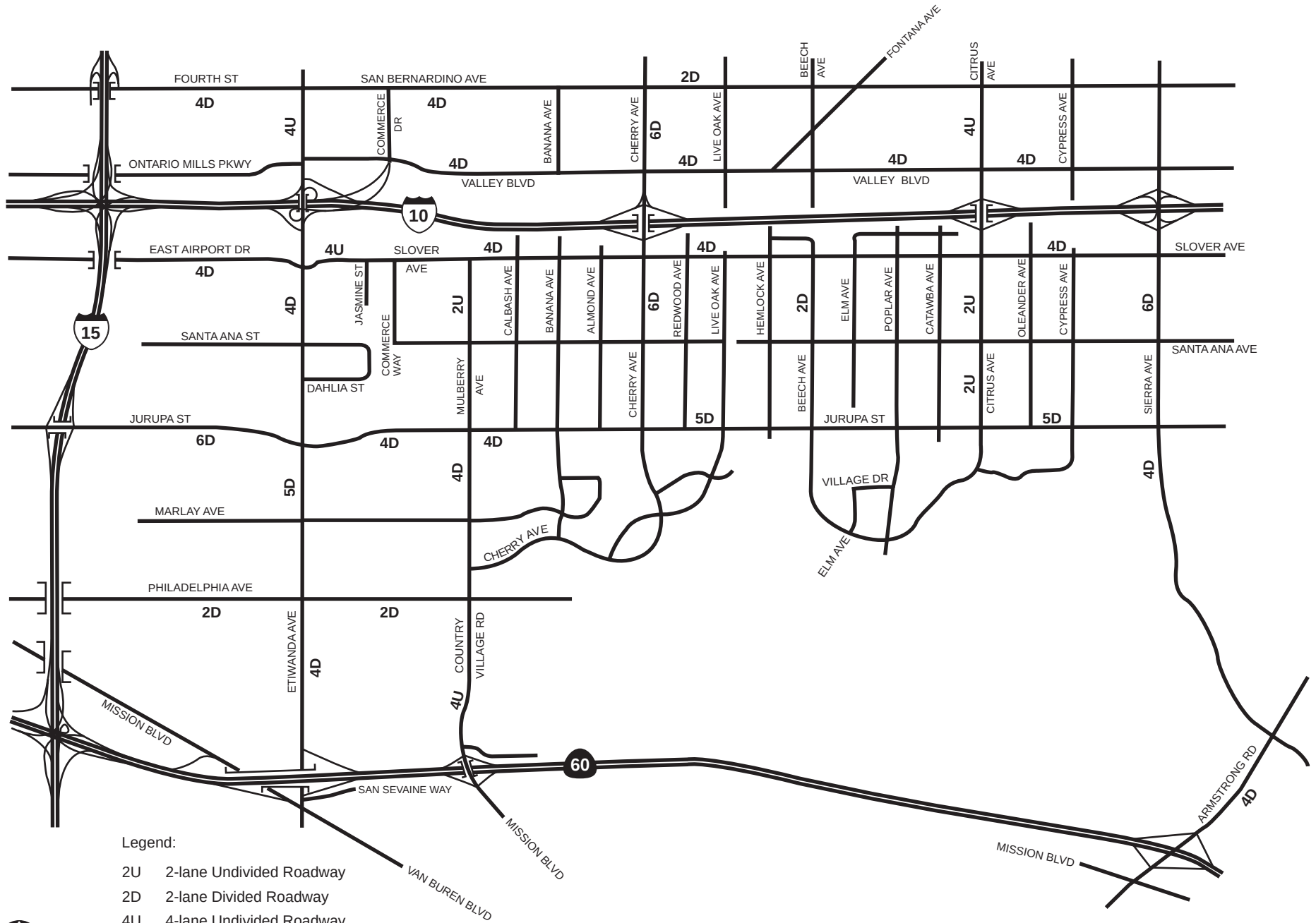




# Area 2 - Existing Conditions Study Intersection Geometry







**Table 5**  
**Existing Conditions Roadway Segment ADT & LOS**

| Study Roadway Segment                                           | LOS E Capacity | Existing ADT | Volume to Capacity Ratio | LOS |
|-----------------------------------------------------------------|----------------|--------------|--------------------------|-----|
| Fourth St btwn I-15 Fwy and Etiwanda Ave                        | 33,000         | 11,558       | 0.350                    | A   |
| East Airport Drive btwn I-15 Fwy and Etiwanda Ave               | 33,000         | 6,867        | 0.208                    | A   |
| Jurupa St btwn I-15 Fwy and Etiwanda Ave                        | 49,000         | 26,207       | 0.535                    | A   |
| Philadelphia Ave btwn I-15 Fwy Etiwanda Ave                     | 12,500         | 3,039        | 0.253                    | A   |
| Etiwanda Ave btwn San Bernardino Ave and I-10 WB Ramps          | 33,000         | 16,571       | 0.502                    | A   |
| Etiwanda Ave btwn I-10 EB Ramps and Jurupa St                   | 33,000         | 18,393       | 0.557                    | A   |
| Etiwanda Ave btwn Jurupa St and Philadelphia Ave                | 41,000         | 14,941       | 0.364                    | A   |
| Etiwanda Ave btwn Philadelphia Ave and SR-60 WB Ramps           | 36,000         | 18,873       | 0.524                    | A   |
| Slover Ave btwn Etiwanda Ave and Mulberry Ave                   | 36,000         | 9,941        | 0.276                    | A   |
| Jurupa St btwn Etiwanda Ave and Mulberry Ave                    | 36,000         | 11,803       | 0.328                    | A   |
| Philadelphia Ave btwn Etiwanda Ave and Mulberry-Country Village | 12,000         | 1,674        | 0.140                    | A   |
| San Bernardino Ave btwn Etiwanda Ave and Cherry Ave             | 36,000         | 10,591       | 0.294                    | A   |
| Valley Blvd btwn Commerce Drive and Cherry Ave                  | 36,000         | 13,917       | 0.387                    | A   |
| Mulberry Ave btwn Slover Ave and Jurupa Ave                     | 12,000         | 6,095        | 0.508                    | A   |
| Mulberry Ave btwn Jurupa St and Philadelphia Ave                | 36,000         | 11,661       | 0.324                    | A   |
| Country Village Rd btwn Philadelphia Ave and SR-60 WB Ramps     | 36,000         | 24,479       | 0.680                    | B   |
| Slover Ave btwn Mulberry Ave and Cherry Ave                     | 36,000         | 9,176        | 0.255                    | A   |
| Jurupa St btwn Mulberry Ave and Cherry Ave                      | 36,000         | 14,118       | 0.392                    | A   |
| Cherry Ave btwn San Bernardino Ave and I-10 WB Ramps            | 54,000         | 16,258       | 0.301                    | A   |
| Cherry Ave btwn I-10 EB Ramps and Jurupa St                     | 54,000         | 11,810       | 0.219                    | A   |
| San Bernardino Ave btwn Cherry Ave and Fontana Ave              | 12,000         | 7,591        | 0.633                    | B   |
| Valley Blvd btwn Cherry Ave and Beech Ave                       | 36,000         | 10,535       | 0.293                    | A   |
| Slover Ave btwn Cherry Ave and Citrus Ave                       | 36,000         | 11,207       | 0.311                    | A   |
| Jurupa St btwn Cherry Ave and Citrus Ave                        | 45,000         | 15,891       | 0.353                    | A   |
| Beech Ave btwn Slover Ave and Jurupa St                         | 12,000         | 4,276        | 0.356                    | A   |
| Valley Blvd btwn Beech Ave and Citrus Ave                       | 36,000         | 10,732       | 0.298                    | A   |
| Citrus Ave btwn San Bernardino Ave and I-10 WB Ramps            | 36,000         | 16,138       | 0.448                    | A   |
| Citrus Ave btwn I-10 EB Ramps and Santa Ana Ave                 | 12,000         | 7,916        | 0.660                    | B   |
| Citrus Ave btwn Santa Ana Ave and Jurupa St                     | 12,000         | 6,740        | 0.562                    | A   |
| Valley Blvd btwn Citrus Ave and Sierra Ave                      | 36,000         | 10,292       | 0.286                    | A   |
| Slover Ave btwn Citrus Ave and Sierra Ave                       | 36,000         | 11,243       | 0.312                    | A   |
| Jurupa St btwn Citrus Ave and Sierra Ave                        | 45,000         | 12,182       | 0.271                    | A   |
| Sierra Ave btwn Slover Ave and Jurupa St                        | 54,000         | 21,789       | 0.404                    | A   |
| Sierra Ave btwn Jurupa St and Armstrong Rd                      | 36,000         | 20,120       | 0.559                    | A   |
| Armstrong Rd btwn Sierra Ave and SR-60 WB Ramps                 | 36,000         | 19,299       | 0.536                    | A   |

**Note:** EB = eastbound; WB = westbound; btwn = between.

As shown in Table 5, the study roadway segments are operating at an acceptable LOS according to agency performance criteria.

### **Existing Conditions Study Intersection LOS**

Table 6 summarizes existing conditions a.m. peak hour and p.m. peak hour LOS of the study intersections; detailed LOS analysis sheets are contained in Appendix B.

**Table 6**  
**Existing Conditions AM & PM Peak Hour Intersection LOS**

| Study Intersection                                    | AM Peak Hour | PM Peak Hour    |
|-------------------------------------------------------|--------------|-----------------|
|                                                       | Delay – LOS  | Delay – LOS     |
| 1 – I-15 SB Ramps/Jurupa St                           | 21.9 – C     | 24.9 – C        |
| 2 – I-15 NB Ramps/Jurupa St                           | 20.3 – C     | 21.7 – C        |
| 3 – Etiwanda Ave/San Bernardino Ave                   | 23.9 – C     | 26.3 – C        |
| 4 – Etiwanda Ave/I-10 WB Ramps                        | 18.8 – B     | 10.3 – B        |
| 5 – Etiwanda Ave/I-10 EB Ramps                        | 20.9 – C     | 13.0 – B        |
| 6 – Etiwanda Ave/East Airport Dr-Slover Ave           | 30.7 – C     | <b>57.7 – E</b> |
| 7 – Etiwanda Ave/Jurupa St                            | 27.4 – C     | 31.1 – C        |
| 8 – Etiwanda Ave/Marlay Ave                           | 15.7 – B     | 14.6 – B        |
| 9 – Etiwanda Ave/Philadelphia Ave                     | 12.1 – B     | 12.9 – B        |
| 10 – Etiwanda Ave/SR-60 WB Off-Ramp                   | 15.0 – B     | 12.2 – B        |
| 11 – Etiwanda Ave/SR-60 EB On-Ramp                    | 12.2 – B     | 12.1 – B        |
| 12 – Commerce Dr-I-10 WB Ramps/Valley Blvd            | 23.7 – C     | 28.5 – C        |
| 13 – Mulberry Ave/Slover Ave                          | 20.8 – C     | 19.9 – B        |
| 14 – Mulberry Ave/Santa Ana Ave                       | 18.6 – B     | 17.5 – B        |
| 15 – Mulberry Ave/Jurupa St                           | 27.9 – C     | 37.5 – D        |
| 16 – Mulberry Ave/Marlay Ave                          | 17.9 – B     | 21.1 – C        |
| 17 – Mulberry Ave-Country Village Rd/Philadelphia Ave | 9.1 – A      | 8.0 – A         |
| 18 – Country Village Rd/SR-60 WB Ramps                | 20.7 – C     | 21.3 – C        |
| 19 – Country Village Rd/SR-60 EB Ramps                | 24.0 – C     | 29.5 – C        |
| 20 – Banana Ave/San Bernardino Ave                    | 9.7 – A      | 12.0 – B        |
| 21 – Banana Ave/Valley Blvd                           | 19.5 – B     | <b>40.3 – E</b> |
| 22 – Cherry Ave/San Bernardino Ave                    | 24.0 – C     | 26.6 – C        |
| 23 – Cherry Ave/Valley Blvd                           | 30.9 – C     | 34.2 – C        |
| 24 – Cherry Ave/I-10 WB Ramps                         | N/A          | N/A             |
| 25 – Cherry Ave/I-10 EB Ramps                         | N/A          | N/A             |
| 26 – Cherry Ave/Slover Ave                            | 30.5 – C     | 29.8 – C        |
| 27 – Cherry Ave/Santa Ana Ave                         | 20.0 – C     | 13.3 – B        |
| 28 – Cherry Ave/Jurupa St                             | 28.8 – C     | 25.5 – C        |
| 29 – Hemlock Ave-Fontana Ave/Valley Blvd              | 30.8 – C     | 29.7 – C        |
| 30 – Beech Ave/Valley Blvd                            | 15.9 – C     | 34.9 – D        |
| 31 – Beech Ave/Slover Ave                             | 11.5 – B     | 13.0 – B        |
| 32 – Beech Ave/Santa Ana Ave                          | 9.3 – A      | 10.0 – A        |
| 33 – Beech Ave/Jurupa St                              | 24.7 – C     | <b>35.1 – E</b> |



**Table 6 (Continued)**  
**Existing Conditions AM & PM Peak Hour Intersection LOS**

| Study Intersection               | AM Peak Hour     | PM Peak Hour         |
|----------------------------------|------------------|----------------------|
|                                  | Delay – LOS      | Delay – LOS          |
| 34 – Citrus Ave/Valley Blvd      | 44.5 – D         | 41.1 – D             |
| 35 – Citrus Ave/I-10 WB Ramps    | N/A              | N/A                  |
| 36 – Citrus Ave/I-10 EB Ramps    | N/A              | N/A                  |
| 37 – Citrus Ave/Slover Ave       | 35.8 – D         | 29.8 – C             |
| 38 – Citrus Ave/Santa Ana Ave    | 12.3 – B         | 16.1 – C             |
| 39 – Citrus Ave/Jurupa St        | 17.3 – C         | 26.4 – D             |
| 40 – Sierra Ave/Slover Ave       | 23.7 – C         | 29.5 – C             |
| 41 – Sierra Ave/Santa Ana Ave    | 20.8 – C         | 25.7 – C             |
| 42 – Sierra Ave/Jurupa St        | 31.1 – C         | 30.3 – C             |
| 43 – Armstrong Rd/Sierra Ave     | 17.3 – B         | 16.9 – B             |
| 44 – Armstrong Rd/SR-60 WB Ramps | 23.8 – C         | 22.6 – C             |
| 45 – Armstrong Rd/SR-60 EB Ramps | <b>118.0 – F</b> | <b>&gt;999.9 – F</b> |

**Note:** NB = Northbound; SB = Southbound; EB = Eastbound; WB = Westbound; delay shown in seconds per vehicle; deficient intersection operation shown in **bold**. N/A = Not applicable, since analysis of these intersections is addressed by recent Project Reports.

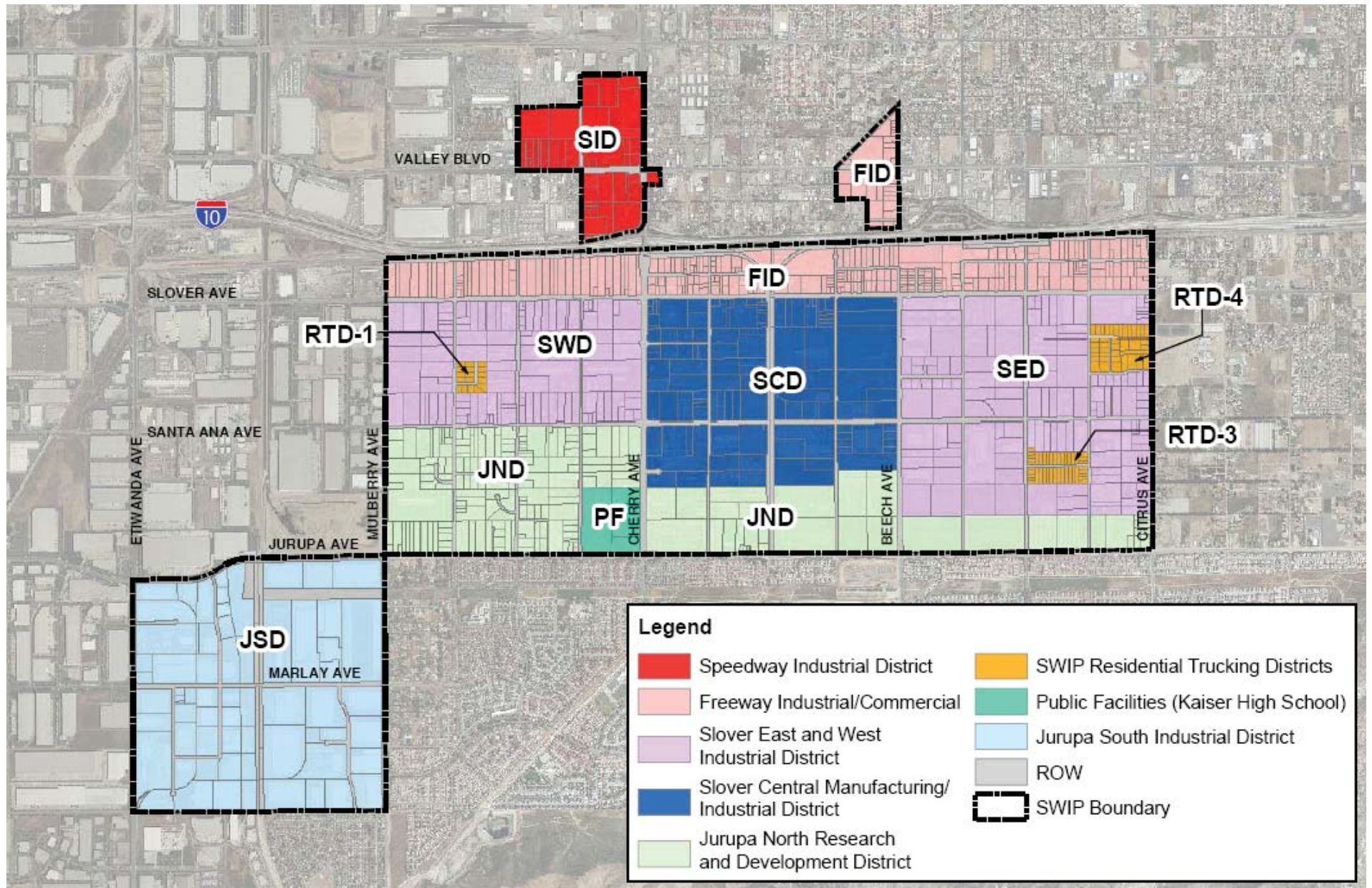
As shown in Table 6, the following four study intersections are currently operating at a deficient LOS (LOS E or worse) according to agency performance criteria:

- Etiwanda Avenue/East Airport Drive-Slover Avenue (p.m. peak hour only);
- Banana Avenue/Valley Boulevard (p.m. peak hour only);
- Beech Avenue/Jurupa Street (p.m. peak hour only); and
- Armstrong Road/SR-60 Eastbound Ramps (both a.m. and p.m. peak hours).

## PROPOSED PROJECT

The proposed Southwest Industrial Park (SWIP) Specific Plan project located in City of Fontana. The proposed Specific Plan identifies 10 Districts where land use planning is refined to help guide future development in a cohesive manner. For the purposes of the traffic analysis, trip generation is identified for 15 sub-zones, generally coinciding with the Districts. The proposed project site is generally defined as the area between the Interstate 10 (I-10) freeway and Jurupa Avenue and the area between Etiwanda Avenue and Sierra Avenue.

Exhibit 15 shows the locations of the 10 proposed project districts. Refer to Appendix C and the Specific Plan for details regarding proposed and displaced land uses for the project.



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## City of Fontana Specific Plan Districts

Exhibit 15

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## Trip Generation of Proposed Project

To calculate trips forecast to be generated by the proposed project, *Institute of Transportation Engineers (ITE)* trip generation rates were used.

Table 7 summarizes *ITE* trip generation rates used to calculate the number of trips forecast to be generated by the existing and proposed project land uses.

**Table 7**  
**ITE Trip Rates for Existing & Proposed Project Land Uses**

| Land Use (ITE Code)          | Units | AM Peak Hour Rates |      |       | PM Peak Hour Rates |      |       | Daily Trip Rate |
|------------------------------|-------|--------------------|------|-------|--------------------|------|-------|-----------------|
|                              |       | In                 | Out  | Total | In                 | Out  | Total |                 |
| Light Industrial (110)       | tsf   | 0.81               | 0.11 | 0.92  | 0.12               | 0.85 | 0.97  | 6.97            |
| Warehousing (150)            | tsf   | 0.24               | 0.06 | 0.30  | 0.08               | 0.24 | 0.32  | 3.56            |
| Single-Family Detached (210) | du    | 0.19               | 0.56 | 0.75  | 0.64               | 0.37 | 1.01  | 9.57            |
| Church (560)                 | tsf   | 0.35               | 0.21 | 0.56  | 0.26               | 0.29 | 0.55  | 9.11            |
| General Office (710)         | tsf   | 1.36               | 0.19 | 1.55  | 0.25               | 1.24 | 1.49  | 11.01           |
| Office Park (750)            | tsf   | 1.52               | 0.19 | 1.71  | 0.21               | 1.27 | 1.48  | 11.42           |
| Research & Development (760) | tsf   | 1.01               | 0.21 | 1.22  | 0.16               | 0.91 | 1.07  | 8.11            |
| Shopping Center (820)        | tsf   | 0.61               | 0.39 | 1.00  | 1.83               | 1.90 | 3.73  | 42.94           |

**Sources:** 2008 ITE Trip Generation Manual, 8<sup>th</sup> Edition.

**Note:** tsf = thousand square feet; du = dwelling unit.

Table 8 summarizes trips forecast to be generated by the proposed project when accounting for displaced land uses using the *ITE* trips rates contained in Table 7; detailed trip generation by zone is contained in Appendix C.

**Table 8**  
**Forecast Net Trip Generation of Proposed Project by Zone**

| Land Use Zone                                 | AM Peak Hour Trips |              |               | PM Peak Hour Trips |               |               | Daily Trips    |
|-----------------------------------------------|--------------------|--------------|---------------|--------------------|---------------|---------------|----------------|
|                                               | In                 | Out          | Total         | In                 | Out           | Total         |                |
| Freeway Industrial Commercial (Central)       | 836                | 244          | 1,080         | 638                | 1,061         | 1,699         | 24,134         |
| Freeway Industrial Commercial (East)          | 972                | 284          | 1,256         | 743                | 1,236         | 1,979         | 28,109         |
| Freeway Industrial Commercial (North)         | 369                | 107          | 476           | 282                | 469           | 750           | 10,650         |
| Freeway Industrial Commercial (West)          | 821                | 239          | 1,060         | 626                | 1,043         | 1,669         | 23,710         |
| Jurupa North Research & Development (West)    | 3,699              | 515          | 4,214         | 537                | 3,409         | 3,946         | 29,278         |
| Jurupa North Research & Development (Central) | 2,651              | 369          | 3,020         | 386                | 2,444         | 2,830         | 20,988         |
| Jurupa North Research & Development (East)    | 2,524              | 353          | 2,877         | 366                | 2,327         | 2,693         | 19,973         |
| Jurupa South Industrial                       | 483                | 114          | 597           | 151                | 486           | 637           | 6,837          |
| Slover Central Manufacturing/Industrial       | 1,139              | 296          | 1,435         | 453                | 1,020         | 1,473         | 12,106         |
| Slover East Industrial                        | 1,574              | 197          | 1,771         | 228                | 1,465         | 1,693         | 13,639         |
| Slover West Industrial                        | 1,934              | 322          | 2,256         | 400                | 1,980         | 2,380         | 21,344         |
| Speedway Industrial                           | 861                | 126          | 987           | 145                | 901           | 1,046         | 8,358          |
| SWIP Residential Trucking (1, 3, and 4)       | 15                 | 47           | 62            | 54                 | 31            | 85            | 803            |
| <b>Forecast Total Net Trip Generation</b>     | <b>17,878</b>      | <b>3,213</b> | <b>21,091</b> | <b>5,009</b>       | <b>17,872</b> | <b>22,880</b> | <b>219,929</b> |

**Note:** SWIP = Southwest Industrial Plan.

As shown in Table 8, when accounting for displaced land uses, the proposed project is forecast to generate approximately 219,929 net new daily trips, which include approximately 21,091 a.m. net new peak hour trips and approximately 22,880 p.m. net new peak hour trips.

This trip generation is conservative since it does not utilize the High-Cube Warehouse trip rate which has been developed in recent years to account for warehousing/distribution facilities that have high lot coverage, minimal staffing, and associated low trip generation. As the proposed project develops the inclusion of distribution centers matching the High-Cube Warehouse trip rate will produce lower trip generation than included in this report.

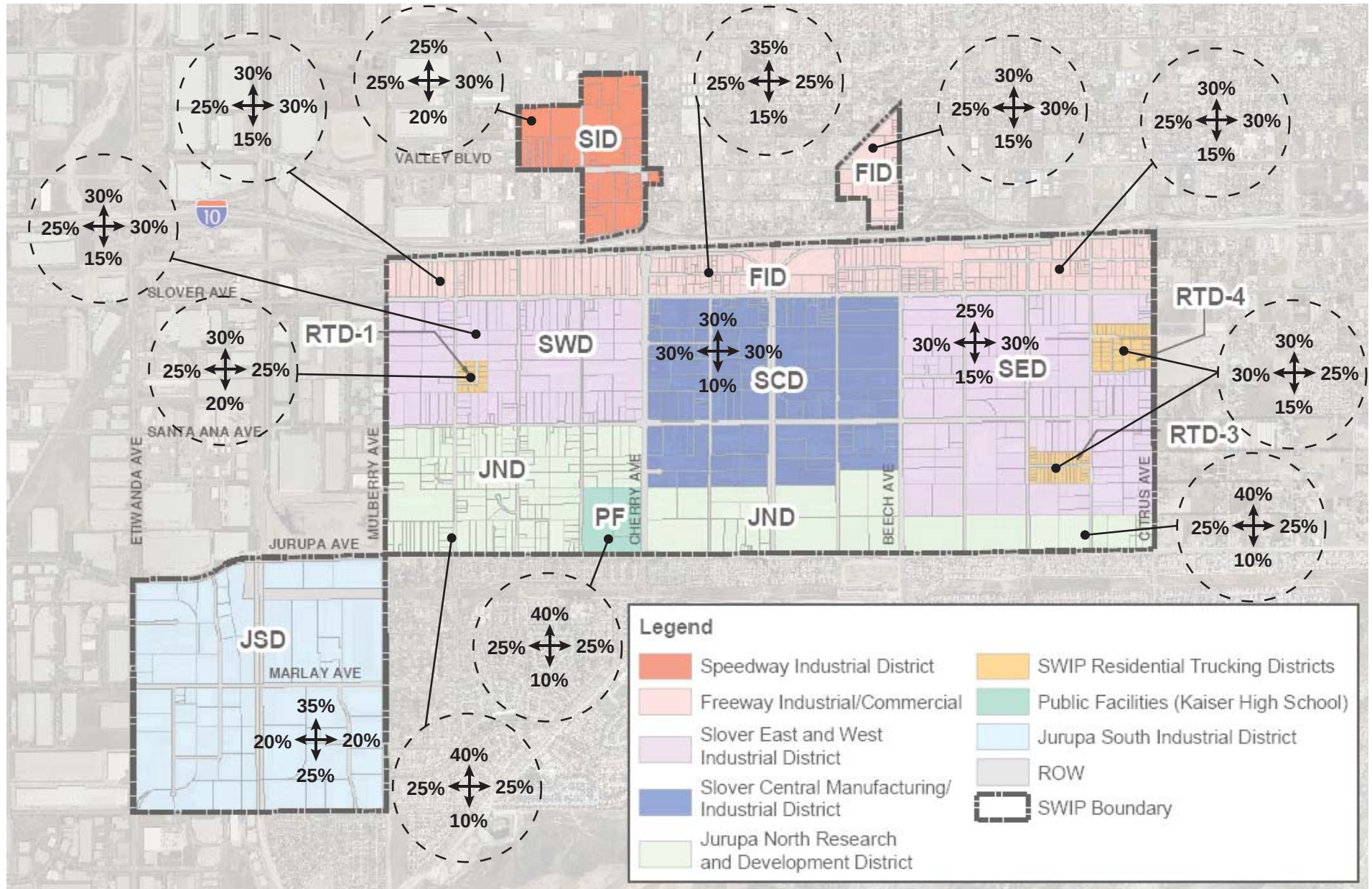
### **Trip Distribution of Proposed Project**

Forecast distribution of trips forecast to be generated by the proposed project is based on field reconnaissance, understanding of the circulation system, and City-provided information. Exhibit 16 shows the forecast trip percent distribution of the proposed project for each district.

### **Trip Assignment of Proposed Project**

Exhibit 17 shows the corresponding forecast assignment of project-generated roadway segment ADT assuming the trip percent distribution shown in Exhibit 16. Exhibits 18 through 20 show the corresponding forecast a.m. peak hour and p.m. peak hour assignment of project-generated trips at the study intersections.





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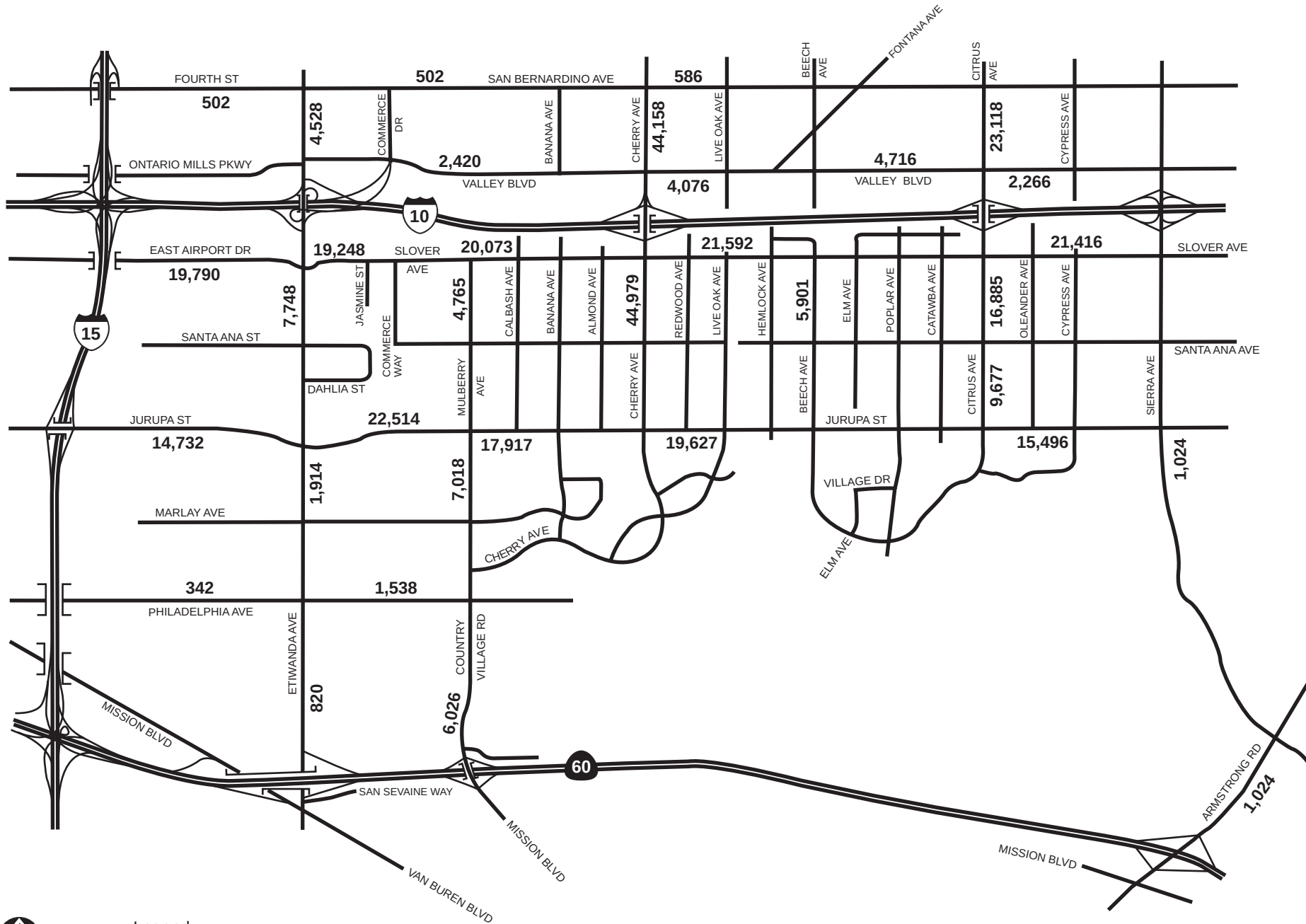


Legend:

XX% Trip Percent Distribution

## Forecast Trip Percent Distribution of Specific Plan Districts

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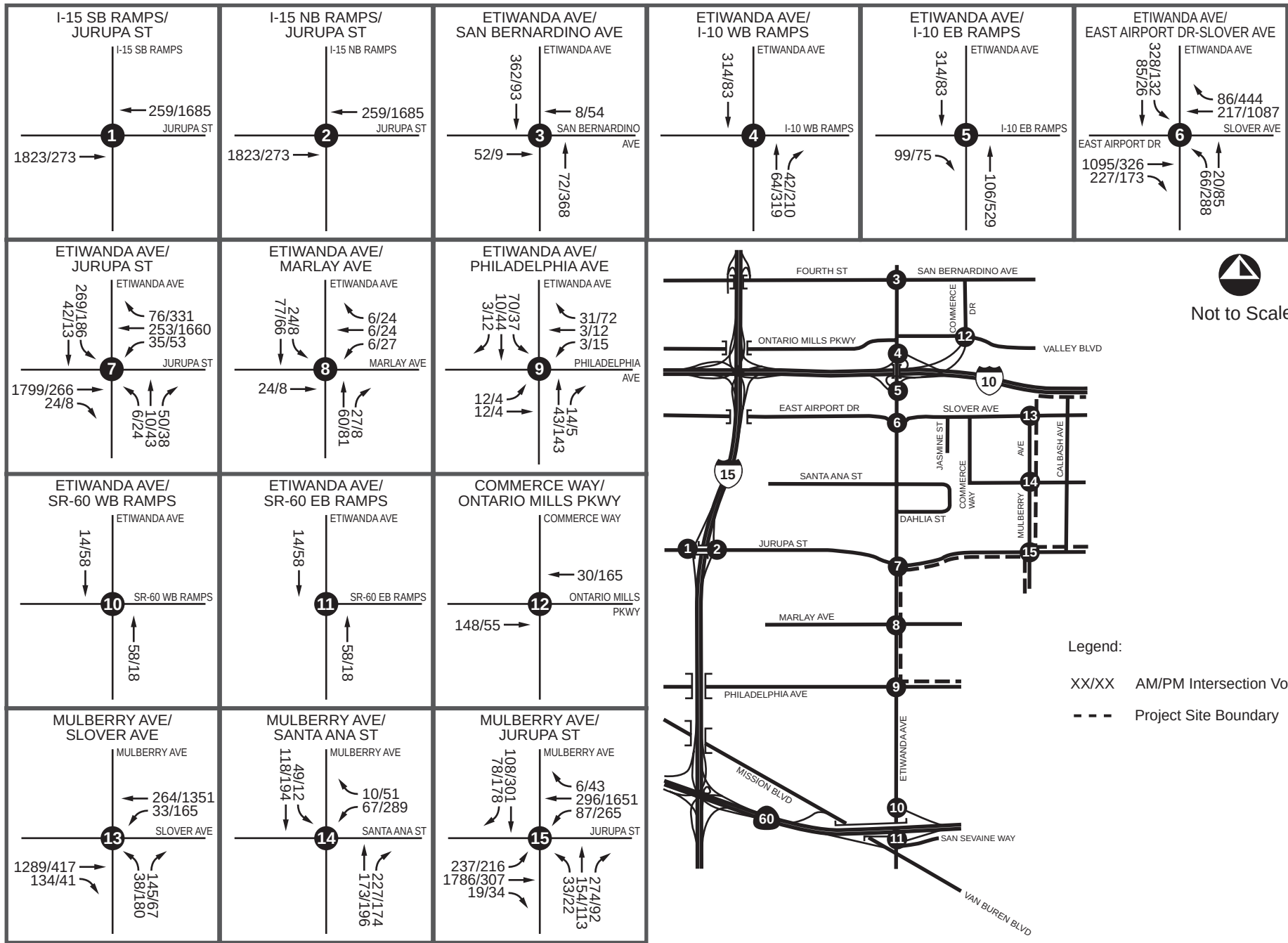


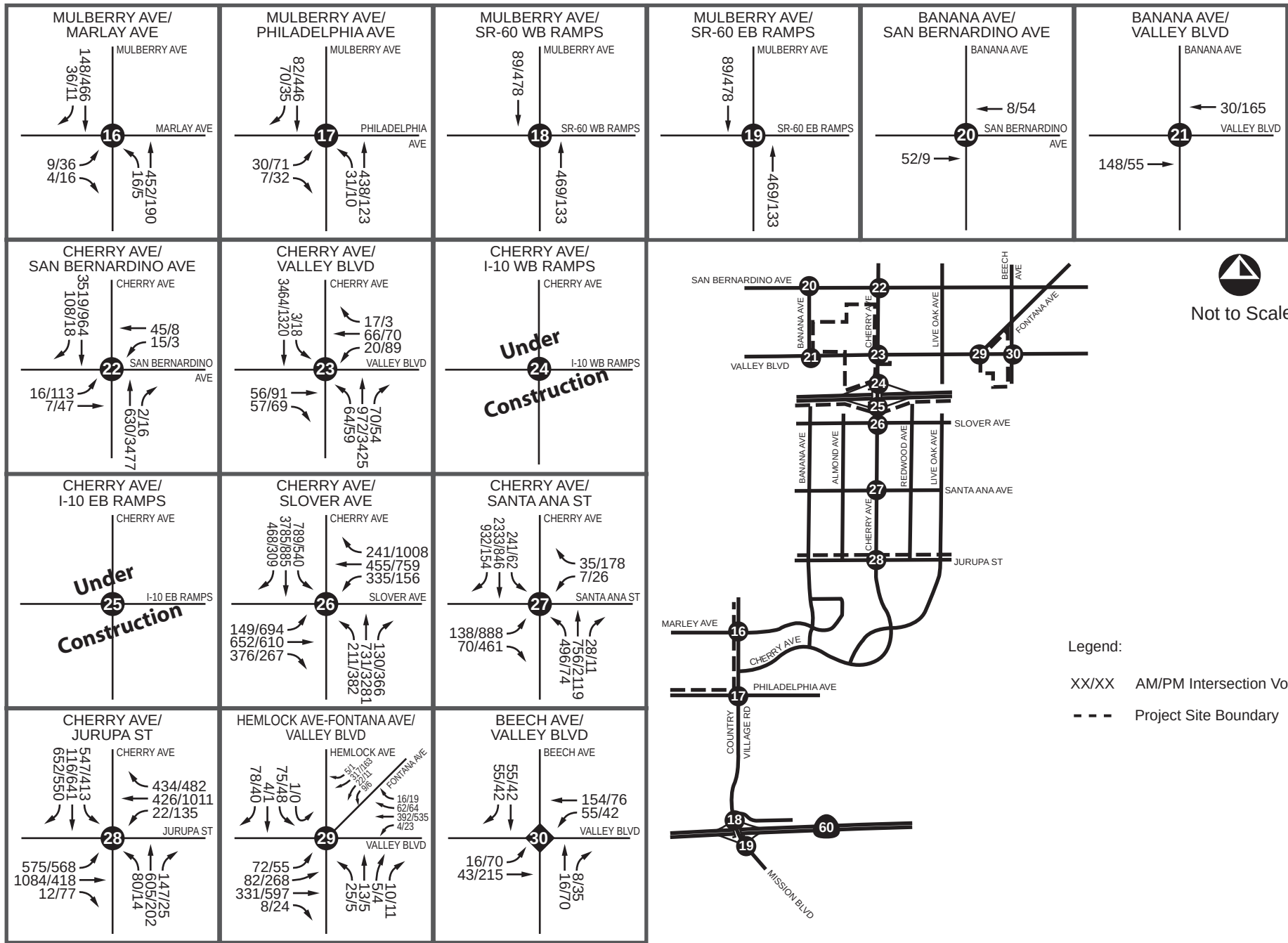
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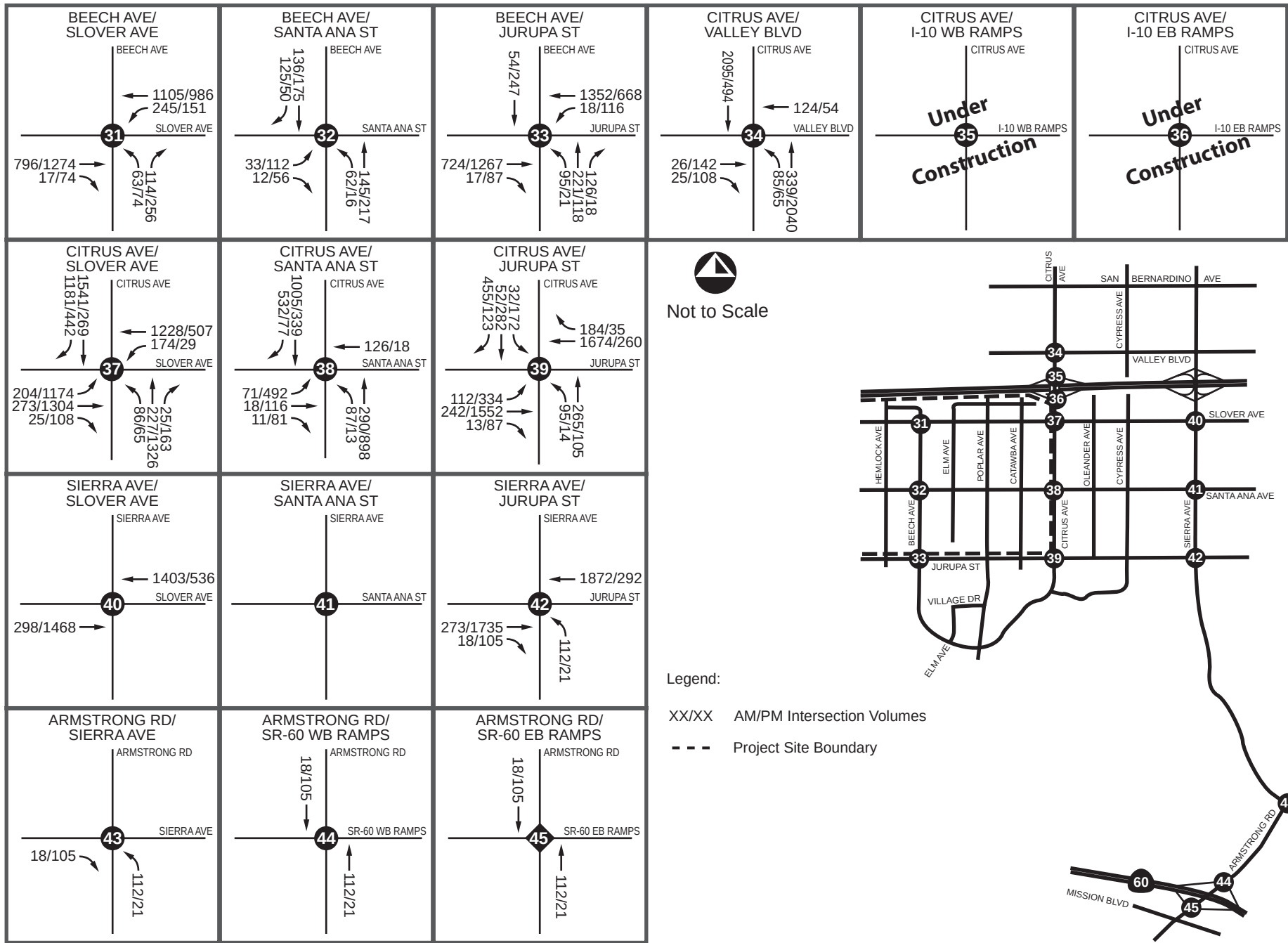
XX,XXX Roadway Segment ADT

## Forecast Roadway Segment ADT Assignment of Proposed Project









## **FORECAST EXISTING WITH PROJECT CONDITIONS**

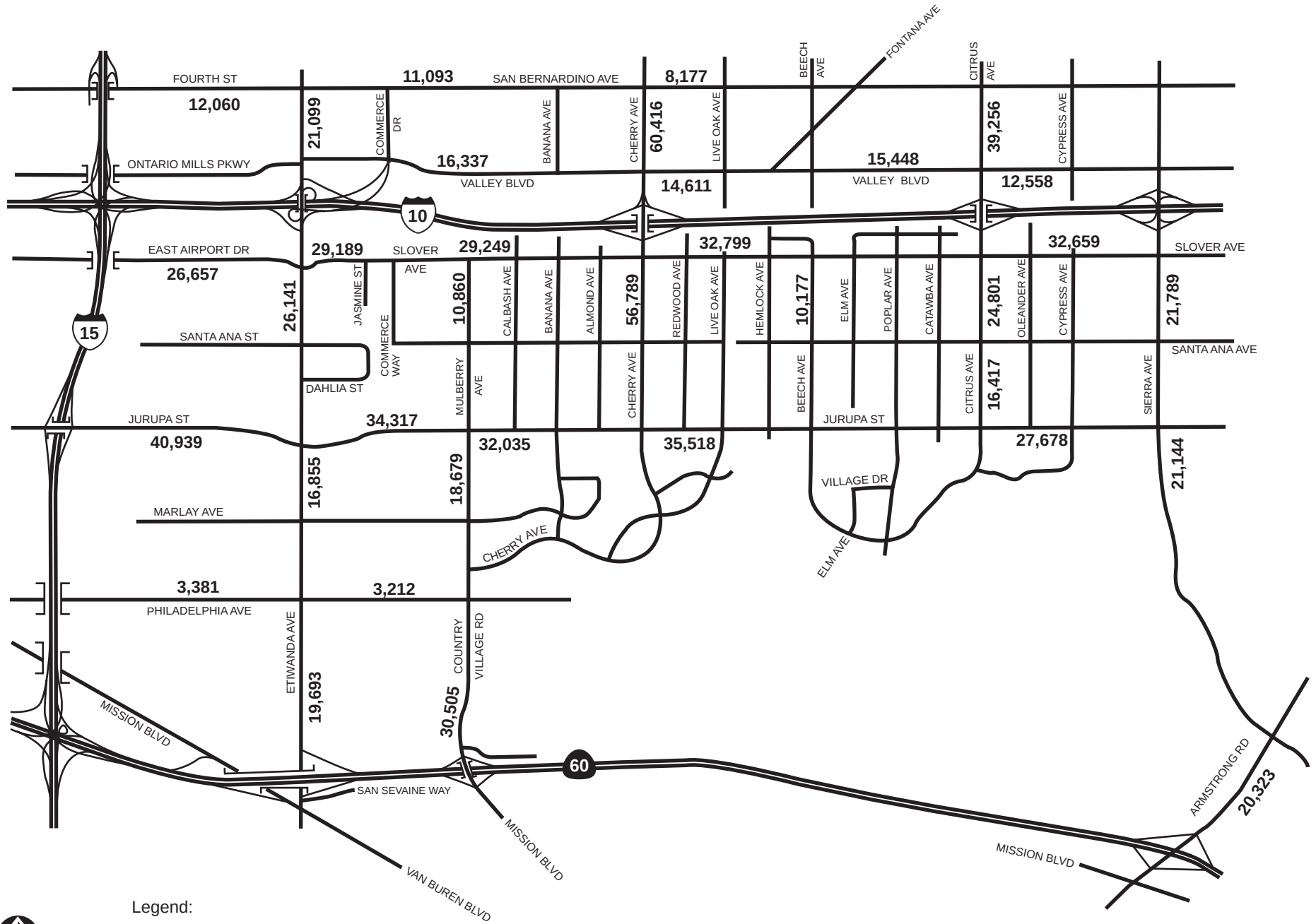
### **Forecast Existing With Project Conditions Traffic Volumes**

Forecast existing with project conditions traffic volumes are derived by adding trips forecast to be generated by the proposed project to existing conditions traffic volumes.

Exhibit 21 shows forecast existing with project conditions roadway segment ADT volumes. Exhibits 22 through 24 show forecast existing with project conditions PCE-adjusted a.m. peak hour and p.m. peak hour volumes at the study intersections.

### **Forecast Existing With Project Conditions Roadway Segment LOS**

Table 9 summarizes forecast existing with project conditions roadway segment ADT volumes and corresponding LOS.



Legend:

XX,XXX Roadway Segment ADT



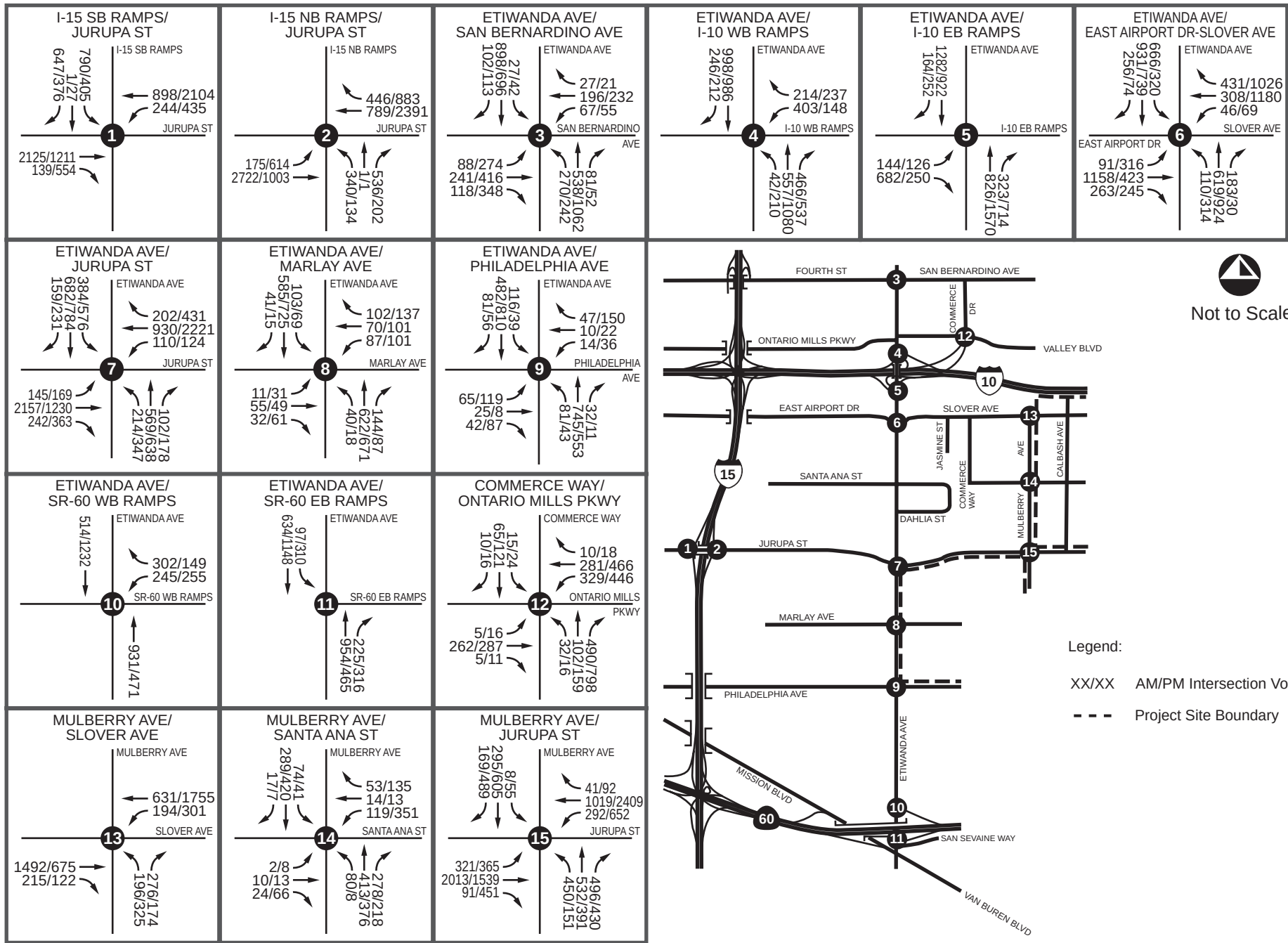
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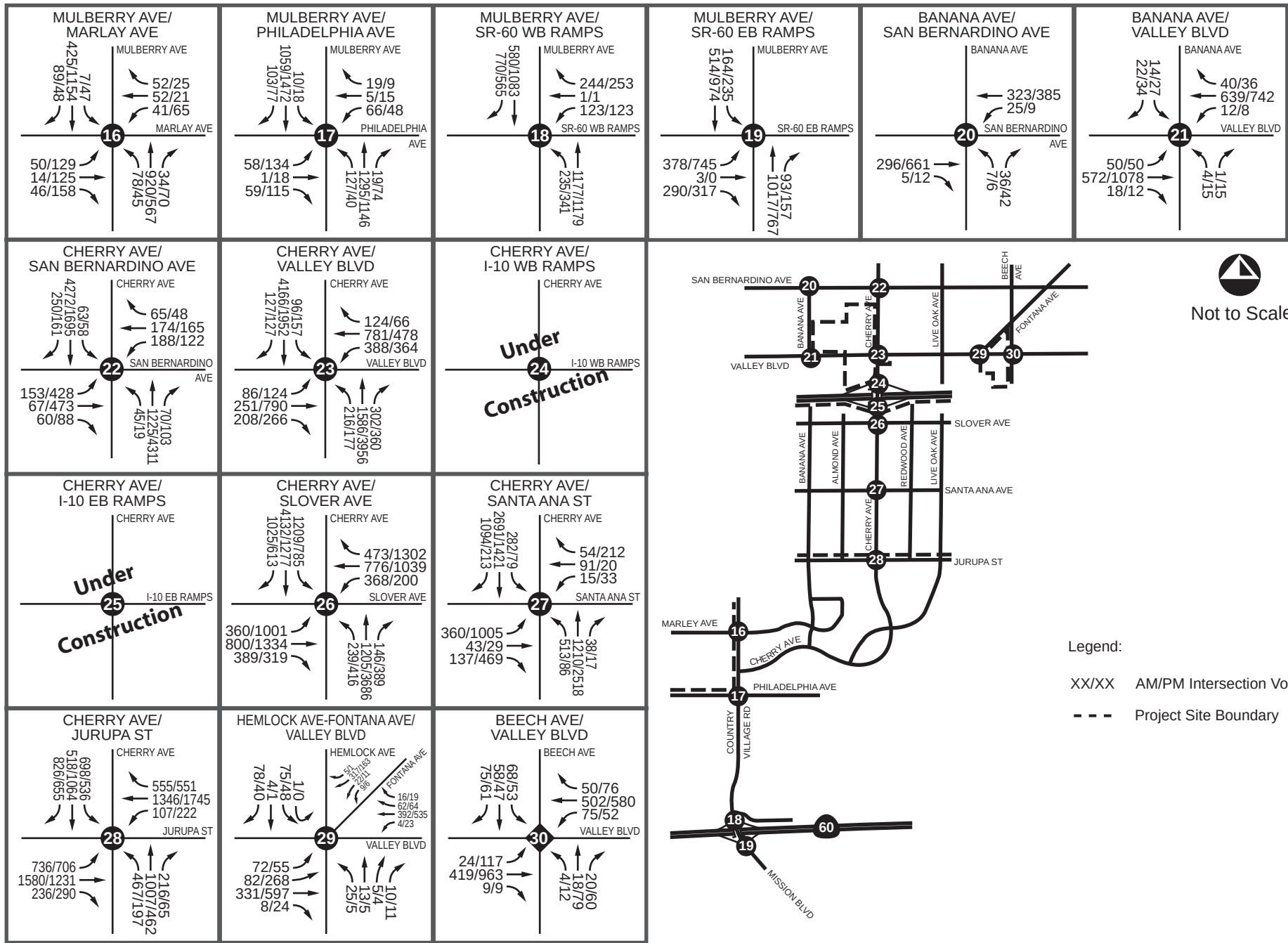
## Forecast Existing Year With Proposed Project Roadway Segment ADT

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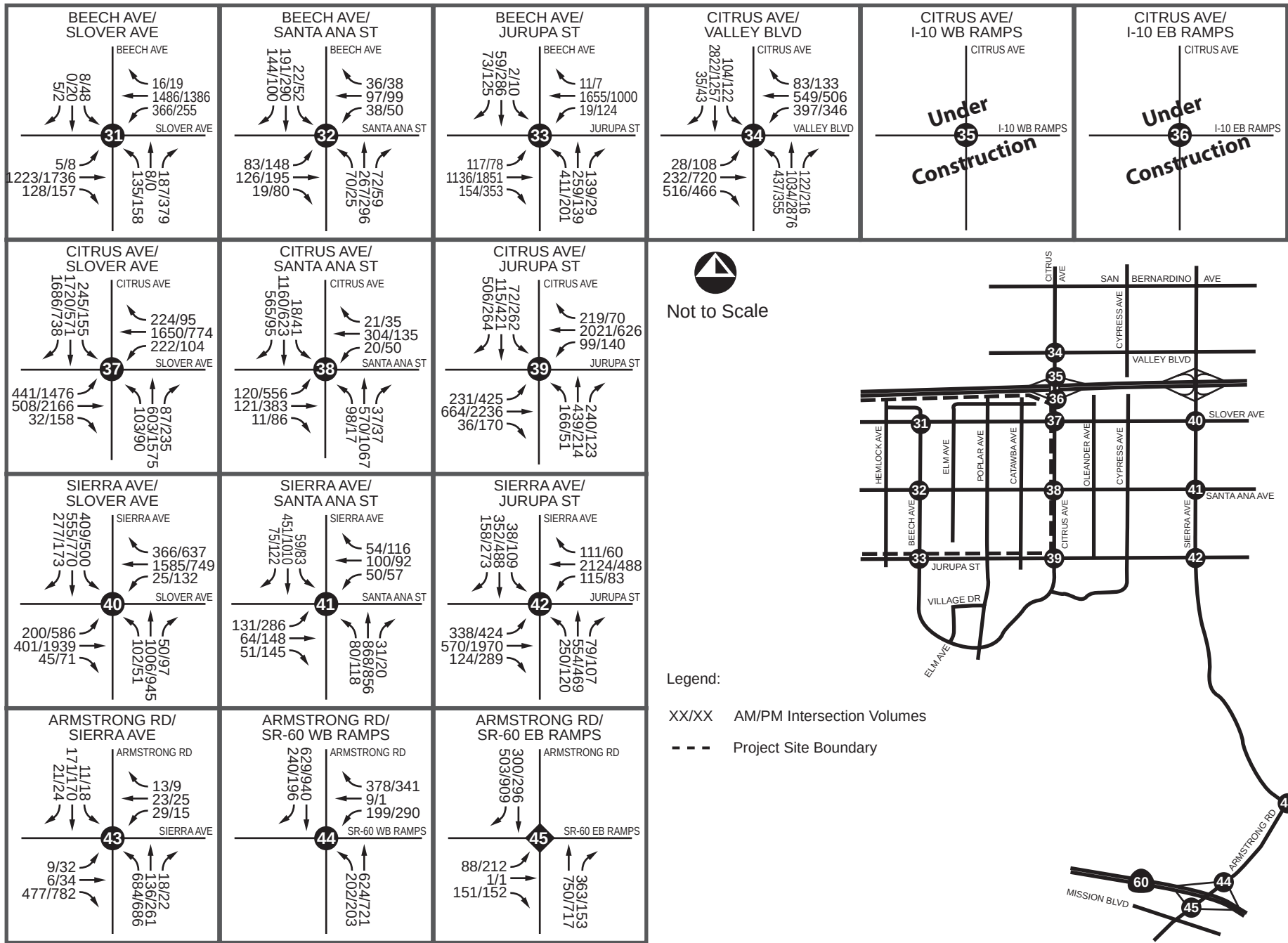
Exhibit 21



## Area 1 - Forecast Existing With Project Conditions PCE-Adjusted AM/PM Peak Hour Intersection Volumes



## Area 2 - Forecast Existing With Project Conditions PCE-Adjusted AM/PM Peak Hour Intersection Volumes



## Area 3 - Forecast Existing With Project Conditions PCE-Adjusted AM/PM Peak Hour Intersection Volumes



**Table 9**  
**Forecast Existing With Project Conditions Roadway Segment ADT & LOS**

| Study Roadway Segment                                           | LOS E Capacity | Forecast Ex+P ADT Volumes | Volume to Capacity Ratio | LOS      |
|-----------------------------------------------------------------|----------------|---------------------------|--------------------------|----------|
| Fourth St Ave btwn I-15 Fwy and Etiwanda Ave                    | 33,000         | 12,060                    | 0.365                    | A        |
| East Airport Drive btwn I-15 Fwy and Etiwanda Ave               | 33,000         | 25,157                    | 0.762                    | C        |
| Jurupa St btwn I-15 Fwy and Etiwanda Ave                        | 49,000         | 42,439                    | 0.866                    | D        |
| Philadelphia Ave btwn I-15 Fwy Etiwanda Ave                     | 12,500         | 3,381                     | 0.270                    | A        |
| Etiwanda Ave btwn San Bernardino Ave and I-10 WB Ramps          | 33,000         | 21,099                    | 0.639                    | B        |
| Etiwanda Ave btwn I-10 EB Ramps and Jurupa St                   | 33,000         | 27,141                    | 0.822                    | D        |
| Etiwanda Ave btwn Jurupa St and Philadelphia Ave                | 41,000         | 16,855                    | 0.411                    | A        |
| Etiwanda Ave btwn Philadelphia Ave and SR-60 WB Ramps           | 36,000         | 19,693                    | 0.547                    | A        |
| Slover Ave btwn Etiwanda Ave and Mulberry Ave                   | 36,000         | 27,689                    | 0.769                    | C        |
| Jurupa St btwn Etiwanda Ave and Mulberry Ave                    | 36,000         | 36,817                    | <b>1.023</b>             | <b>F</b> |
| Philadelphia Ave btwn Etiwanda Ave and Mulberry-Country Village | 12,000         | 3,212                     | 0.268                    | A        |
| San Bernardino Ave btwn Etiwanda Ave and Cherry Ave             | 36,000         | 11,093                    | 0.308                    | A        |
| Valley Blvd btwn Commerce Drive and Cherry Ave                  | 36,000         | 16,337                    | 0.454                    | A        |
| Mulberry Ave btwn Slover Ave and Jurupa Ave                     | 12,000         | 11,860                    | <b>0.988</b>             | <b>E</b> |
| Mulberry Ave btwn Jurupa St and Philadelphia Ave                | 36,000         | 18,679                    | 0.519                    | A        |
| Country Village Rd btwn Philadelphia Ave and SR-60 WB Ramps     | 36,000         | 30,505                    | 0.847                    | D        |
| Slover Ave btwn Mulberry Ave and Cherry Ave                     | 36,000         | 23,749                    | 0.660                    | B        |
| Jurupa St btwn Mulberry Ave and Cherry Ave                      | 36,000         | 36,535                    | <b>1.015</b>             | <b>E</b> |
| Cherry Ave btwn San Bernardino Ave and I-10 WB Ramps            | 54,000         | 60,416                    | <b>1.119</b>             | <b>F</b> |
| Cherry Ave btwn I-10 EB Ramps and Jurupa St                     | 54,000         | 55,289                    | <b>1.024</b>             | <b>F</b> |
| San Bernardino Ave btwn Cherry Ave and Fontana Ave              | 12,000         | 8,177                     | 0.681                    | B        |
| Valley Blvd btwn Cherry Ave and Beech Ave                       | 36,000         | 15,111                    | 0.420                    | A        |
| Slover Ave btwn Cherry Ave and Citrus Ave                       | 36,000         | 27,299                    | 0.758                    | C        |
| Jurupa St btwn Cherry Ave and Citrus Ave                        | 45,000         | 41,518                    | <b>0.923</b>             | <b>E</b> |
| Beech Ave btwn Slover Ave and Jurupa St                         | 12,000         | 9,177                     | 0.765                    | C        |
| Valley Blvd btwn Beech Ave and Citrus Ave                       | 36,000         | 15,948                    | 0.443                    | A        |
| Citrus Ave btwn San Bernardino Ave and I-10 WB Ramps            | 36,000         | 39,256                    | <b>1.090</b>             | <b>F</b> |
| Citrus Ave btwn I-10 EB Ramps and Santa Ana Ave                 | 12,000         | 24,301                    | <b>2.025</b>             | <b>F</b> |
| Citrus Ave btwn Santa Ana Ave and Jurupa St                     | 12,000         | 16,917                    | <b>1.410</b>             | <b>F</b> |
| Valley Blvd btwn Citrus Ave and Sierra Ave                      | 36,000         | 12,558                    | 0.349                    | A        |
| Slover Ave btwn Citrus Ave and Sierra Ave                       | 36,000         | 29,659                    | 0.824                    | D        |
| Jurupa St btwn Citrus Ave and Sierra Ave                        | 45,000         | 31,178                    | 0.693                    | B        |
| Sierra Ave btwn Slover Ave and Jurupa St                        | 54,000         | 20,789                    | 0.385                    | A        |
| Sierra Ave btwn Jurupa St and Armstrong Rd                      | 36,000         | 21,144                    | 0.587                    | A        |
| Armstrong Rd btwn Sierra Ave and SR-60 WB Ramps                 | 36,000         | 20,323                    | 0.565                    | A        |

**Note:** EB = eastbound; WB = westbound; btwn = between; Ex+P = Existing Plus Project.

As shown in Table 9, with the addition of project-generated trips, the following nine roadway segments are forecast to operate at a deficient LOS according to agency performance criteria for forecast existing with project conditions:

- Jurupa Street between Etiwanda Avenue and Mulberry Avenue;
- Mulberry Avenue between Slover Avenue and Jurupa Street;
- Jurupa Street between Mulberry Avenue and Cherry Avenue;
- Cherry Avenue between San Bernardino Avenue and I-10 Westbound Ramps;
- Cherry Avenue between I-10 Eastbound Ramps and Jurupa Street;
- Jurupa Street between Cherry Avenue and Citrus Avenue;
- Citrus Avenue between San Bernardino Avenue and I-10 Westbound Ramps;
- Citrus Avenue between I-10 Eastbound Ramps and Santa Ana Avenue; and
- Citrus Avenue between Santa Ana Avenue and Jurupa Street.

It is worth noting, high forecast traffic volumes on Cherry Avenue and Citrus Avenue in the vicinity of Interstate 10 are related to the lack of parallel north-south roadways such as Mulberry Avenue and Beech Avenue, which are identified as future crossings of I-10 in the City of Fontana Circulation Master Plan. Since the collection of baseline traffic data for this analysis, the Cypress Avenue overcrossing has been constructed provides vehicular connectivity between Slover Avenue and Valley Boulevard over I-10.

#### **Forecast Existing With Project Conditions Study Intersection LOS**

Table 10 summarizes forecast existing with project conditions a.m. peak hour and p.m. peak hour LOS of the study intersections, detailed LOS analysis sheets are contained in Appendix B.

**Table 10**  
**Forecast Existing With Project Conditions AM & PM Peak Hour Intersection LOS**

| Study Intersection                                    | Forecast Existing Without Project Conditions |                 | Forecast Existing With Project Conditions |                      |
|-------------------------------------------------------|----------------------------------------------|-----------------|-------------------------------------------|----------------------|
|                                                       | AM Peak Hour                                 | PM Peak Hour    | AM Peak Hour                              | PM Peak Hour         |
|                                                       | Delay – LOS                                  | Delay – LOS     | Delay – LOS                               | Delay – LOS          |
| 1 – I-15 SB Ramps/Jurupa St                           | 21.9 – C                                     | 24.9 – C        | 37.3 – D                                  | 22.3 – C             |
| 2 – I-15 NB Ramps/Jurupa St                           | 20.3 – C                                     | 21.7 – C        | 20.2 – C                                  | 20.8 – C             |
| 3 – Etiwanda Ave/San Bernardino Ave                   | 23.9 – C                                     | 26.3 – C        | 22.5 – C                                  | 26.1 – C             |
| 4 – Etiwanda Ave/I-10 WB Ramps                        | 18.8 – B                                     | 10.3 – B        | 17.7 – B                                  | 9.0 – A              |
| 5 – Etiwanda Ave/I-10 EB Ramps                        | 20.9 – C                                     | 13.0 – B        | 24.9 – C                                  | 14.2 – B             |
| 6 – Etiwanda Ave/East Airport Dr-Slover Ave           | 30.7 – C                                     | <b>57.7 – E</b> | <b>93.1 – F</b>                           | <b>208.8 – F</b>     |
| 7 – Etiwanda Ave/Jurupa St                            | 27.4 – C                                     | 31.1 – C        | <b>61.1 – E</b>                           | <b>90.6 – F</b>      |
| 8 – Etiwanda Ave/Marlay Ave                           | 15.7 – B                                     | 14.6 – B        | 16.1 – B                                  | 15.3 – B             |
| 9 – Etiwanda Ave/Philadelphia Ave                     | 12.1 – B                                     | 12.9 – B        | 15.4 – B                                  | 16.4 – B             |
| 10 – Etiwanda Ave/SR-60 WB Off-Ramp                   | 15.0 – B                                     | 12.2 – B        | 14.7 – B                                  | 12.0 – B             |
| 11 – Etiwanda Ave/SR-60 EB On-Ramp                    | 12.2 – B                                     | 12.1 – B        | 12.7 – B                                  | 12.3 – B             |
| 12 – Commerce Dr-I-10 WB Ramps/Valley Blvd            | 23.7 – C                                     | 28.5 – C        | 25.9 – C                                  | 30.1 – C             |
| 13 – Mulberry Ave/Slover Ave                          | 20.8 – C                                     | 19.9 – B        | 19.9 – B                                  | 20.7 – C             |
| 14 – Mulberry Ave/Santa Ana Ave                       | 18.6 – B                                     | 17.5 – B        | 18.4 – B                                  | 22.3 – C             |
| 15 – Mulberry Ave/Jurupa St                           | 27.9 – C                                     | 37.5 – D        | <b>81.6 – F</b>                           | <b>159.8 – F</b>     |
| 16 – Mulberry Ave/Marlay Ave                          | 17.9 – B                                     | 21.1 – C        | 13.4 – B                                  | 18.2 – B             |
| 17 – Mulberry Ave-Country Village Rd/Philadelphia Ave | 9.1 – A                                      | 8.0 – A         | 9.1 – A                                   | 9.5 – A              |
| 18 – Country Village Rd/SR-60 WB Ramps                | 20.7 – C                                     | 21.3 – C        | 18.4 – B                                  | 26.2 – C             |
| 19 – Country Village Rd/SR-60 EB Ramps                | 24.0 – C                                     | 29.5 – C        | 25.1 – C                                  | 30.6 – C             |
| 20 – Banana Ave/San Bernardino Ave                    | 9.7 – A                                      | 12.0 – B        | 10.0 – B                                  | 12.1 – B             |
| 21 – Banana Ave/Valley Blvd                           | 19.5 – B                                     | <b>40.3 – E</b> | 24.3 – C                                  | <b>53.5 – F</b>      |
| 22 – Cherry Ave/San Bernardino Ave                    | 24.0 – C                                     | 26.6 – C        | <b>90.0 – F</b>                           | <b>152.8 – F</b>     |
| 23 – Cherry Ave/Valley Blvd                           | 30.9 – C                                     | 34.2 – C        | <b>303.6 – F</b>                          | <b>289.2 – F</b>     |
| 24 – Cherry Ave/I-10 WB Ramps                         | N/A                                          | N/A             | N/A                                       | N/A                  |
| 25 – Cherry Ave/I-10 EB Ramps                         | N/A                                          | N/A             | N/A                                       | N/A                  |
| 26 – Cherry Ave/Slover Ave                            | 30.5 – C                                     | 29.8 – C        | <b>529.7 – F</b>                          | <b>642.1 – F</b>     |
| 27 – Cherry Ave/Santa Ana Ave                         | 20.0 – C                                     | 13.3 – B        | <b>162.0 – F</b>                          | <b>108.9 – F</b>     |
| 28 – Cherry Ave/Jurupa St                             | 28.8 – C                                     | 25.5 – C        | <b>128.0 – F</b>                          | <b>104.8 – F</b>     |
| 29 – Hemlock Ave-Fontana Ave/Valley Blvd              | 30.8 – C                                     | 29.7 – C        | 31.9 – C                                  | 30.7 – C             |
| 30 – Beech Ave/Valley Blvd                            | 15.9 – C                                     | 34.9 – D        | <b>49.5 – E</b>                           | <b>&gt;999.9 – F</b> |
| 31 – Beech Ave/Slover Ave                             | 11.5 – B                                     | 13.0 – B        | <b>228.3 – F</b>                          | <b>410.5 – F</b>     |

**Table 10 (Continued)**  
**Forecast Existing With Project Conditions AM & PM Peak Hour Intersection LOS**

| Study Intersection               | Forecast Existing Without Project Conditions |                      | Forecast Existing With Project Conditions |                      |
|----------------------------------|----------------------------------------------|----------------------|-------------------------------------------|----------------------|
|                                  | AM Peak Hour                                 | PM Peak Hour         | AM Peak Hour                              | PM Peak Hour         |
|                                  | Delay – LOS                                  | Delay – LOS          | Delay – LOS                               | Delay – LOS          |
| 32 – Beech Ave/Santa Ana Ave     | 9.3 – A                                      | 10.0 – A             | 13.3 – B                                  | 19.6 – C             |
| 33 – Beech Ave/Jurupa St         | 24.7 – C                                     | <b>35.1 – E</b>      | <b>733.3 – F</b>                          | <b>738.4 – F</b>     |
| 34 – Citrus Ave/Valley Blvd      | 44.5 – D                                     | 41.1 – D             | <b>244.7 – F</b>                          | <b>224.6 – F</b>     |
| 35 – Citrus Ave/I-10 WB Ramps    | N/A                                          | N/A                  | N/A                                       | N/A                  |
| 36 – Citrus Ave/I-10 EB Ramps    | N/A                                          | N/A                  | N/A                                       | N/A                  |
| 37 – Citrus Ave/Slover Ave       | 35.8 – D                                     | 29.8 – C             | <b>411.1 – F</b>                          | <b>469.4 – F</b>     |
| 38 – Citrus Ave/Santa Ana Ave    | 12.3 – B                                     | 16.1 – C             | <b>854.7 – F</b>                          | <b>595.0 – F</b>     |
| 39 – Citrus Ave/Jurupa St        | 17.3 – C                                     | 26.4 – D             | <b>766.0 – F</b>                          | <b>538.0 – F</b>     |
| 40 – Sierra Ave/Slover Ave       | 23.7 – C                                     | 29.5 – C             | 41.9 – D                                  | <b>57.9 – E</b>      |
| 41 – Sierra Ave/Santa Ana Ave    | 20.8 – C                                     | 25.7 – C             | 20.8 – C                                  | 25.7 – C             |
| 42 – Sierra Ave/Jurupa St        | 31.1 – C                                     | 30.3 – C             | <b>347.4 – F</b>                          | <b>108.6 – F</b>     |
| 43 – Armstrong Rd/Sierra Ave     | 17.3 – B                                     | 16.9 – B             | 16.5 – B                                  | 16.8 – B             |
| 44 – Armstrong Rd/SR-60 WB Ramps | 23.8 – C                                     | 22.6 – C             | 23.3 – C                                  | 22.8 – C             |
| 45 – Armstrong Rd/SR-60 EB Ramps | <b>118.0 – F</b>                             | <b>&gt;999.9 – F</b> | <b>166.7 – F</b>                          | <b>&gt;999.9 – F</b> |

**Note:** NB = Northbound; SB = Southbound; EB = Eastbound; WB = Westbound; delay shown in seconds per vehicle; deficient intersection operation shown in **bold**. N/A = Not applicable, since analysis of these intersections is addressed by recent Project Reports.

As shown in Table 10, with the addition of project-generated trips, the following 19 study intersections are forecast to operate at a deficient LOS (LOS E or worse) according to agency performance criteria for forecast existing with project conditions:

- Etiwanda Avenue/East Airport Drive-Slover Avenue (both a.m. and p.m. peak hours);
- Etiwanda Avenue/Jurupa Street (both a.m. and p.m. peak hours);
- Mulberry Avenue/Jurupa Street (both a.m. and p.m. peak hours);
- Banana Avenue/Valley Boulevard (p.m. peak hour only);
- Cherry Avenue/San Bernardino Avenue (both a.m. and p.m. peak hours);
- Cherry Avenue/Valley Boulevard (both a.m. and p.m. peak hours);
- Cherry Avenue/Slover Avenue (both a.m. and p.m. peak hours);
- Cherry Avenue/Santa Ana Avenue (both a.m. and p.m. peak hours);
- Cherry Avenue/Jurupa Street (both a.m. and p.m. peak hours);
- Beech Avenue/Valley Boulevard (both a.m. and p.m. peak hours);
- Beech Avenue/Slover Avenue (both a.m. and p.m. peak hours);

- Beech Avenue/Jurupa Street (both a.m. and p.m. peak hours);
- Citrus Avenue/Valley Boulevard (both a.m. and p.m. peak hours);
- Citrus Avenue/Slover Avenue (both a.m. and p.m. peak hours);
- Citrus Avenue/Santa Ana Avenue (both a.m. and p.m. peak hours);
- Citrus Avenue/Jurupa Street (both a.m. and p.m. peak hours);
- Sierra Avenue/Slover Avenue (p.m. peak hour only);
- Sierra Avenue/Jurupa Street (both a.m. and p.m. peak hours); and
- Armstrong Road/SR-60 Eastbound Ramps (both a.m. and p.m. peak hours).

Since the collection of baseline traffic data for this analysis, the Sierra Avenue/Jurupa Street intersection has been improved to accommodate forecast existing with project conditions traffic volumes.

### **Forecast Existing With Project Conditions Recommended Improvements**

Improvements have been identified to provide acceptable operations at the study segments and study intersections. Some improvements may already be included in funding programs, such as the City of Fontana 7-Year Capital Improvement Program (CIP). The 7-Year CIP serves as a planning tool which coordinates financing and scheduling of major infrastructure projects within the City. Projects not already included in a fee program with financing and scheduling identified will require project and funding approvals to incorporate in City planning the improvement implementation.

The following improvements are identified to achieve acceptable operations at the deficient roadway segments for forecast existing with project conditions:

- |                          |                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Improvement No. 1</b> | <b>Mulberry Avenue</b> – Consistent with City of Fontana Circulation Master Plan, construct Mulberry Avenue connection from Slover Avenue to Valley Boulevard over I-10 freeway. This improvement is identified to provide additional north-south capacity, reducing forecast traffic on Etiwanda Avenue and Cherry Avenue.                                                                                               |
| <b>Improvement No. 2</b> | <b>Beech Avenue</b> – Consistent with City of Fontana Circulation Master Plan, construct Beech Avenue from Slover Avenue to Valley Boulevard including an interchange with I-10. This improvement is consistent with City of Fontana Circulation Master Plan. This improvement is identified to provide additional north-south capacity and freeway access, reducing forecast traffic on Cherry Avenue and Citrus Avenue. |
| <b>Improvement No. 3</b> | <b>Jurupa Street between Etiwanda Avenue and Mulberry Avenue</b> – Consistent with the City of Fontana Circulation Master Plan, widen the study roadway segment from a 4-lane divided roadway segment to a 6-lane divided roadway segment. This improvement is included in the City of Fontana 7-year CIP, but is not yet fully funded.                                                                                   |

- |                          |                                                                                                                                                                                                                                                                                                                          |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Improvement No. 4</b> | <b>Mulberry Avenue between Slover Avenue and Jurupa Avenue</b><br>– Consistent with the City of Fontana Circulation Master Plan, widen the study roadway segment from a 2-lane undivided roadway segment to a 4-lane undivided roadway segment.                                                                          |
| <b>Improvement No. 5</b> | <b>Jurupa Street between Mulberry Avenue and Cherry Avenue</b> –<br>Consistent with the City of Fontana Circulation Master Plan, widen the study roadway segment from a 4-lane divided roadway to a 6-lane divided roadway. This improvement is included in the City of Fontana 7-year CIP, but is not yet fully funded. |
| <b>Improvement No. 6</b> | <b>Beech Avenue between Slover Avenue and Jurupa Street</b> –<br>Consistent with the City of Fontana Circulation Master Plan, widen the study roadway segment from a 2-lane divided roadway to a 4-lane divided roadway.                                                                                                 |
| <b>Improvement No. 7</b> | <b>Citrus Avenue between I-10 Eastbound Ramps and Santa Ana Avenue</b> – Consistent with the City of Fontana Circulation Master Plan, widen the study roadway segment from a 2-lane undivided roadway segment to a 4-lane undivided roadway segment.                                                                     |
| <b>Improvement No. 8</b> | <b>Citrus Avenue between Santa Ana Avenue and Jurupa Street</b><br>– Consistent with the City of Fontana Circulation Master Plan, widen the study roadway segment from a 2-lane undivided roadway segment to a 4-lane undivided roadway segment.                                                                         |

The following improvements are identified to achieve acceptable operations at the affected study intersections for forecast existing with project conditions assuming implementation of the identified roadway segment improvements:

- |                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Improvement No. 9</b>  | <b>Etiwanda Avenue/San Bernardino Avenue</b> – Widen the northbound Etiwanda Avenue approach from two left-turn lanes, two through lanes, and one right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane. Widen the westbound San Bernardino Avenue approach from two left-turn lanes, one through lane, and one shared through/right-turn lane to consist of two left-turn lanes, two through lanes, and one right-turn lane. Additionally, modify the westbound San Bernardino Avenue signal phasing to include a westbound right-turn overlap, which will preclude U-turn movement from southbound to northbound Etiwanda Avenue. |
| <b>Improvement No. 10</b> | <b>Etiwanda Avenue/East Airport Drive-Slover Avenue</b> – Widen the northbound Etiwanda Avenue approach from one left-turn lane, one through lane, and one shared through/right-turn lane to consist of two left-turn lanes, one through lane, and one shared through/right-turn lane. Widen the southbound Etiwanda Avenue approach from one left-turn lane, one through lane, and one shared through/right-turn lane to consist of two left-turn lanes, one through lane, and one shared through/right-turn lane. Widen the westbound Slover Avenue approach from one left-turn lane, one                                                                                   |

through lane, and one shared through/right-turn lane to consist of one left-turn lane, two through lanes, and two right-turn lanes.

**Improvement No. 11**

**Etiwanda Avenue/Jurupa Street** – Widen the eastbound Jurupa Street approach from two left-turn lanes, two through lanes, and one right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane. Widen the westbound Jurupa Street approach from two left-turn lanes, two through lanes, and one right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane.

**Improvement No. 12**

**Mulberry Avenue/Slover Avenue** – In concert with construction of the extension of Mulberry Avenue north of Slover Avenue, widen the northbound Mulberry Avenue approach from one left-turn lane and one right-turn lane to consist of one left-turn lane, two through lanes, and one right-turn lane. Construct and stripe the southbound Mulberry Avenue approach to consist of one left-turn lane, two through lanes, and one right-turn lane. Widen the eastbound Slover Avenue approach from two through lanes and one shared through/right-turn lane to consist of one left-turn lane, two through lanes, and one shared through/right-turn lane. Widen the westbound Slover Avenue approach from one left-turn lane and two through lanes to consist of one left-turn lane, two through lanes, and one right-turn lane. Additionally, modify the signal phasing to consist of protected left-turn phasing.

**Improvement No. 13**

**Mulberry Avenue/Santa Ana Avenue** – Widen the northbound Mulberry Avenue approach from one left-turn lane, one through lane, and one right-turn lane to consist of one left-turn lane, two through lanes, and one right-turn lane. Re-stripe the eastbound Santa Ana Avenue approach from one shared left-turn/through lane and one right-turn lane to consist of one left-turn lane and one shared through/right-turn lane. Widen the westbound Santa Ana Avenue approach from one shared left-turn/through/right-turn lane to consist of one left-turn lane, one through lane, and one shared through/right-turn lane. Additionally, modify the east-west signal phasing from permitted left-turns to protected left-turns.

**Improvement No. 14**

**Mulberry Avenue/Jurupa Street** – Modify the northbound Mulberry Avenue signal phasing to include a northbound right-turn overlap, which will preclude U-turn movement from westbound to eastbound Jurupa Street. Widen the southbound Mulberry Avenue approach from one left-turn lane, two through lanes, and one right-turn lane to consist of two left-turn lanes, two through lanes, and one right-turn lane. Additionally, modify the southbound Mulberry Avenue signal phasing to include a southbound right-turn overlap, which will preclude U-turn movement from eastbound to westbound Jurupa Avenue. Widen the eastbound Jurupa Street approach from one left-turn lane, two through lanes, and one right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane. Widen the

westbound Jurupa Avenue approach from one left-turn lane, two through lanes, and one right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane.

**Improvement No. 15**

**Banana Avenue/Valley Boulevard** – Signalize the Banana Avenue/Valley Boulevard intersection. According to the City of Fontana, the Banana Avenue/Valley Boulevard intersection satisfies traffic signal warrants and is in Pre-Construction.

**Improvement No. 16**

**Cherry Avenue/Valley Boulevard** – Widen the northbound Cherry Avenue approach from one left-turn lane, two through lanes, and one defacto right-turn lane to consist of one left-turn lane, three through lanes, and one right-turn lane. Widen the southbound Cherry Avenue approach from one left-turn lane, two through lanes, and one right-turn lane to consist of one left-turn lane, three through lanes, and one right-turn lane. Widen the westbound Valley Boulevard approach from one left-turn lane, two through lanes, and one right-turn lane to consist of two left-turn lanes, two through lanes, and one right-turn lane.

**Improvement No. 17**

**Cherry Avenue/Slover Avenue** – Widen the northbound Cherry Avenue approach from one left-turn lane, two through lanes, and one right-turn lane to consist of one left-turn lane, four through lanes and one right-turn lane. Widen the southbound Cherry Avenue approach from one left-turn lane, one through lane, and one shared through/right-turn lane to consist of two left-turn lanes, four through lanes, and two right-turn lanes. Widen the eastbound Slover Avenue approach from one left-turn lane, two through lanes, and one defacto right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane. Widen the westbound Slover Avenue approach from one left-turn lane, two through lanes, and one right-turn lane to consist of two left-turn lanes, three through lanes, and two right-turn lanes.

**Improvement No. 18**

**Cherry Avenue/Jurupa Street** – Widen the northbound Cherry Avenue approach from two left-turn lanes, two through lanes, and one right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane. Widen the southbound Cherry Avenue approach from two left-turn lanes, two through lanes, and one right-turn lane to consist of two left-turn lanes, three through lanes, and two right-turn lanes. Widen the eastbound Jurupa Avenue approach from two left-turn lanes, two through lanes, and one shared through/right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane. Widen the westbound Jurupa Street approach from two left-turn lanes, two through lanes, and one right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane.

**Improvement No. 19**

**Beech Avenue/Valley Boulevard** – Signalize the Beech Avenue/Valley Boulevard intersection. Widen the northbound Beech Avenue approach from one shared left-turn/through lane



and one right-turn lane to consist of one left-turn lane, one through lane, and one shared through/right-turn lane. Widen the southbound Beech Avenue approach from one shared left-turn/through lane and one right-turn lane to consist of one left-turn lane, two through lanes, and one right-turn lane.

**Improvement No. 20**

**Beech Avenue/Slover Avenue** – Signalize the Beech Avenue/Slover Avenue intersection. Widen the northbound Beech Avenue approach from one shared left-turn/through/right-turn lane to consist of one left-turn lane, two through lanes, and one right-turn lane. Widen the southbound Beech Avenue approach from one shared left-turn/through/right-turn lane to consist of one left-turn lane, two through lanes, and one right-turn lane. Widen the eastbound Slover Avenue approach from one left-turn lane, one through lane, and one shared through/right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane. Widen the westbound Slover Avenue approach from one left-turn lane, one through lane, and one shared through/right-turn lane to consist of one left-turn lane, three through lanes, and one right-turn lane.

**Improvement No. 21**

**Beech Avenue/Santa Ana Avenue** – Signalize the Beech Avenue/Santa Ana Avenue intersection.

**Improvement No. 22**

**Beech Avenue/Jurupa Street** – Signalize the Beech Avenue/Jurupa Street intersection. Widen the eastbound Jurupa Street approach from one shared left-turn/through lane and one shared through/right-turn lane to consist of one left-turn lane, two through lanes, and one right-turn lane. Widen the westbound Jurupa Street approach from one shared left-turn/through/right-turn lane to consist of one left-turn lane, two through lanes, and one right-turn lane.

**Improvement No. 23**

**Citrus Avenue/Valley Boulevard** – Widen the northbound Citrus Avenue approach from one left-turn lane, one through lane, and one shared through/right-turn lane to consist of two left-turn lanes, one through lane, and one shared through/right-turn lane. Widen the southbound Citrus Avenue approach from one left-turn lane, one through lane, and one shared through/right-turn lane to consist of one left-turn lane, two through lanes, and one right-turn lane. Widen the eastbound Valley Boulevard approach from two left-turn lanes, one through lane, and one shared through/right-turn lane to consist of two left-turn lanes, two through lanes, and two right-turn lanes.

**Improvement No. 24**

**Citrus Avenue/Slover Avenue** – Widen the northbound Citrus Avenue approach from one left-turn lane and one shared through/right-turn lane to consist of one left-turn lane, two through lanes, and one right-turn lane. Widen the southbound Citrus Avenue approach from one left-turn lane, one through lane, and one right-turn lane to consist of one left-turn lane, two through

lanes, and two right-turn lanes. Widen the eastbound Slover Avenue approach from one left-turn lane, two through lanes, and one defacto right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane. Widen the westbound Slover Avenue approach from one left-turn lane, one through lane, and one shared through/right-turn lane to consist of one left-turn lane, three through lanes, and one right-turn lane.

**Improvement No. 25**

**Citrus Avenue/Santa Ana Avenue** – Signalize the Citrus Avenue/Santa Ana Avenue intersection. Widen the northbound Citrus Avenue approach from one shared left-turn/through/right-turn lane to consist of one left-turn lane and one shared through/right-turn lane. Widen the southbound Citrus Avenue approach from one shared left-turn/through/right-turn lane to consist of one left-turn lane and one shared through/right-turn lane. Widen the eastbound Santa Ana Avenue approach from one shared left-turn/through/right-turn lane to consist of one left-turn lane and one shared through/right-turn lane. Re-stripe the westbound Santa Ana Avenue approach from one shared left-turn/through lane and one right-turn lane to consist of one left-turn lane and one shared through/right-turn lane.

**Improvement No. 26**

**Citrus Avenue/Jurupa Street** – Signalize the Citrus Avenue/Jurupa Street intersection. Widen the southbound Citrus Avenue approach from one left-turn lane and one shared through/right-turn lane to consist of one left-turn lane, one through lane, and one shared through/right-turn lane. Widen the eastbound Jurupa Street approach from one left-turn lane, two through lanes, and one shared through/right-turn lane to consist of one left-turn lane, three through lanes, and one right-turn lane. Widen the westbound Jurupa Street approach from one left-turn lane, one through lane, and one shared through/right-turn lane to consist of one left-turn lane, three through lanes, and one right-turn lane.

**Improvement No. 27**

**Sierra Avenue/Slover Avenue** – Widen the eastbound Slover Avenue approach from two left-turn lanes, two through lanes, and one right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane.

**Improvement No. 28**

**Sierra Avenue/Jurupa Street** – Widen the southbound Sierra Avenue approach from two left-turn lanes, two through lanes, and one right-turn lane to consist of two left-turn lane, two through lanes, and two right-turn lanes. Widen the eastbound Jurupa Street approach from one left-turn lane, one shared left-turn/through lane, one through lane, and one right-turn lane to consist of two left-turn lanes, two through lanes, and one right-turn lane. Widen the westbound Jurupa Street approach from one left-turn lane, one through lane, and one right-turn lane to consist of one left-turn lane, three through lanes, and one right-turn lane.

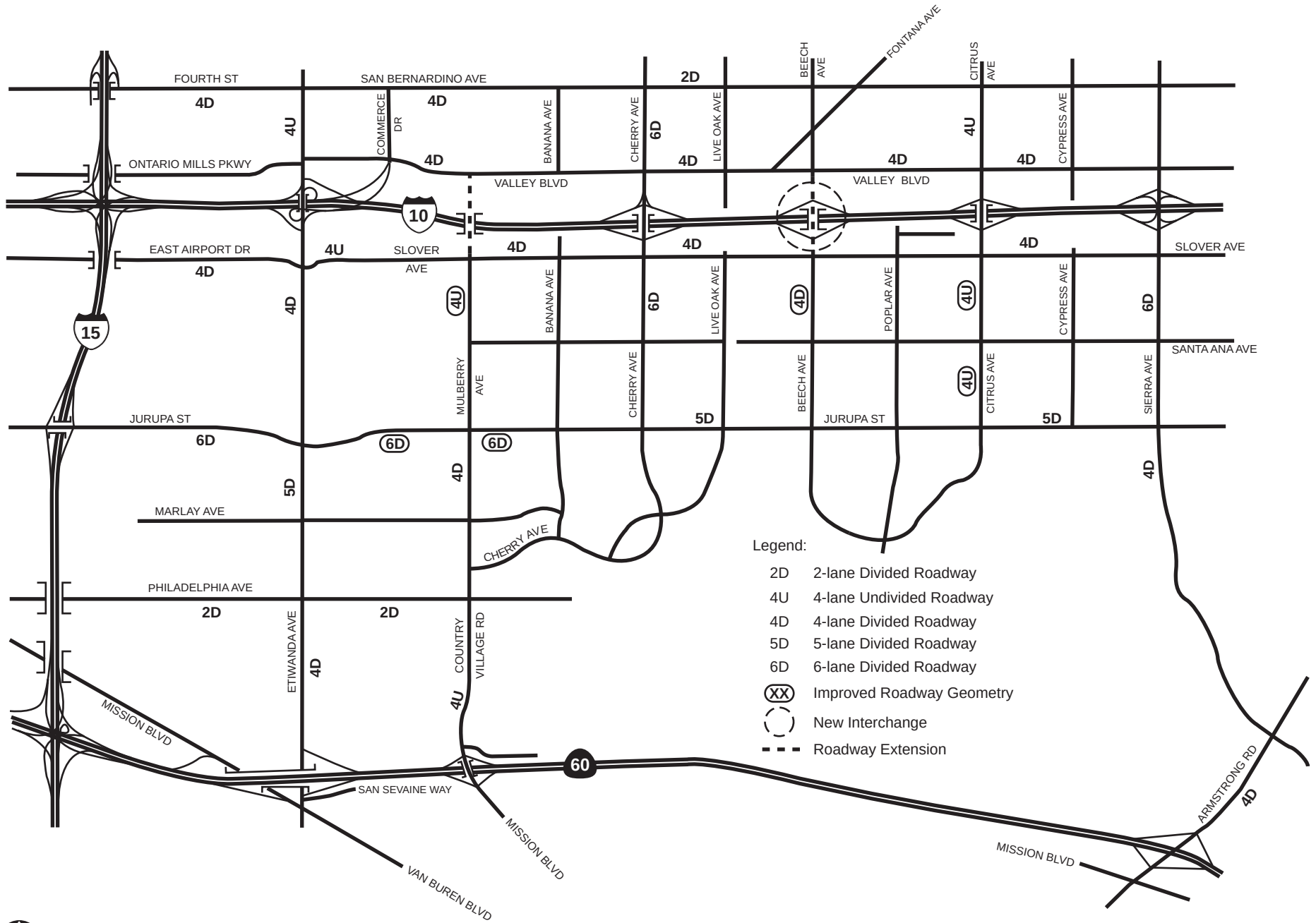
Improvements have recently been constructed at this intersection satisfying the lane configuration recommended.

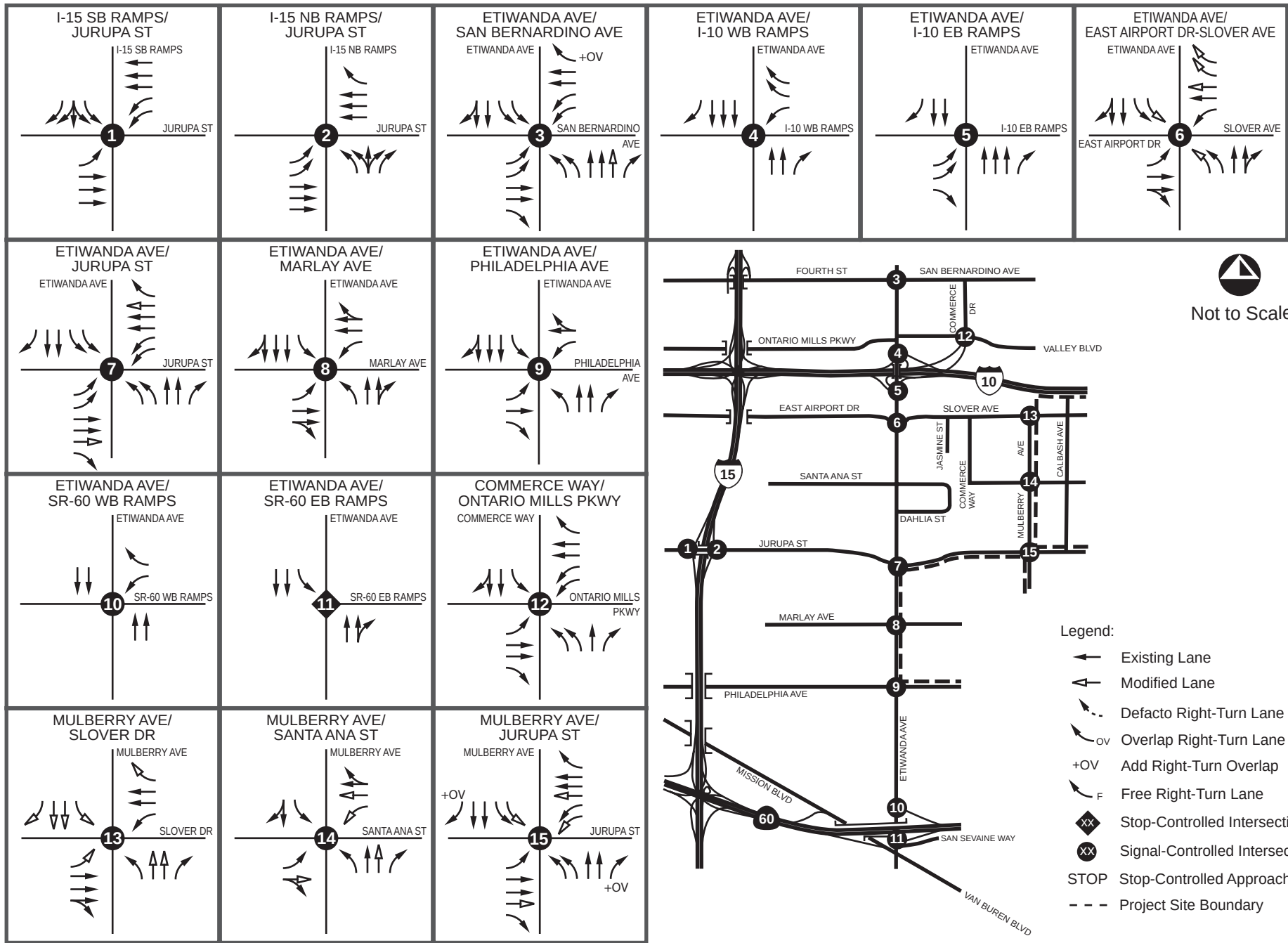
**Improvement No. 29**      **Armstrong Road/SR-60 Eastbound Ramps** – Contribute towards preparation of a Project Study Report to improve operations, circulation, and access at the Armstrong Road/SR-60 interchange.

Exhibit 25 shows the improved forecast existing with project conditions roadway segment geometry and circulation system. Exhibits 26 through 28 shows improved forecast existing with project conditions study intersection geometry.

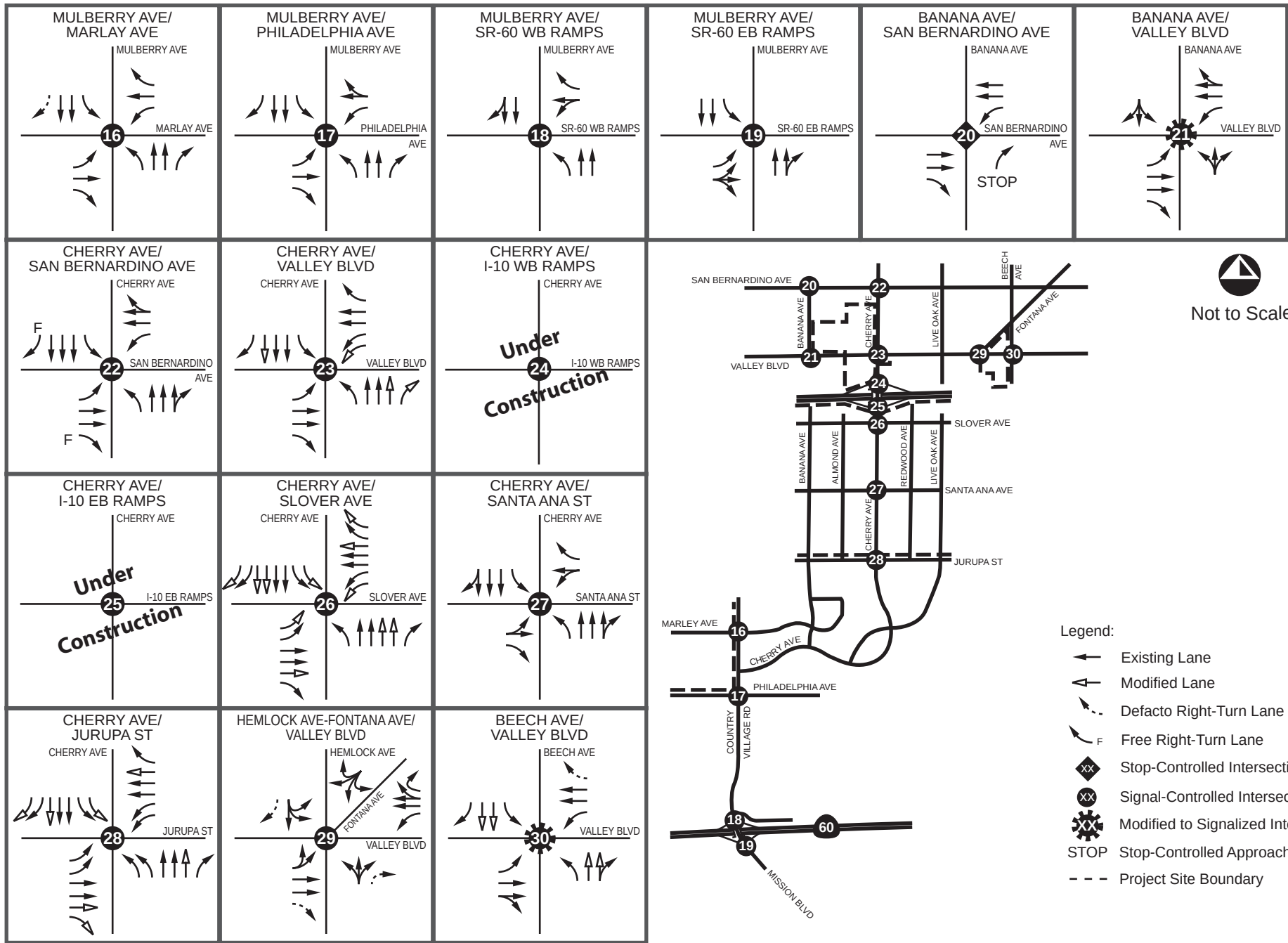
#### **Improved Forecast Existing With Project Conditions Roadway Segment LOS**

Table 11 summarizes improved forecast existing with project conditions roadway segment ADT volumes and corresponding LOS assuming implementation of the recommended roadway segment improvements.

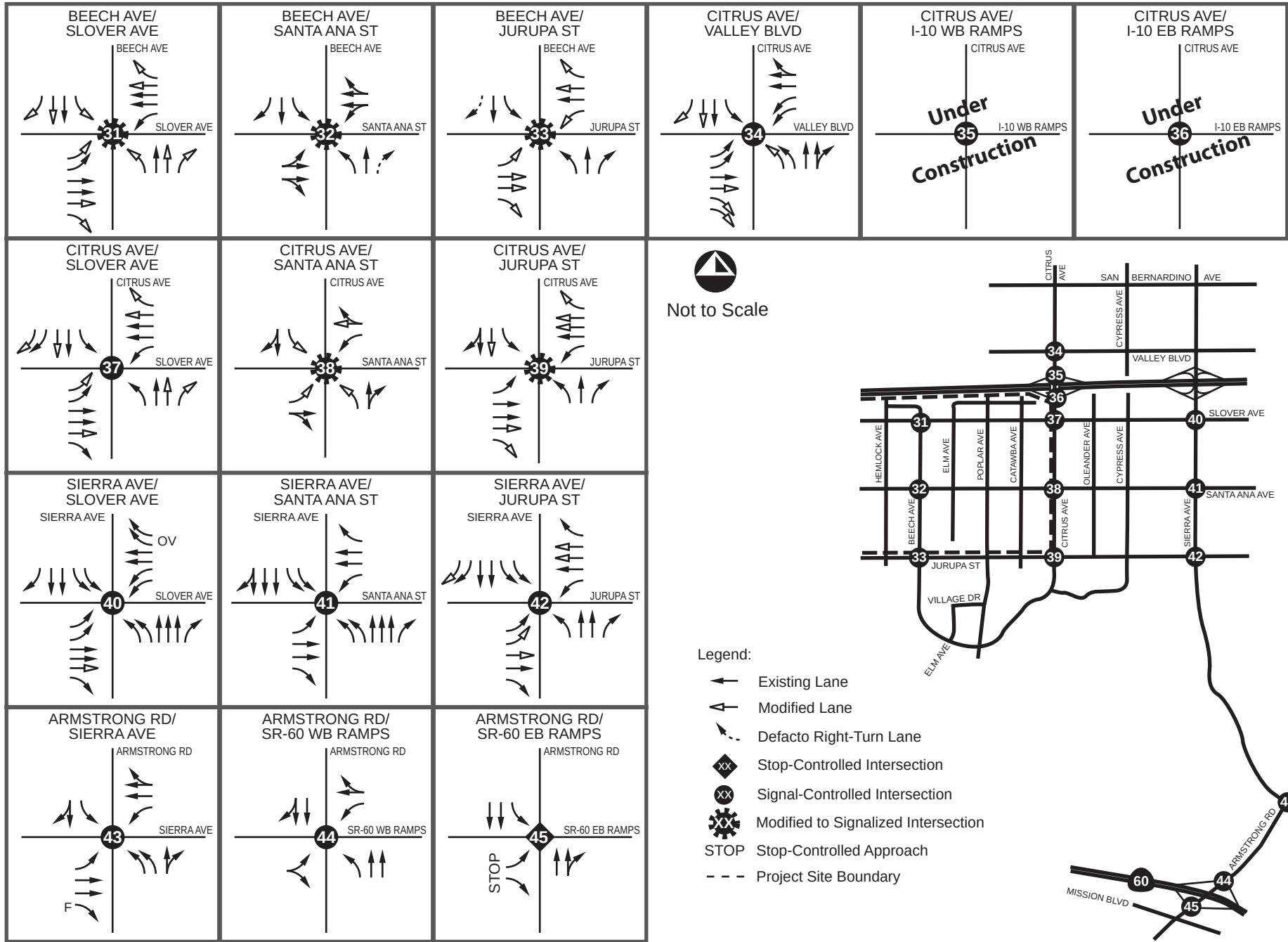




## Area 1 - Improved Forecast Existing With Project Conditions Study Intersection Geometry



## Area 2 - Improved Forecast Existing With Project Conditions Study Intersection Geometry



## Area 3 - Improved Forecast Existing With Project Conditions Study Intersection Geometry

**Table 11**  
**Improved Forecast Existing With Project Conditions Roadway Segment ADT & LOS**

| Study Roadway Segment                                           | LOS E Capacity | Forecast Ex+P ADT Volumes | Volume to Capacity Ratio | LOS |
|-----------------------------------------------------------------|----------------|---------------------------|--------------------------|-----|
| Fourth St btwn I-15 Fwy and Etiwanda Ave                        | 33,000         | 12060                     | 0.365                    | A   |
| East Airport Drive btwn I-15 Fwy and Etiwanda Ave               | 33,000         | 25157                     | 0.762                    | C   |
| Jurupa St btwn I-15 Fwy and Etiwanda Ave                        | 49,000         | 42439                     | 0.866                    | D   |
| Philadelphia Ave btwn I-15 Fwy Etiwanda Ave                     | 12,500         | 3381                      | 0.270                    | A   |
| Etiwanda Ave btwn San Bernardino Ave and I-10 WB Ramps          | 33,000         | 23845                     | 0.723                    | B   |
| Etiwanda Ave btwn I-10 EB Ramps and Jurupa St                   | 33,000         | 27141                     | 0.822                    | C   |
| Etiwanda Ave btwn Jurupa St and Philadelphia Ave                | 41,000         | 16855                     | 0.411                    | A   |
| Etiwanda Ave btwn Philadelphia Ave and SR-60 WB Ramps           | 36,000         | 19693                     | 0.547                    | A   |
| Slover Ave btwn Etiwanda Ave and Mulberry Ave                   | 36,000         | 25851                     | 0.718                    | C   |
| Jurupa St btwn Etiwanda Ave and Mulberry Ave                    | 54,000         | 36817                     | 0.682                    | B   |
| Philadelphia Ave btwn Etiwanda Ave and Mulberry-Country Village | 12,000         | 3212                      | 0.268                    | A   |
| San Bernardino Ave btwn Etiwanda Ave and Cherry Ave             | 36,000         | 21545                     | 0.598                    | A   |
| Valley Blvd btwn Commerce Drive and Cherry Ave                  | 36,000         | 22185                     | 0.616                    | B   |
| Mulberry Ave btwn Slover Ave and Jurupa Ave                     | 36,000         | 22108                     | 0.614                    | B   |
| Mulberry Ave btwn Jurupa St and Philadelphia Ave                | 36,000         | 18679                     | 0.519                    | A   |
| Country Village Rd btwn Philadelphia Ave and SR-60 WB Ramps     | 36,000         | 30505                     | 0.847                    | D   |
| Slover Ave btwn Mulberry Ave and Cherry Ave                     | 36,000         | 30077                     | 0.835                    | D   |
| Jurupa St btwn Mulberry Ave and Cherry Ave                      | 54,000         | 40194                     | 0.744                    | C   |
| Cherry Ave btwn San Bernardino Ave and I-10 WB Ramps            | 54,000         | 35884                     | 0.665                    | B   |
| Cherry Ave btwn I-10 EB Ramps and Jurupa St                     | 54,000         | 39324                     | 0.728                    | C   |
| San Bernardino Ave btwn Cherry Ave and Fontana Ave              | 12,000         | 9363                      | 0.780                    | C   |
| Valley Blvd btwn Cherry Ave and Beech Ave                       | 36,000         | 15111                     | 0.420                    | A   |
| Slover Ave btwn Cherry Ave and Citrus Ave                       | 36,000         | 29650                     | 0.824                    | D   |
| Jurupa St btwn Cherry Ave and Citrus Ave                        | 45,000         | 39996                     | 0.889                    | D   |
| Beech Ave btwn Slover Ave and Jurupa St                         | 36,000         | 17530                     | 0.487                    | A   |
| Valley Blvd btwn Beech Ave and Citrus Ave                       | 36,000         | 19894                     | 0.553                    | A   |
| Citrus Ave btwn San Bernardino Ave and I-10 WB Ramps            | 36,000         | 24762                     | 0.688                    | B   |
| Citrus Ave btwn I-10 EB Ramps and Santa Ana Ave                 | 36,000         | 18199                     | 0.506                    | A   |
| Citrus Ave btwn Santa Ana Ave and Jurupa St                     | 36,000         | 15880                     | 0.441                    | A   |
| Valley Blvd btwn Citrus Ave and Sierra Ave                      | 36,000         | 12558                     | 0.349                    | A   |
| Slover Ave btwn Citrus Ave and Sierra Ave                       | 36,000         | 29659                     | 0.824                    | D   |
| Jurupa St btwn Citrus Ave and Sierra Ave                        | 45,000         | 34174                     | 0.759                    | C   |
| Sierra Ave btwn Slover Ave and Jurupa St                        | 54,000         | 23785                     | 0.440                    | A   |
| Sierra Ave btwn Jurupa St and Armstrong Rd                      | 36,000         | 21144                     | 0.587                    | A   |
| Armstrong Rd btwn Sierra Ave and SR-60 WB Ramps                 | 36,000         | 20323                     | 0.565                    | A   |

**Note:** EB = eastbound; WB = westbound; btwn = between; Ex+P = Existing Plus Project.

As shown in Table 11, assuming implementation of the identified roadway segment improvements, the study roadway segments are forecast to operate at an acceptable LOS according to agency performance criteria.



## Improved Forecast Existing With Project Conditions Study Intersection LOS

Table 12 summarizes improved forecast existing with project conditions a.m. peak hour and p.m. peak hour LOS of the improved study intersections assuming implementation of the identified roadway segment improvements (Improvements 1 through 11); detailed LOS analysis sheets are contained in Appendix B.

**Table 12**  
**Improved Forecast Existing With Project**  
**Conditions AM & PM Peak Hour Intersection LOS**

| Study Intersection                          | Forecast Existing Without Project Conditions |                      | Improved Forecast Existing With Project Conditions |              |
|---------------------------------------------|----------------------------------------------|----------------------|----------------------------------------------------|--------------|
|                                             | AM Peak Hour                                 | PM Peak Hour         | AM Peak Hour                                       | PM Peak Hour |
|                                             | Delay – LOS                                  | Delay – LOS          | Delay – LOS                                        | Delay – LOS  |
| 3 – Etiwanda Ave/San Bernardino Ave         | 23.9 – C                                     | 26.3 – C             | 24.2 – C                                           | 47.7 – D     |
| 6 – Etiwanda Ave/East Airport Dr-Slover Ave | 30.7 – C                                     | <b>57.7 – E</b>      | 44.5 – D                                           | 54.3 – D     |
| 7 – Etiwanda Ave/Jurupa St                  | 27.4 – C                                     | 31.1 – C             | 31.3 – C                                           | 41.9 – D     |
| 13 – Mulberry Ave/Slover Ave                | 20.8 – C                                     | 19.9 – B             | 52.9 – D                                           | 52.2 – D     |
| 14 – Mulberry Ave/Santa Ana Ave             | 18.6 – B                                     | 17.5 – B             | 27.5 – C                                           | 30.7 – C     |
| 15 – Mulberry Ave/Jurupa St                 | 27.9 – C                                     | 37.5 – D             | 39.7 – D                                           | 35.0 – C     |
| 21 – Banana Ave/Valley Blvd                 | 19.5 – B                                     | <b>40.3 – E</b>      | 2.5 – A                                            | 3.5 – A      |
| 23 – Cherry Ave/Valley Blvd                 | 30.9 – C                                     | 34.2 – C             | 35.1 – D                                           | 36.9 – D     |
| 26 – Cherry Ave/Slover Ave                  | 30.5 – C                                     | 29.8 – C             | 35.5 – D                                           | 49.6 – D     |
| 28 – Cherry Ave/Jurupa St                   | 28.8 – C                                     | 25.5 – C             | 43.8 – D                                           | 34.3 – C     |
| 30 – Beech Ave/Valley Blvd                  | 15.9 – C                                     | 34.9 – D             | 24.6 – C                                           | 36.7 – D     |
| 31 – Beech Ave/Slover Ave                   | 11.5 – B                                     | 13.0 – B             | 38.9 – D                                           | 54.1 – D     |
| 32 – Beech Ave/Santa Ana Ave                | 9.3 – A                                      | 10.0 – A             | 20.0 – B                                           | 24.2 – C     |
| 33 – Beech Ave/Jurupa St                    | 24.7 – C                                     | <b>35.1 – E</b>      | 53.6 – D                                           | 41.2 – D     |
| 34 – Citrus Ave/Valley Blvd                 | 44.5 – D                                     | 41.1 – D             | 45.0 – D                                           | 50.1 – D     |
| 37 – Citrus Ave/Slover Ave                  | 35.8 – D                                     | 29.8 – C             | 40.2 – D                                           | 41.3 – D     |
| 38 – Citrus Ave/Santa Ana Ave               | 12.3 – B                                     | 16.1 – C             | 42.2 – D                                           | 33.1 – C     |
| 39 – Citrus Ave/Jurupa St                   | 17.3 – C                                     | 26.4 – D             | 45.8 – D                                           | 50.6 – D     |
| 40 – Sierra Ave/Slover Ave                  | 30.0 – C                                     | 49.6 – D             | 45.4 – D                                           | 41.7 – D     |
| 42 – Sierra Ave/Jurupa St                   | 31.1 – C                                     | 30.3 – C             | 44.0 – D                                           | 36.2 – D     |
| 45 – Armstrong Rd/SR-60 EB Ramps            | <b>118.0 – F</b>                             | <b>&gt;999.9 – F</b> | TBD                                                | TBD          |

**Note:** NB = Northbound; SB = Southbound; EB = Eastbound; WB = Westbound; delay shown in seconds per vehicle; deficient intersection operation shown in **bold**; TBD = To be determined pending outcome of Project Study Report.

As shown in Table 12, assuming implementation of the identified intersection improvements, the study intersections are forecast to operate at an acceptable LOS according to agency performance criteria for improved forecast existing with project conditions.

## **FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS**

It should be noted, forecast year 2030 conditions does not assume implementation of the recommended improvements identified for forecast existing with project conditions.

As directed by City staff, forecast year 2030 conditions assumes the following intersection geometry at the currently under-construction Sierra Avenue/Jurupa Street intersection:

- Northbound Sierra Avenue approach is planned to consist of two left-turn lanes, two through lanes, and one right-turn lane;
- Southbound Sierra Avenue approach is planned to consist of two left-turn lanes, two through lanes, and one right-turn lane;
- Eastbound Jurupa Street approach is planned to consist of two left-turn lanes, two through lanes, and one right-turn lane; and
- Westbound Jurupa Street approach is planned to consist of two left-turn lanes, two through lanes, and one right-turn lane.

### **Forecast Year 2030 Without Project Conditions Peak Hour Traffic Volumes**

Forecast year 2030 conditions traffic volumes are derived by increasing existing traffic volumes one percent per year as directed by City staff.

Exhibit 29 shows forecast year 2030 without project conditions ADT volumes for the study roadways. Exhibits 30 through 32 shows forecast year 2030 without project conditions PCE-adjusted a.m. peak hour and p.m. peak hour volumes at the study intersections.

### **Forecast Year 2030 Without Project Conditions Roadway Segment LOS**

Table 13 summarizes forecast year 2030 without project conditions roadway segment ADT volumes and corresponding LOS.



Not to Scale

Legend:

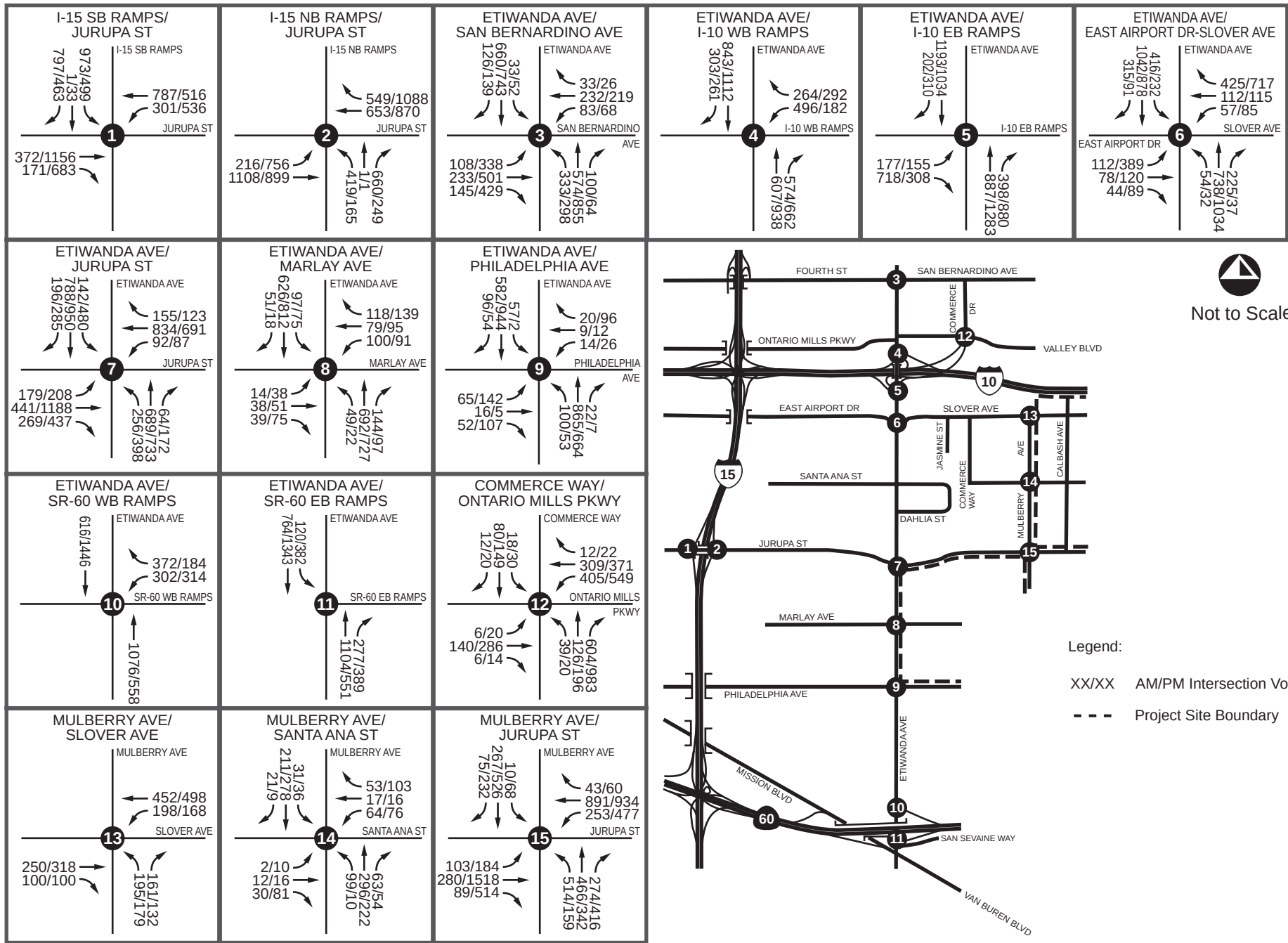
XX,XXX Roadway Segment ADT

### Forecast Year 2030 Without Project Conditions Roadway Segment ADT

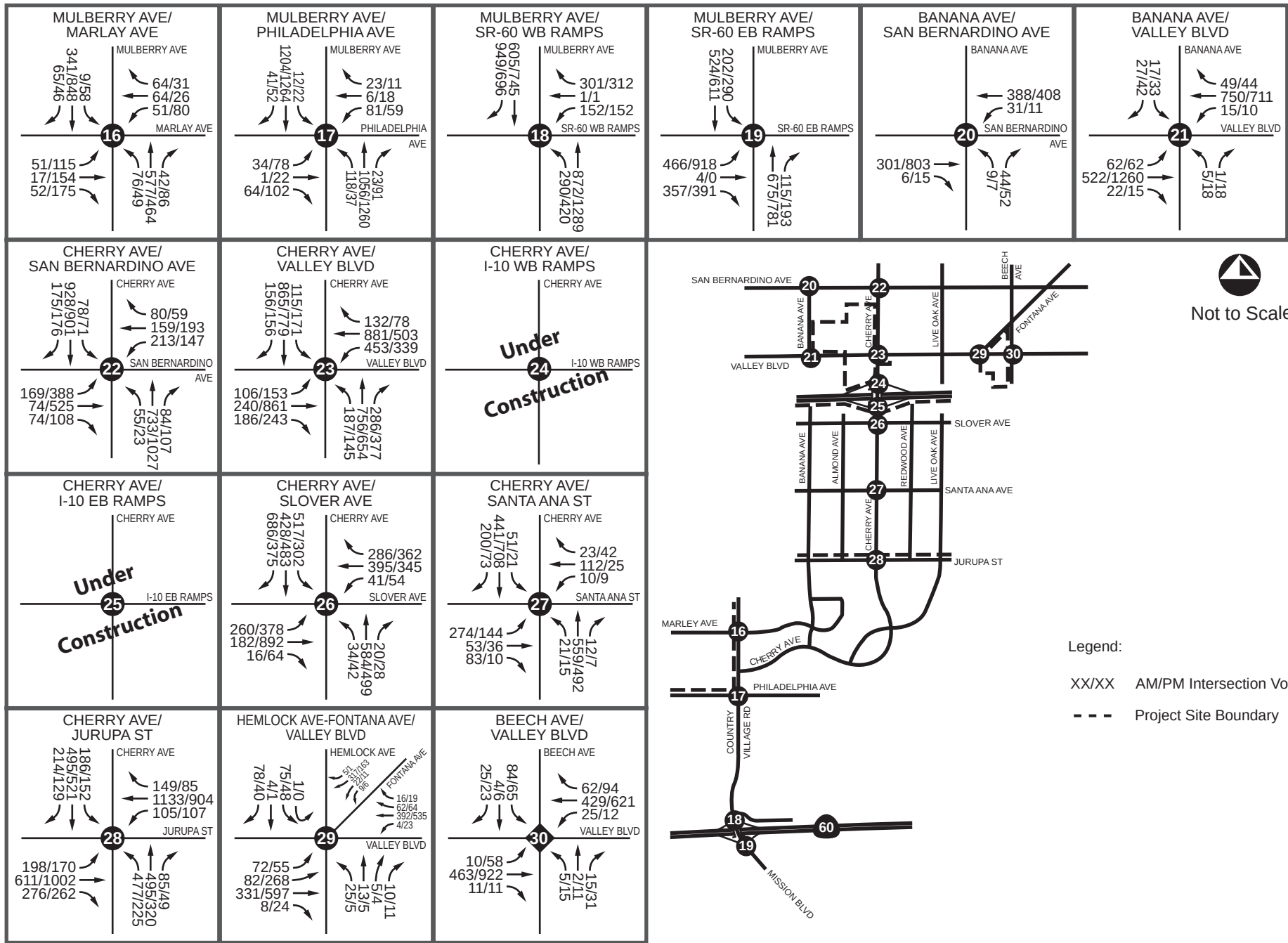
H:\pdata\65100340\Traffic\Exhibits\Exh29.ai

Exhibit 29

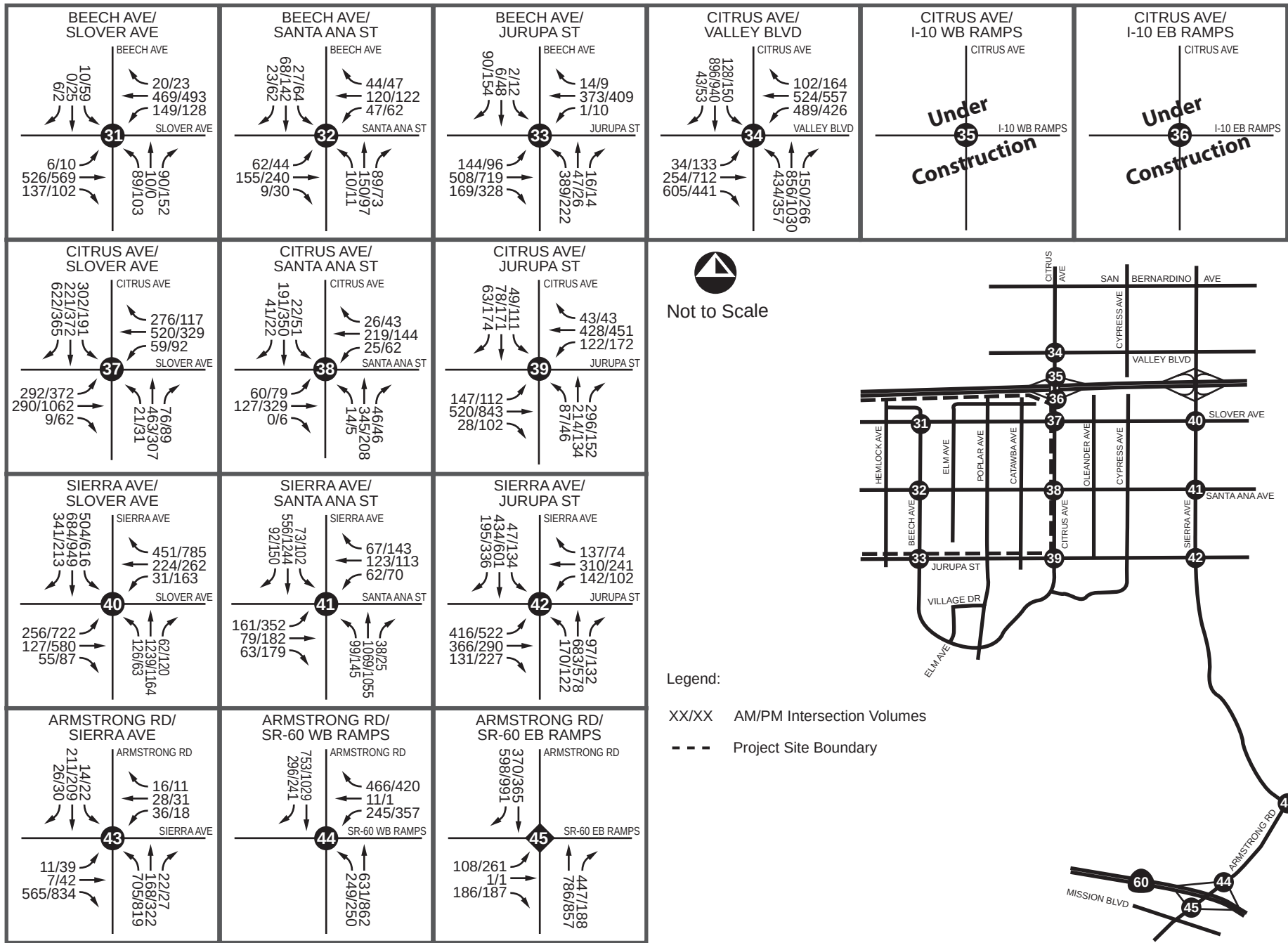
**RBF**



## Area 1 - Forecast Year 2030 Without Project Conditions PCE-Adjusted AM/PM Peak Hour Intersection Volumes



## Area 2 - Forecast Year 2030 Without Project Conditions PCE-Adjusted AM/PM Peak Hour Intersection Volumes



## Area 3 - Forecast Year 2030 Without Project Conditions PCE-Adjusted AM/PM Peak Hour Intersection Volumes

**Table 13**  
**Forecast Year 2030 Without Project Conditions Roadway Segment ADT & LOS**

| Study Roadway Segment                                           | LOS E Capacity | Forecast Year 2030 ADT | Volume to Capacity Ratio | LOS |
|-----------------------------------------------------------------|----------------|------------------------|--------------------------|-----|
| Fourth St btwn I-15 Fwy and Etiwanda Ave                        | 33,000         | 14,244                 | 0.432                    | A   |
| East Airport Drive btwn I-15 Fwy and Etiwanda Ave               | 33,000         | 8,463                  | 0.256                    | A   |
| Jurupa St btwn I-15 Fwy and Etiwanda Ave                        | 49,000         | 32,297                 | 0.659                    | B   |
| Philadelphia Ave btwn I-15 Fwy Etiwanda Ave                     | 12,500         | 3,745                  | 0.300                    | A   |
| Etiwanda Ave btwn San Bernardino Ave and I-10 WB Ramps          | 33,000         | 20,422                 | 0.619                    | B   |
| Etiwanda Ave btwn I-10 EB Ramps and Jurupa St                   | 33,000         | 22,667                 | 0.687                    | B   |
| Etiwanda Ave btwn Jurupa St and Philadelphia Ave                | 41,000         | 18,413                 | 0.449                    | A   |
| Etiwanda Ave btwn Philadelphia Ave and SR-60 WB Ramps           | 36,000         | 23,259                 | 0.646                    | B   |
| Slover Ave btwn Etiwanda Ave and Mulberry Ave                   | 36,000         | 12,251                 | 0.340                    | A   |
| Jurupa St btwn Etiwanda Ave and Mulberry Ave                    | 36,000         | 14,546                 | 0.404                    | A   |
| Philadelphia Ave btwn Etiwanda Ave and Mulberry-Country Village | 12,000         | 2,063                  | 0.172                    | A   |
| San Bernardino Ave btwn Etiwanda Ave and Cherry Ave             | 36,000         | 13,052                 | 0.363                    | A   |
| Valley Blvd btwn Commerce Drive and Cherry Ave                  | 36,000         | 17,151                 | 0.476                    | A   |
| Mulberry Ave btwn Slover Ave and Jurupa Ave                     | 12,000         | 7,511                  | 0.626                    | B   |
| Mulberry Ave btwn Jurupa St and Philadelphia Ave                | 36,000         | 14,371                 | 0.399                    | A   |
| Country Village Rd btwn Philadelphia Ave and SR-60 WB Ramps     | 36,000         | 30,168                 | 0.838                    | D   |
| Slover Ave btwn Mulberry Ave and Cherry Ave                     | 36,000         | 11,308                 | 0.314                    | A   |
| Jurupa St btwn Mulberry Ave and Cherry Ave                      | 36,000         | 17,399                 | 0.483                    | A   |
| Cherry Ave btwn San Bernardino Ave and I-10 WB Ramps            | 54,000         | 20,036                 | 0.371                    | A   |
| Cherry Ave btwn I-10 EB Ramps and Jurupa St                     | 54,000         | 14,555                 | 0.270                    | A   |
| San Bernardino Ave btwn Cherry Ave and Fontana Ave              | 12,000         | 9,355                  | 0.780                    | C   |
| Valley Blvd btwn Cherry Ave and Beech Ave                       | 36,000         | 12,983                 | 0.361                    | A   |
| Slover Ave btwn Cherry Ave and Citrus Ave                       | 36,000         | 13,811                 | 0.384                    | A   |
| Jurupa St btwn Cherry Ave and Citrus Ave                        | 45,000         | 19,584                 | 0.435                    | A   |
| Beech Ave btwn Slover Ave and Jurupa St                         | 12,000         | 5,270                  | 0.439                    | A   |
| Valley Blvd btwn Beech Ave and Citrus Ave                       | 36,000         | 13,226                 | 0.367                    | A   |
| Citrus Ave btwn San Bernardino Ave and I-10 WB Ramps            | 36,000         | 19,888                 | 0.552                    | A   |
| Citrus Ave btwn I-10 EB Ramps and Santa Ana Ave                 | 12,000         | 9,756                  | 0.813                    | D   |
| Citrus Ave btwn Santa Ana Ave and Jurupa St                     | 12,000         | 8,306                  | 0.692                    | B   |
| Valley Blvd btwn Citrus Ave and Sierra Ave                      | 36,000         | 12,684                 | 0.352                    | A   |
| Slover Ave btwn Citrus Ave and Sierra Ave                       | 36,000         | 13,856                 | 0.385                    | A   |
| Jurupa St btwn Citrus Ave and Sierra Ave                        | 45,000         | 15,013                 | 0.334                    | A   |
| Sierra Ave btwn Slover Ave and Jurupa St                        | 54,000         | 26,853                 | 0.497                    | A   |
| Sierra Ave btwn Jurupa St and Armstrong Rd                      | 36,000         | 24,796                 | 0.689                    | B   |
| Armstrong Rd btwn Sierra Ave and SR-60 WB Ramps                 | 36,000         | 23,784                 | 0.661                    | B   |

**Note:** EB = eastbound; WB = westbound; btwn = between.

As shown in Table 13, the study roadway segments are forecast to operate at an acceptable LOS according to agency performance criteria for forecast year 2030 without project conditions.

### **Forecast Year 2030 Without Project Conditions Study Intersection LOS**

Table 14 summarizes forecast year 2030 without project conditions a.m. peak hour and p.m. peak hour study intersection LOS; detailed LOS analysis sheets are contained in Appendix B.



**Table 14**  
**Forecast Year 2030 Without Project Conditions**  
**AM & PM Peak Hour Intersection LOS**

| Study Intersection                                    | AM Peak Hour | PM Peak Hour     |
|-------------------------------------------------------|--------------|------------------|
|                                                       | Delay – LOS  | Delay – LOS      |
| 1 – I-15 SB Ramps/Jurupa St                           | 23.9 – C     | 30.5 – C         |
| 2 – I-15 NB Ramps/Jurupa St                           | 22.1 – C     | 39.8 – D         |
| 3 – Etiwanda Ave/San Bernardino Ave                   | 24.7 – C     | 28.4 – C         |
| 4 – Etiwanda Ave/I-10 WB Ramps                        | 19.8 – B     | 10.8 – B         |
| 5 – Etiwanda Ave/I-10 EB Ramps                        | 25.2 – C     | 13.9 – B         |
| 6 – Etiwanda Ave/East Airport Dr-Slover Ave           | 42.6 – D     | <b>111.5 – F</b> |
| 7 – Etiwanda Ave/Jurupa St                            | 29.3 – C     | 36.9 – D         |
| 8 – Etiwanda Ave/Marlay Ave                           | 16.2 – B     | 15.1 – B         |
| 9 – Etiwanda Ave/Philadelphia Ave                     | 12.4 – B     | 13.3 – B         |
| 10 – Etiwanda Ave/SR-60 WB Off-Ramp                   | 16.1 – B     | 13.7 – B         |
| 11 – Etiwanda Ave/SR-60 EB On-Ramp                    | 15.4 – C     | 16.6 – C         |
| 12 – Commerce Dr-I-10 WB Ramps/Valley Blvd            | 25.0 – C     | 39.5 – D         |
| 13 – Mulberry Ave/Slover Ave                          | 21.3 – C     | 20.3 – C         |
| 14 – Mulberry Ave/Santa Ana Ave                       | 19.0 – B     | 18.0 – B         |
| 15 – Mulberry Ave/Jurupa St                           | 29.4 – C     | <b>65.9 – E</b>  |
| 16 – Mulberry Ave/Marlay Ave                          | 18.3 – B     | 21.9 – C         |
| 17 – Mulberry Ave-Country Village Rd/Philadelphia Ave | 9.6 – A      | 8.4 – A          |
| 18 – Country Village Rd/SR-60 WB Ramps                | 33.9 – C     | 30.1 – C         |
| 19 – Country Village Rd/SR-60 EB Ramps                | 26.8 – C     | 47.9 – D         |
| 20 – Banana Ave/San Bernardino Ave                    | 10.2 – B     | 13.6 – B         |
| 21 – Banana Ave/Valley Blvd                           | 26.2 – D     | <b>99.7 – F</b>  |
| 22 – Cherry Ave/San Bernardino Ave                    | 24.9 – C     | 28.5 – C         |
| 23 – Cherry Ave/Valley Blvd                           | 35.4 – D     | 40.9 – D         |
| 24 – Cherry Ave/I-10 WB Ramps                         | N/A          | N/A              |
| 25 – Cherry Ave/I-10 EB Ramps                         | N/A          | N/A              |
| 26 – Cherry Ave/Slover Ave                            | 37.1 – D     | 34.4 – C         |
| 27 – Cherry Ave/Santa Ana Ave                         | 20.7 – C     | 13.6 – B         |
| 28 – Cherry Ave/Jurupa St                             | 31.6 – C     | 27.0 – C         |
| 29 – Fontana Ave/Valley Blvd                          | 43.6 – D     | 39.3 – D         |
| 30 – Beech Ave/Valley Blvd                            | 21.2 – C     | <b>102.7 – F</b> |
| 31 – Beech Ave/Slover Ave                             | 14.2 – B     | 17.4 – C         |
| 32 – Beech Ave/Santa Ana Ave                          | 10.1 – B     | 11.1 – B         |

**Table 14 (Continued)**  
**Forecast Year 2030 Without Project Conditions**  
**AM & PM Peak Hour Intersection LOS**

| Study Intersection               | AM Peak Hour     | PM Peak Hour         |
|----------------------------------|------------------|----------------------|
|                                  | Delay – LOS      | Delay – LOS          |
| 33 – Beech Ave/Jurupa St         | <b>59.4 – F</b>  | <b>107.7 – F</b>     |
| 34 – Citrus Ave/Valley Blvd      | <b>82.3 – F</b>  | <b>77.1 – E</b>      |
| 35 – Citrus Ave/I-10 WB Ramps    | N/A              | N/A                  |
| 36 – Citrus Ave/I-10 EB Ramps    | N/A              | N/A                  |
| 37 – Citrus Ave/Slover Ave       | 54.7 – D         | 34.4 – C             |
| 38 – Citrus Ave/Santa Ana Ave    | 16.9 – C         | 33.0 – D             |
| 39 – Citrus Ave/Jurupa St        | 29.0 – D         | <b>64.0 – F</b>      |
| 40 – Sierra Ave/Slover Ave       | 25.0 – C         | 33.0 – C             |
| 41 – Sierra Ave/Santa Ana Ave    | 21.4 – C         | 27.8 – C             |
| 42 – Sierra Ave/Jurupa St        | 29.0 – C         | 28.4 – C             |
| 43 – Armstrong Rd/Sierra Ave     | 18.0 – B         | 17.6 – B             |
| 44 – Armstrong Rd/SR-60 WB Ramps | 27.8 – C         | 27.6 – C             |
| 45 – Armstrong Rd/SR-60 EB Ramps | <b>640.2 – F</b> | <b>&gt;999.9 – F</b> |

**Note:** NB = Northbound; SB = Southbound; EB = Eastbound; WB = Westbound; delay shown in seconds per vehicle; deficient intersection operation shown in **bold**. N/A = Not applicable, since analysis of these intersections is addressed by recent Project Reports.

As shown in Table 14, the following 12 study intersections are forecast to operate at a deficient LOS (LOS E or worse) according to agency performance criteria for forecast year 2030 without project conditions:

- Etiwanda Avenue/East Airport Drive-Slover Avenue (p.m. peak hour only);
- Mulberry Avenue/Jurupa Street (p.m. peak hour only);
- Banana Avenue/Valley Boulevard (p.m. peak hour only);
- Cherry Avenue/I-10 Westbound Ramps (a.m. peak hour only);
- Cherry Avenue/I-10 Eastbound Ramps (p.m. peak hour only);
- Beech Avenue/Valley Boulevard (p.m. peak hour only);
- Beech Avenue/Jurupa Street (both a.m. and p.m. peak hours);
- Citrus Avenue/Valley Boulevard (both a.m. and p.m. peak hours);
- Citrus Avenue/I-10 Westbound Ramps (p.m. peak hour only);
- Citrus Avenue/I-10 Eastbound Ramps (p.m. peak hour only);
- Citrus Avenue/Jurupa Street (p.m. peak hour only); and
- Armstrong Road/SR-60 Eastbound Ramps (both a.m. and p.m. peak hours).

## **FORECAST YEAR 2030 WITH PROJECT CONDITIONS**

### **Forecast Year 2030 With Project Conditions Traffic Volumes**

Forecast year 2030 with project conditions traffic volumes are derived by adding trips forecast to be generated by the proposed project to forecast year 2030 without project conditions traffic volumes.

Exhibit 33 shows forecast year 2030 with project conditions roadway segment ADT volumes. Exhibits 34 through 36 show forecast year 2030 with project conditions PCE-adjusted a.m. peak hour and p.m. peak hour volumes at the study intersection.

### **Forecast Year 2030 With Project Conditions Roadway Segment LOS**

Table 15 summarizes forecast year 2030 with project conditions roadway segment ADT volumes and corresponding LOS.



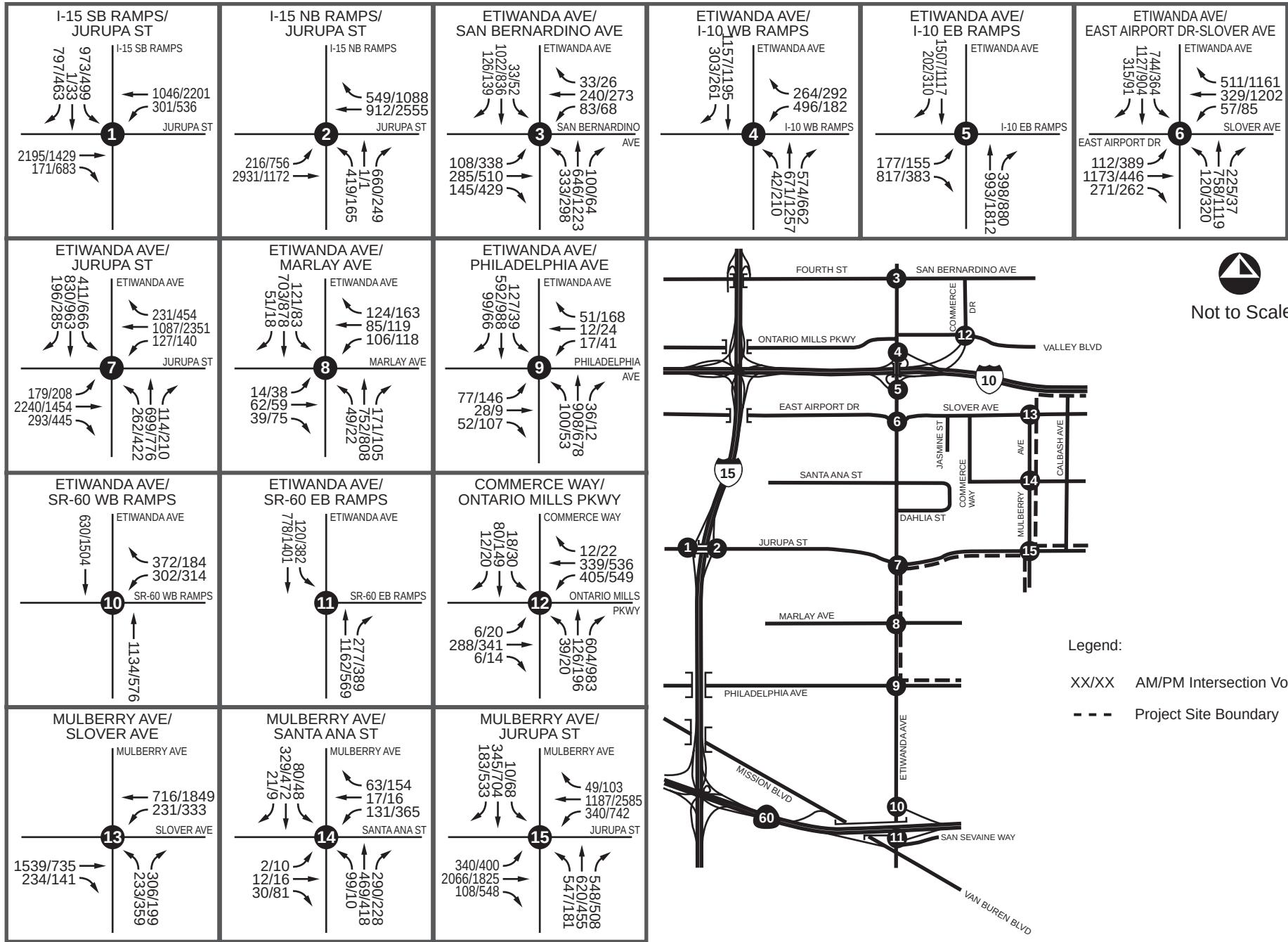
Not to Scale

Legend:

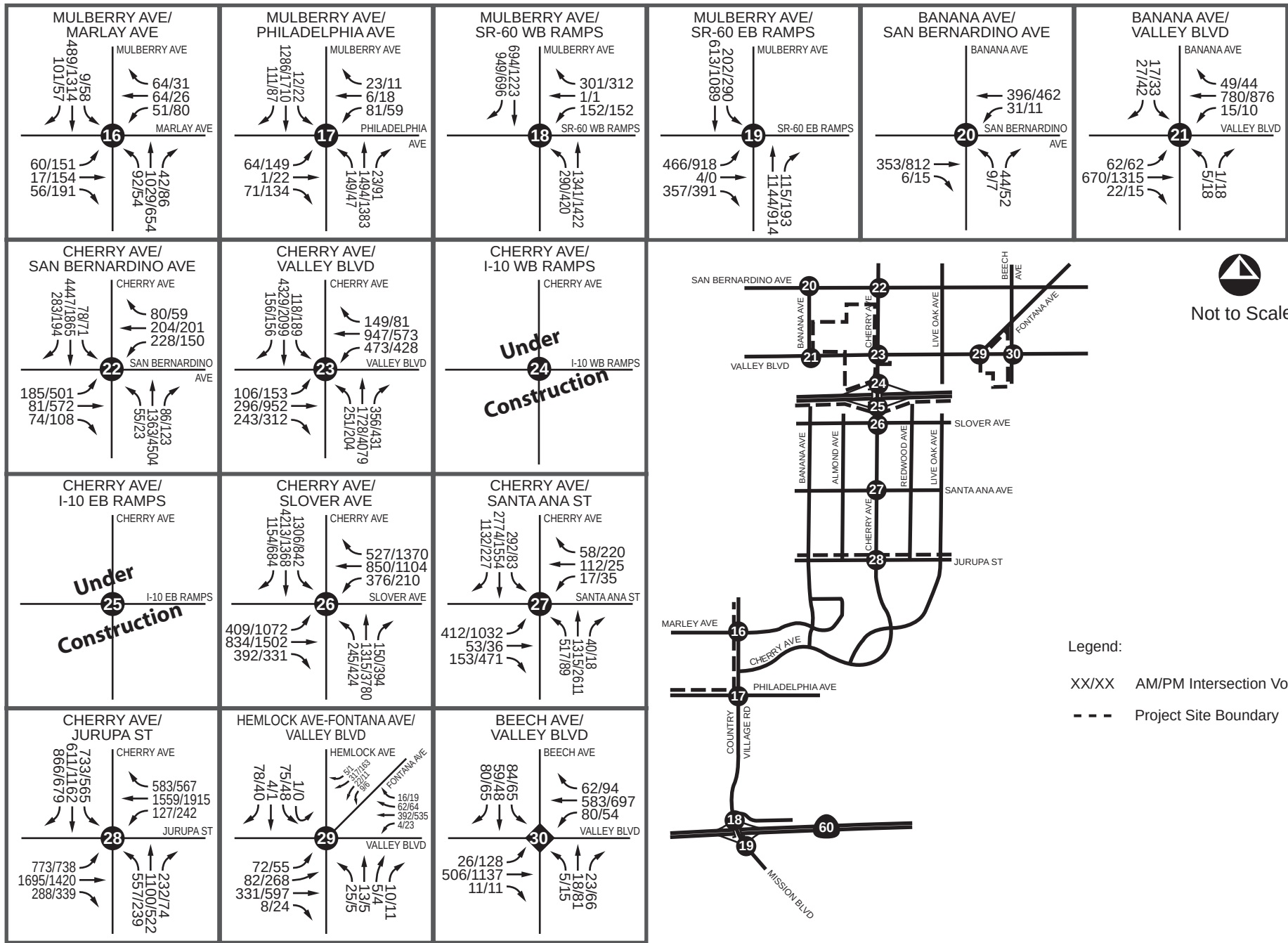
XX,XXX Roadway Segment ADT

### Forecast Year 2030 With Project Conditions Roadway Segment ADT

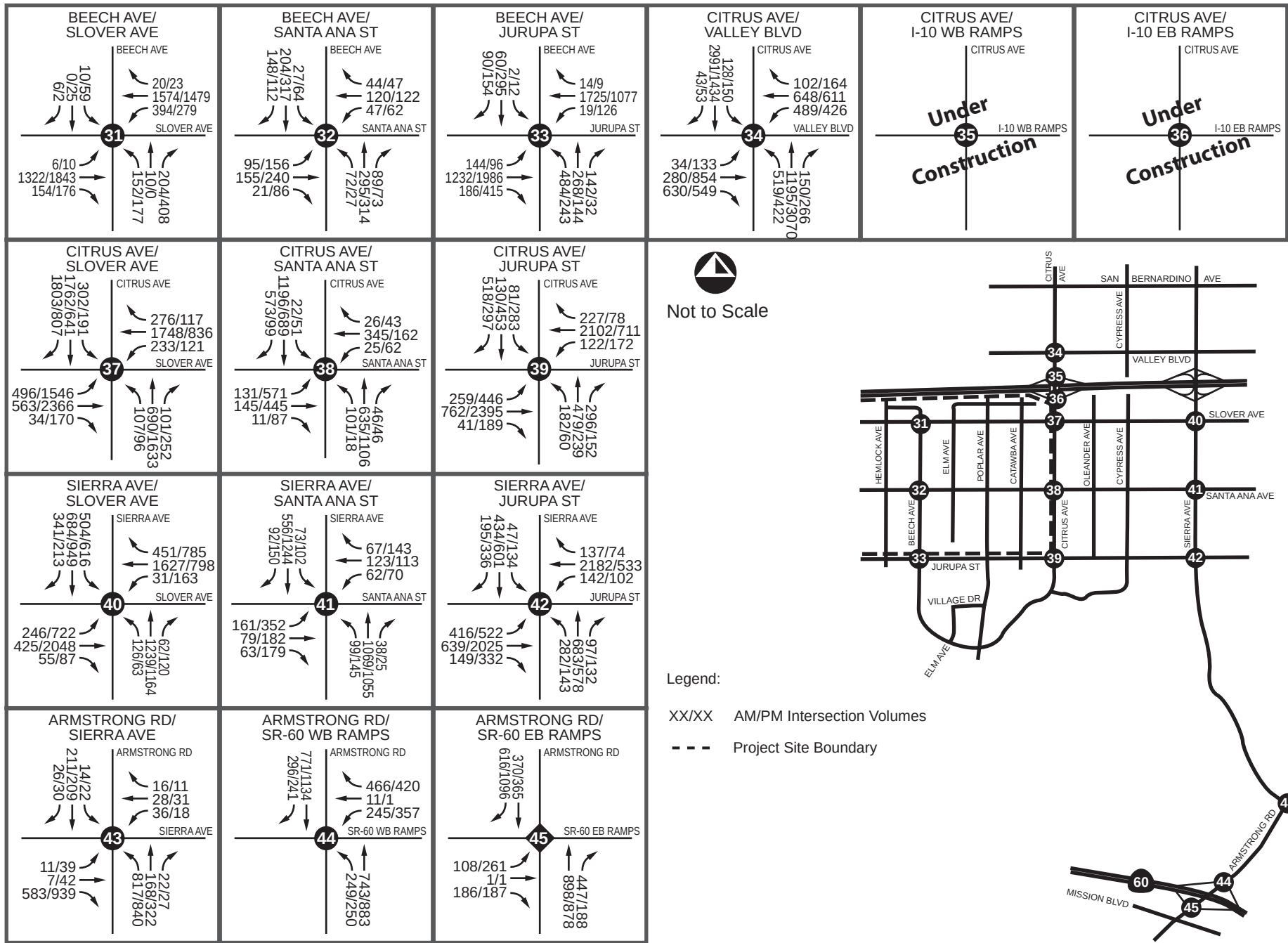
Exhibit 33



## Area 1 - Forecast Year 2030 With Project Conditions PCE-Adjusted AM/PM Peak Hour Intersection Volumes



## Area 2 - Forecast Year 2030 With Project Conditions PCE-Adjusted AM/PM Peak Hour Intersection Volumes



## Area 3 - Forecast Year 2030 With Project Conditions PCE-Adjusted AM/PM Peak Hour Intersection Volumes

**Table 15**  
**Forecast Year 2030 With Project Conditions Roadway Segment ADT & LOS**

| Study Roadway Segment                                           | LOS E Capacity | Forecast 2030 WP ADT Volumes | Volume to Capacity Ratio | LOS      |
|-----------------------------------------------------------------|----------------|------------------------------|--------------------------|----------|
| Fourth St btwn I-15 Fwy and Etiwanda Ave                        | 33,000         | 14,746                       | 0.447                    | A        |
| East Airport Drive btwn I-15 Fwy and Etiwanda Ave               | 33,000         | 26,753                       | 0.811                    | D        |
| Jurupa St btwn I-15 Fwy and Etiwanda Ave                        | 49,000         | 48,529                       | 0.990                    | E        |
| Philadelphia Ave btwn I-15 Fwy Etiwanda Ave                     | 12,500         | 4,087                        | 0.327                    | A        |
| Etiwanda Ave btwn San Bernardino Ave and I-10 WB Ramps          | 33,000         | 24,950                       | 0.756                    | C        |
| Etiwanda Ave btwn I-10 EB Ramps and Jurupa St                   | 33,000         | 31,415                       | 0.952                    | E        |
| Etiwanda Ave btwn Jurupa St and Philadelphia Ave                | 41,000         | 20,327                       | 0.496                    | A        |
| Etiwanda Ave btwn Philadelphia Ave and SR-60 WB Ramps           | 36,000         | 24,079                       | 0.669                    | B        |
| Slover Ave btwn Etiwanda Ave and Mulberry Ave                   | 36,000         | 29,999                       | 0.833                    | D        |
| Jurupa St btwn Etiwanda Ave and Mulberry Ave                    | 36,000         | 39,560                       | <b>1.099</b>             | <b>F</b> |
| Philadelphia Ave btwn Etiwanda Ave and Mulberry-Country Village | 12,000         | 3,601                        | 0.300                    | A        |
| San Bernardino Ave btwn Etiwanda Ave and Cherry Ave             | 36,000         | 13,554                       | 0.377                    | A        |
| Valley Blvd btwn Commerce Drive and Cherry Ave                  | 36,000         | 19,571                       | 0.544                    | A        |
| Mulberry Ave btwn Slover Ave and Jurupa Ave                     | 12,000         | 13,276                       | <b>1.106</b>             | <b>F</b> |
| Mulberry Ave btwn Jurupa St and Philadelphia Ave                | 36,000         | 21,389                       | 0.594                    | A        |
| Country Village Rd btwn Philadelphia Ave and SR-60 WB Ramps     | 36,000         | 36,194                       | <b>1.005</b>             | <b>F</b> |
| Slover Ave btwn Mulberry Ave and Cherry Ave                     | 36,000         | 25,881                       | 0.719                    | C        |
| Jurupa St btwn Mulberry Ave and Cherry Ave                      | 36,000         | 39,816                       | <b>1.106</b>             | <b>F</b> |
| Cherry Ave btwn San Bernardino Ave and I-10 WB Ramps            | 54,000         | 64,194                       | <b>1.189</b>             | <b>F</b> |
| Cherry Ave btwn I-10 EB Ramps and Jurupa St                     | 54,000         | 58,034                       | <b>1.075</b>             | <b>F</b> |
| San Bernardino Ave btwn Cherry Ave and Fontana Ave              | 12,000         | 9,941                        | 0.828                    | D        |
| Valley Blvd btwn Cherry Ave and Beech Ave                       | 36,000         | 17,559                       | 0.488                    | A        |
| Slover Ave btwn Cherry Ave and Citrus Ave                       | 36,000         | 29,903                       | 0.831                    | D        |
| Jurupa St btwn Cherry Ave and Citrus Ave                        | 45,000         | 45,211                       | <b>1.005</b>             | <b>F</b> |
| Beech Ave btwn Slover Ave and Jurupa St                         | 12,000         | 10,171                       | 0.848                    | D        |
| Valley Blvd btwn Beech Ave and Citrus Ave                       | 36,000         | 18,442                       | 0.512                    | A        |
| Citrus Ave btwn San Bernardino Ave and I-10 WB Ramps            | 36,000         | 43,006                       | <b>1.195</b>             | <b>F</b> |
| Citrus Ave btwn I-10 EB Ramps and Santa Ana Ave                 | 12,000         | 26,141                       | <b>2.178</b>             | <b>F</b> |
| Citrus Ave btwn Santa Ana Ave and Jurupa St                     | 12,000         | 18,483                       | <b>1.540</b>             | <b>F</b> |
| Valley Blvd btwn Citrus Ave and Sierra Ave                      | 36,000         | 14,950                       | 0.415                    | A        |
| Slover Ave btwn Citrus Ave and Sierra Ave                       | 36,000         | 32,272                       | 0.896                    | D        |
| Jurupa St btwn Citrus Ave and Sierra Ave                        | 45,000         | 34,009                       | 0.756                    | C        |
| Sierra Ave btwn Slover Ave and Jurupa St                        | 54,000         | 25,853                       | 0.497                    | A        |
| Sierra Ave btwn Jurupa St and Armstrong Rd                      | 36,000         | 25,820                       | 0.717                    | C        |
| Armstrong Rd btwn Sierra Ave and SR-60 WB Ramps                 | 36,000         | 24,808                       | 0.689                    | B        |

**Note:** EB = eastbound; WB = westbound; btwn = between.



As shown in Table 15, the following ten study roadway segments are forecast to operate at a deficient LOS according to agency performance criteria for forecast year 2030 with project conditions:

- Jurupa Street between Etiwanda Avenue and Mulberry Avenue;
- Mulberry Avenue between Slover Avenue and Jurupa Avenue;
- Country Village Road between Philadelphia Avenue and SR-60 Westbound Ramps;
- Jurupa Street between Mulberry Avenue and Cherry Avenue;
- Cherry Avenue between San Bernardino Avenue and I-10 Eastbound Ramps;
- Cherry Avenue between I-10 Eastbound Ramps and Jurupa Street;
- Jurupa Street between Cherry Avenue and Citrus Avenue;
- Citrus Avenue between San Bernardino Avenue and I-10 Westbound Ramps;
- Citrus Avenue between I-10 Eastbound Ramps and Santa Ana Avenue; and
- Citrus Avenue between Santa Ana Avenue and Jurupa Street.

Note two roadway segments are forecast to operate at LOS E, which are located in the City of Ontario, where LOS E satisfies acceptable operations. It is worth noting, high forecast traffic volumes on Cherry Avenue and Citrus Avenue in the vicinity of Interstate 10 are related to the lack of parallel north-south roadways such as Mulberry Avenue and Beech Avenue, which are identified as future crossings of I-10 in the City of Fontana Circulation Master Plan. Since the collection of baseline traffic data for this analysis, the Cypress Avenue overcrossing has been constructed provides vehicular connectivity between Slover Avenue and Valley Boulevard over I-10.

#### **Forecast Year 2030 With Project Conditions Study Intersection LOS**

Table 16 summarizes forecast year 2030 with project conditions a.m. peak hour and p.m. peak hour study intersection LOS; detailed LOS analysis sheets are contained in Appendix B.

**Table 16**  
**Forecast Year 2030 With Project Conditions AM & PM Peak Hour Intersection LOS**

| Study Intersection                                    | Forecast Year 2030 Without Project Conditions |                  | Forecast Year 2030 With Project Conditions |                      |
|-------------------------------------------------------|-----------------------------------------------|------------------|--------------------------------------------|----------------------|
|                                                       | AM Peak Hour                                  | PM Peak Hour     | AM Peak Hour                               | PM Peak Hour         |
|                                                       | Delay – LOS                                   | Delay – LOS      | Delay – LOS                                | Delay – LOS          |
| 1 – I-15 SB Ramps/Jurupa St                           | 23.9 – C                                      | 30.5 – C         | <b>60.9 – E</b>                            | 27.0 – C             |
| 2 – I-15 NB Ramps/Jurupa St                           | 22.1 – C                                      | 39.8 – D         | 30.4 – C                                   | 34.6 – C             |
| 3 – Etiwanda Ave/San Bernardino Ave                   | 24.7 – C                                      | 28.4 – C         | 24.4 – C                                   | 29.1 – C             |
| 4 – Etiwanda Ave/I-10 WB Ramps                        | 19.8 – B                                      | 10.8 – B         | 19.1 – B                                   | 9.7 – A              |
| 5 – Etiwanda Ave/I-10 EB Ramps                        | 25.2 – C                                      | 13.9 – B         | 40.9 – D                                   | 15.7 – B             |
| 6 – Etiwanda Ave/East Airport Dr-Slover Ave           | 42.6 – D                                      | <b>111.5 – F</b> | <b>128.8 – F</b>                           | <b>278.4 – F</b>     |
| 7 – Etiwanda Ave/Jurupa St                            | 29.3 – C                                      | 36.9 – D         | <b>86.4 – F</b>                            | <b>129.5 – F</b>     |
| 8 – Etiwanda Ave/Marlay Ave                           | 16.2 – B                                      | 15.1 – B         | 16.6 – B                                   | 15.7 – B             |
| 9 – Etiwanda Ave/Philadelphia Ave                     | 12.4 – B                                      | 13.3 – B         | 15.3 – B                                   | 16.3 – B             |
| 10 – Etiwanda Ave/SR-60 WB Off-Ramp                   | 16.1 – B                                      | 13.7 – B         | 16.1 – B                                   | 13.7 – B             |
| 11 – Etiwanda Ave/SR-60 EB On-Ramp                    | 15.4 – C                                      | 16.6 – C         | 16.2 – C                                   | 17.0 – C             |
| 12 – Commerce Dr-I-10 WB Ramps/Valley Blvd            | 25.0 – C                                      | 39.5 – D         | 27.4 – C                                   | 42.2 – D             |
| 13 – Mulberry Ave/Slover Ave                          | 21.3 – C                                      | 20.3 – C         | 22.0 – C                                   | 22.8 – C             |
| 14 – Mulberry Ave/Santa Ana Ave                       | 19.0 – B                                      | 18.0 – B         | 19.0 – B                                   | 23.5 – C             |
| 15 – Mulberry Ave/Jurupa St                           | 29.4 – C                                      | <b>65.9 – E</b>  | <b>103.6 – F</b>                           | <b>216.6 – F</b>     |
| 16 – Mulberry Ave/Marlay Ave                          | 18.3 – B                                      | 21.9 – C         | 14.4 – B                                   | 20.2 – C             |
| 17 – Mulberry Ave-Country Village Rd/Philadelphia Ave | 9.6 – A                                       | 8.4 – A          | 9.9 – A                                    | 10.6 – B             |
| 18 – Country Village Rd/SR-60 WB Ramps                | 33.9 – C                                      | 30.1 – C         | 30.2 – C                                   | 54.4 – D             |
| 19 – Country Village Rd/SR-60 EB Ramps                | 26.8 – C                                      | 47.9 – D         | 32.3 – C                                   | 52.6 – D             |
| 20 – Banana Ave/San Bernardino Ave                    | 10.2 – B                                      | 13.6 – B         | 10.5 – B                                   | 13.8 – B             |
| 21 – Banana Ave/Valley Blvd                           | 26.2 – D                                      | <b>99.7 – F</b>  | 33.6 – D                                   | <b>154.1 – F</b>     |
| 22 – Cherry Ave/San Bernardino Ave                    | 24.9 – C                                      | 28.5 – C         | <b>117.5 – F</b>                           | <b>191.4 – F</b>     |
| 23 – Cherry Ave/Valley Blvd                           | 35.4 – D                                      | 40.9 – D         | 349.9 – C                                  | <b>341.0 – F</b>     |
| 24 – Cherry Ave/I-10 WB Ramps                         | N/A                                           | N/A              | N/A                                        | N/A                  |
| 25 – Cherry Ave/I-10 EB Ramps                         | N/A                                           | N/A              | N/A                                        | N/A                  |
| 26 – Cherry Ave/Slover Ave                            | 37.1 – D                                      | 34.4 – C         | <b>575.1 – F</b>                           | <b>693.0 – F</b>     |
| 27 – Cherry Ave/Santa Ana Ave                         | 20.7 – C                                      | 13.6 – B         | <b>180.5 – F</b>                           | <b>120.4 – F</b>     |
| 28 – Cherry Ave/Jurupa St                             | 31.6 – C                                      | 27.0 – C         | 164.7 – C                                  | <b>132.6 – F</b>     |
| 29 – Fontana Ave/Valley Blvd                          | 43.6 – D                                      | 39.3 – D         | 45.7 – D                                   | 42.8 – D             |
| 30 – Beech Ave/Valley Blvd                            | 21.2 – C                                      | <b>102.7 – F</b> | <b>128.2 – F</b>                           | <b>&gt;999.9 – F</b> |
| 31 – Beech Ave/Slover Ave                             | 14.2 – B                                      | 17.4 – C         | <b>284.0 – F</b>                           | <b>470.9 – F</b>     |

**Table 16 (Continued)**  
**Forecast Year 2030 With Project Conditions AM & PM Peak Hour Intersection LOS**

| Study Intersection               | Forecast Year 2030 Without Project Conditions |                      | Forecast Year 2030 With Project Conditions |                      |
|----------------------------------|-----------------------------------------------|----------------------|--------------------------------------------|----------------------|
|                                  | AM Peak Hour                                  | PM Peak Hour         | AM Peak Hour                               | PM Peak Hour         |
|                                  | Delay – LOS                                   | Delay – LOS          | Delay – LOS                                | Delay – LOS          |
| 32 – Beech Ave/Santa Ana Ave     | 10.1 – B                                      | 11.1 – B             | 15.3 – C                                   | 25.8 – D             |
| 33 – Beech Ave/Jurupa St         | <b>59.4 – F</b>                               | <b>107.7 – F</b>     | <b>802.1 – F</b>                           | <b>862.1 – F</b>     |
| 34 – Citrus Ave/Valley Blvd      | <b>82.3 – F</b>                               | <b>77.1 – E</b>      | <b>305.8 – F</b>                           | <b>296.1 – F</b>     |
| 35 – Citrus Ave/I-10 WB Ramps    | N/A                                           | N/A                  | N/A                                        | N/A                  |
| 36 – Citrus Ave/I-10 EB Ramps    | N/A                                           | N/A                  | N/A                                        | N/A                  |
| 37 – Citrus Ave/Slover Ave       | 54.7 – D                                      | 34.4 – C             | <b>464.2 – F</b>                           | <b>522.3 – F</b>     |
| 38 – Citrus Ave/Santa Ana Ave    | 16.9 – C                                      | 33.0 – D             | <b>964.8 – F</b>                           | <b>683.6 – F</b>     |
| 39 – Citrus Ave/Jurupa St        | 29.0 – D                                      | <b>64.0 – F</b>      | <b>801.8 – F</b>                           | <b>624.2 – F</b>     |
| 40 – Sierra Ave/Slover Ave       | 25.0 – C                                      | 33.0 – C             | <b>63.1 – E</b>                            | <b>87.9 – F</b>      |
| 41 – Sierra Ave/Santa Ana Ave    | 21.4 – C                                      | 27.8 – C             | 21.4 – C                                   | 27.8 – C             |
| 42 – Sierra Ave/Jurupa St        | 29.0 – C                                      | 28.4 – C             | <b>112.1 – F</b>                           | <b>79.4 – E</b>      |
| 43 – Armstrong Rd/Sierra Ave     | 18.0 – B                                      | 17.6 – B             | 17.4 – B                                   | 17.5 – B             |
| 44 – Armstrong Rd/SR-60 WB Ramps | 27.8 – C                                      | 27.6 – C             | 27.4 – C                                   | 29.0 – C             |
| 45 – Armstrong Rd/SR-60 EB Ramps | <b>640.2 – F</b>                              | <b>&gt;999.9 – F</b> | <b>959.3 – F</b>                           | <b>&gt;999.9 – F</b> |

**Note:** NB = Northbound; SB = Southbound; EB = Eastbound; WB = Westbound; delay shown in seconds per vehicle; deficient intersection operation shown in **bold**. N/A = Not applicable, since analysis of these intersections is addressed by recent Project Reports.

As shown in Table 16, with the addition of project-generated trips, the following 19 study intersections are forecast to continue to operate at a deficient LOS (LOS E or worse) according to agency performance criteria for forecast year 2030 with project conditions:

- Etiwanda Avenue/East Airport Drive-Slover Avenue (both a.m. and p.m. peak hours);
- Etiwanda Avenue/Jurupa Street (both a.m. and p.m. peak hours);
- Mulberry Avenue/Jurupa Street (both a.m. and p.m. peak hours);
- Banana Avenue/Valley Boulevard (p.m. peak hour only);
- Cherry Avenue/San Bernardino Avenue (both a.m. and p.m. peak hours);
- Cherry Avenue/Valley Boulevard (p.m. peak hour only);
- Cherry Avenue/Slover Avenue (both a.m. and p.m. peak hours);
- Cherry Avenue/Santa Ana Avenue (both a.m. and p.m. peak hours);
- Cherry Avenue/Jurupa Street (p.m. peak hour only);
- Beech Avenue/Valley Boulevard (both a.m. and p.m. peak hours);

- Beech Avenue/Slover Avenue (both a.m. and p.m. peak hours);
- Beech Avenue/Jurupa Street (both a.m. and p.m. peak hours);
- Citrus Avenue/Valley Boulevard (both a.m. and p.m. peak hours);
- Citrus Avenue/Slover Avenue (both a.m. and p.m. peak hours);
- Citrus Avenue/Santa Ana Avenue (both a.m. and p.m. peak hours);
- Citrus Avenue/Jurupa Street (both a.m. and p.m. peak hours);
- Sierra Avenue/Slover Avenue (both a.m. and p.m. peak hours);
- Sierra Avenue/Jurupa Street (both a.m. and p.m. peak hours); and
- Armstrong Road/SR-60 Eastbound Ramps (both a.m. and p.m. peak hours).

Since the collection of baseline traffic data for this analysis, the Sierra Avenue/Jurupa Street intersection has been improved to accommodate forecast year 2030 with project conditions traffic volumes.

### **Forecast Year 2030 With Project Conditions Recommended Improvements**

Improvements have been identified to provide acceptable operations at the study segments and study intersections. Some improvements may already be included in funding programs, such as the City of Fontana 7-Year Capital Improvement Program (CIP). The 7-Year CIP serves as a planning tool which coordinates financing and scheduling of major infrastructure projects within the City. Projects not already included in a fee program with financing and scheduling identified will require project and funding approvals to incorporate in City planning the improvement implementation.

The following improvements are identified to achieve acceptable operations at the deficient roadway segments for forecast year 2030 with project conditions:

- |                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Improvement No. 30</b> | <b>Mulberry Avenue</b> – Consistent with City of Fontana Circulation Master Plan, construct Mulberry Avenue connection from Slover Avenue to Valley Boulevard over I-10 freeway. This improvement is identified to provide additional north-south capacity, reducing forecast traffic on Etiwanda Avenue and Cherry Avenue. <i>[Identical to Improvement Number 1.]</i>                                                                                               |
| <b>Improvement No. 31</b> | <b>Beech Avenue</b> – Consistent with City of Fontana Circulation Master Plan, construct Beech Avenue from Slover Avenue to Valley Boulevard including an interchange with I-10. This improvement is consistent with City of Fontana Circulation Master Plan. This improvement is identified to provide additional north-south capacity and freeway access, reducing forecast traffic on Cherry Avenue and Citrus Avenue. <i>[Identical to Improvement Number 2.]</i> |
| <b>Improvement No. 32</b> | <b>Cypress Avenue</b> – Consistent with City of Fontana Circulation Master Plan, construct Cypress Avenue from Slover Avenue to Valley Boulevard over I-10 freeway. This improvement is consistent with City of Fontana Circulation Master Plan. This                                                                                                                                                                                                                 |

improvement is identified to provide additional north-south capacity, reducing forecast traffic on Cherry Avenue and Citrus Avenue. This improvement has recently been implemented by the City of Fontana providing the overcrossing connecting Cypress Avenue between Slover Avenue to Valley Boulevard over I-10.

- Improvement No. 33**      **Jurupa Street between Etiwanda Avenue and Mulberry Avenue** – Consistent with the City of Fontana Circulation Master Plan, widen the study roadway segment from a 4-lane divided roadway segment to a 6-lane divided roadway segment. This improvement is included in the City of Fontana 7-year CIP, but is not yet fully funded. *[Identical to Improvement Number 3.]*
- Improvement No. 34**      **Mulberry Avenue between Slover Avenue and Jurupa Street** – Consistent with the City of Fontana Circulation Master Plan, widen the study roadway segment from a 2-lane undivided roadway segment to a 4-lane undivided roadway segment. *[Identical to Improvement Number 4.]*
- Improvement No. 35**      **Country Village Road between Philadelphia Avenue and SR-60 Westbound Ramps** – Consistent with the County of Riverside Circulation Master Plan, widen the study roadway segment from a 4-lane undivided roadway segment to a 6-lane divided roadway segment. Since this improvement is within the jurisdiction of the recently incorporated City of Jurupa Valley, implementation by the City of Fontana cannot be assured. Therefore, this improvement should be included in the planning and collection of fees and coordination with the appropriate lead agency is needed to help administer the improvement.
- Improvement No. 36**      **Jurupa Street between Mulberry Avenue and Cherry Avenue** – Consistent with the City of Fontana Circulation Master Plan, widen the study roadway segment from a 4-lane divided roadway to a 6-lane divided roadway. This improvement is included in the City of Fontana 7-year CIP, but is not yet fully funded. *[Identical to Improvement Number 5.]*
- Improvement No. 37**      **San Bernardino Avenue between Cherry Avenue and Fontana Avenue** – Consistent with the City of Fontana Circulation Master Plan, widen the study roadway segment from a 2-lane divided roadway to a 4-lane divided roadway. Since this improvement is within the jurisdiction of the County of San Bernardino, implementation by the City of Fontana cannot be assured. Therefore, this improvement should be included in the planning and collection of fees and coordination with the appropriate lead agency is needed to help administer the improvement.
- Improvement No. 38**      **Jurupa Street between Cherry Avenue and Citrus Avenue** – Consistent with the City of Fontana Circulation Master Plan, widen the study roadway segment from a 5-lane divided roadway to a 6-lane divided roadway. A portion of this improvement has recently

been implemented by the City of Fontana providing the capacity for a 6-lane roadway between Poplar Avenue and Citrus Avenue.

- Improvement No. 39**      **Beech Avenue between Slover Avenue and Jurupa Street** – Consistent with the City of Fontana Circulation Master Plan, widen the study roadway segment from a 2-lane divided roadway to a 4-lane divided roadway. *[Identical to Improvement Number 6.]*
- Improvement No. 40**      **Citrus Avenue between I-10 Eastbound Ramps and Santa Ana Avenue** – Consistent with the City of Fontana Circulation Master Plan, widen the study roadway segment from a 2-lane undivided roadway segment to a 4-lane undivided roadway segment. *[Identical to Improvement Number 7.]*
- Improvement No. 41**      **Citrus Avenue between Santa Ana Avenue and Jurupa Street** – Consistent with the City of Fontana Circulation Master Plan, widen the study roadway segment from a 2-lane undivided roadway segment to a 4-lane undivided roadway segment. *[Identical to Improvement Number 8.]*
- Improvement No. 42**      **Jurupa Street between Citrus Avenue and Sierra Avenue** – Consistent with the City of Fontana Circulation Master Plan, widen the study roadway segment from a 5-lane divided roadway to a 6-lane divided roadway. This improvement has recently been implemented by the City of Fontana providing the capacity for a 6-lane roadway between Citrus Avenue and Sierra Avenue.

The following improvements are identified to achieve acceptable operations at the affected study intersections for forecast year 2030 with project conditions assuming implementation of the identified roadway segment improvements:

- Improvement No. 43**      **I-15 Southbound Ramps/Jurupa Street** – Widen the southbound I-15 Southbound Off-Ramp from one left-turn lane, one shared left-turn/through/right-turn lane, and one right-turn lane to consist of two left-turn lanes, one through lane, and one right-turn lane.
- Improvement No. 44**      **Etiwanda Avenue/San Bernardino Avenue** – Widen the northbound Etiwanda Avenue approach from two left-turn lanes, two through lanes, and one right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane. Widen the westbound San Bernardino Avenue approach from two left-turn lanes, one through lane, and one shared through/right-turn lane to consist of two left-turn lanes, two through lanes, and two right-turn lanes. Additionally, modify the westbound San Bernardino Avenue signal phasing to include a westbound right-turn overlap, which will preclude U-turn movement from southbound to northbound Etiwanda Avenue. *(This recommended improvement is consistent with Improvement No. 9.)*

- Improvement No. 45**      **Etiwanda Avenue/East Airport Drive-Slover Avenue** – Widen the northbound Etiwanda Avenue approach from one left-turn lane, one through lane, and one shared through/right-turn lane to consist of two left-turn lanes, two through lanes, and one shared through/right-turn lane. Widen the southbound Etiwanda Avenue approach from one left-turn lane, one through lane, and one shared through/right-turn lane to consist of two left-turn lanes, one through lane, and one shared through/right-turn lane. Widen the eastbound East Airport Drive approach from one left-turn lane, one through lane, and one shared through/right-turn lane to consist of two left-turn lanes, one through lane, and one shared through/right-turn lane. Widen the westbound Slover Avenue approach from one left-turn lane, one through lane, and one shared through/right-turn lane to consist of one left-turn lane, two through lanes, and two right-turn lanes. *(This recommended improvement is consistent with Improvement No. 10.)*
- Improvement No. 46**      **Etiwanda Avenue/Jurupa Street** – Widen the eastbound Jurupa Street approach from two left-turn lanes, two through lanes, and one right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane. Widen the westbound Jurupa Street approach from two left-turn lanes, two through lanes, and one right-turn lane to consist of two left-turn lanes, four through lanes, and one right-turn lane. *(This recommended improvement is consistent with Improvement No. 11.)*
- Improvement No. 47**      **Commerce Way/Ontario Mills Parkway** – Widen the northbound Commerce Way approach from two left-turn lanes, one through lane, and one right-turn lane.
- Improvement No. 48**      **Mulberry Avenue/Slover Avenue** – In concert with construction of the extension of Mulberry Avenue north of Slover Avenue, widen the northbound Mulberry Avenue approach from one left-turn lane and one right-turn lane to consist of one left-turn lane, two through lanes, and one right-turn lane. Construct and stripe the southbound Mulberry Avenue approach to consist of one left-turn lane, three through lanes, and one right-turn lane. Widen the eastbound Slover Avenue approach from two through lanes and one shared through/right-turn lane to consist of one left-turn lane, three through lanes, and one right-turn lane. Widen the westbound Slover Avenue approach from one left-turn lane and two through lanes to consist of one left-turn lane, three through lanes, and one right-turn lane. Additionally, modify the signal phasing to consist of protected left-turn phasing. *(This recommended improvement is consistent with Improvement No. 12.)*
- Improvement No. 49**      **Mulberry Avenue/Santa Ana Avenue** – Widen the northbound Mulberry Avenue approach from one left-turn lane, one through lane, and one right-turn lane to consist of one left-turn lane, two through lanes, and one right-turn lane. Re-stripe the eastbound

Santa Ana Avenue approach from one shared left-turn/through lane and one right-turn lane to consist of one left-turn lane and one shared through/right-turn lane. Widen the westbound Santa Ana Avenue approach from one shared left-turn/through/right-turn lane to consist of one left-turn lane, one through lane, and one shared through/right-turn lane. Additionally, modify the east-west signal phasing from permitted left-turns to protected left-turns. *(This recommended improvement is identical to Improvement No. 13.)*

**Improvement No. 50**

**Mulberry Avenue/Jurupa Street** – Modify the northbound Mulberry Avenue signal phasing to include a northbound right-turn overlap, which will preclude U-turn movement from westbound to eastbound Jurupa Street. Widen the southbound Mulberry Avenue approach from one left-turn lane, two through lanes, and one right-turn lane to consist of two left-turn lanes, two through lanes, and one right-turn lane. Additionally, modify the southbound Mulberry Avenue signal phasing to include a southbound right-turn overlap, which will preclude U-turn movement from eastbound to westbound Jurupa Avenue. Widen the eastbound Jurupa Street approach from one left-turn lane, two through lanes, and one right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane. Widen the westbound Jurupa Avenue approach from one left-turn lane, two through lanes, and one right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane. *(This recommended improvement is identical to Improvement No. 14.)*

**Improvement No. 51**

**Banana Avenue/Valley Boulevard** – Signalize the Banana Avenue/Valley Boulevard intersection. According to the City of Fontana, the Banana Avenue/Valley Boulevard intersection satisfies traffic signal warrants and is in Pre-Construction. *(This improvement is identical to Improvement No. 15.)*

**Improvement No. 52**

**Cherry Avenue/San Bernardino Avenue** – Widen the eastbound San Bernardino Avenue approach from one left-turn lane, two through lanes, and one right-turn lane to consist of two left-turn lanes, two through lanes, and one right-turn lane.

**Improvement No. 53**

**Cherry Avenue/Valley Boulevard** – Widen the northbound Cherry Avenue approach from one left-turn lane, two through lanes, and one right-turn lane to consist of one left-turn lane, three through lanes, and defacto one right-turn lane. Widen the southbound Cherry Avenue approach from one left-turn lane, two through lanes, and one right-turn lane to consist of one left-turn lane, three through lanes, and one right-turn lane. Widen the westbound Valley Boulevard approach from one left-turn lane, two through lanes, and one right-turn lane to consist of two left-turn lanes, two through lanes, and one right-turn lane. *(This recommended improvement is identical to Improvement No. 16.)*



- Improvement No. 54**      **Cherry Avenue/Slover Avenue** – Widen the northbound Cherry Avenue approach from one left-turn lane, two through lanes, and one right-turn lane to consist of two left-turn lanes, five through lanes and one right-turn lane. Widen the southbound Cherry Avenue approach from one left-turn lane, one through lane, and one shared through/right-turn lane to consist of two left-turn lanes, three through lanes, and two right-turn lanes. Additionally, modify the southbound Cherry Avenue signal phasing to include a southbound right-turn overlap, which will preclude U-turn movement from eastbound to westbound Slover Avenue. Widen the eastbound Slover Avenue approach from one left-turn lane, two through lanes, and one defacto right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane. Widen the westbound Slover Avenue approach from one left-turn lane, two through lanes, and one right-turn lane to consist of one left-turn lane, three through lanes, and two right-turn lanes. Additionally, modify the westbound Slover Avenue signal phasing to include a westbound right-turn overlap, which will preclude U-turn movement from southbound to northbound Cherry Avenue. *(This recommended improvement is consistent with Improvement No. 17.)*
- Improvement No. 55**      **Cherry Avenue/Santa Ana Avenue** – Widen the southbound Cherry Avenue approach from one left-turn lane, two through lanes, and one shared through/right-turn lane to consist of one left-turn lane, three through lanes, and one right-turn lane.
- Improvement No. 56**      **Cherry Avenue/Jurupa Street** – Widen the northbound Cherry Avenue approach from two left-turn lanes, two through lanes, and one right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane. Widen the southbound Cherry Avenue approach from two left-turn lanes, two through lanes, and one right-turn lane to consist of two left-turn lanes, two through lanes, and two right-turn lanes. Widen the westbound Jurupa Street approach from two left-turn lanes, two through lanes, and one right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane. *(This recommended improvement is consistent with Improvement No. 18.)*
- Improvement No. 57**      **Beech Avenue/Valley Boulevard** – Signalize the Beech Avenue/Valley Boulevard intersection. Widen the northbound Beech Avenue approach from one shared left-turn/through lane and one right-turn lane to consist of one left-turn lane, one through lane, and one shared through/right-turn lane. Widen the southbound Beech Avenue approach from one shared left-turn/through lane and one right-turn lane to consist of one left-turn lane, two through lanes, and one right-turn lane. *(This recommended improvement is identical to Improvement No. 19.)*

- Improvement No. 58**      **Beech Avenue/Slover Avenue** – Signalize the Beech Avenue/Slover Avenue intersection. Widen the northbound Beech Avenue approach from one shared left-turn/through/right-turn lane to consist of one left-turn lane, two through lanes, and one right-turn lane. Widen the southbound Beech Avenue approach from one shared left-turn/through/right-turn lane to consist of one left-turn lane, two through lanes, and one right-turn lane. Widen the eastbound Slover Avenue approach from one left-turn lane, one through lane, and one shared through/right-turn lane to consist of two left-turn lanes, two through lanes, and one right-turn lane. Widen the westbound Slover Avenue approach from one left-turn lane, one through lane, and one shared through/right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane. *(This recommended improvement is consistent with Improvement No. 20.)*
- Improvement No. 59**      **Beech Avenue/Santa Ana Avenue** – Signalize the Beech Avenue/Santa Ana Avenue intersection. *(This recommended improvement is identical to Improvement No. 21.)*
- Improvement No. 60**      **Beech Avenue/Jurupa Street** – Signalize the Beech Avenue/Jurupa Street intersection. Widen the northbound Beech Avenue approach from one left-turn lane, one through lane, and one right-turn lane to consist of two left-turn lanes, one through lane, and one right-turn lane. Widen the eastbound Jurupa Street approach from one shared left-turn/through lane and one shared through/right-turn lane to consist of one left-turn lane, three through lanes, and one right-turn lane. Widen the westbound Jurupa Street approach from one shared left-turn/through/right-turn lane to consist of one left-turn lane, two through lanes, and one right-turn lane. *(This recommended improvement is consistent with Improvement No. 22.)*
- Improvement No. 61**      **Citrus Avenue/Valley Boulevard** – Widen the northbound Citrus Avenue approach from one left-turn lane, one through lane, and one shared through/right-turn lane to consist of two left-turn lanes, two through lanes, and right-turn lane. Widen the southbound Citrus Avenue approach from one left-turn lane, one through lane, and one shared through/right-turn lane to consist of one left-turn lane, two through lanes, and one right-turn lane. Widen the eastbound Valley Boulevard approach from two left-turn lanes, one through lane, and one shared through/right-turn lane to consist of two left-turn lanes, two through lanes, and two right-turn lanes. Additionally, modify the eastbound Valley Boulevard signal phasing to include an eastbound right-turn overlap, which will preclude U-turn movement from northbound to southbound Citrus Avenue. *(This recommended improvement is consistent with Improvement No. 23.)*
- Improvement No. 62**      **Citrus Avenue/Slover Avenue** – Widen the northbound Citrus Avenue approach from one left-turn lane and one shared

through/right-turn lane to consist of one left-turn lane, two through lanes, and one right-turn lane. Widen the southbound Citrus Avenue approach from one left-turn lane, one through lane, and one right-turn lane to consist of one left-turn lane, two through lanes, and two right-turn lanes. Widen the eastbound Slover Avenue approach from one left-turn lane, two through lanes, and one defacto right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane. Widen the westbound Slover Avenue approach from one left-turn lane, one through lane, and one shared through/right-turn lane to consist of one left-turn lane, three through lanes, and one right-turn lane. *(This recommended improvement is identical to Improvement No. 24.)*

**Improvement No. 63**

**Citrus Avenue/Santa Ana Avenue** – Signalize the Citrus Avenue/Santa Ana Avenue intersection. Widen the northbound Citrus Avenue approach from one shared left-turn/through/right-turn lane to consist of one left-turn lane and one shared through/right-turn lane. Widen the southbound Citrus Avenue approach from one shared left-turn/through/right-turn lane to consist of one left-turn lane and one shared through/right-turn lane. Widen the eastbound Santa Ana Avenue approach from one shared left-turn/through/right-turn lane to consist of one left-turn lane and one shared through/right-turn lane. Re-stripe the westbound Santa Ana Avenue approach from one shared left-turn/through lane and one right-turn lane to consist of one left-turn lane and one shared through/right-turn lane. *(This recommended improvement is identical to Improvement No. 25.)*

**Improvement No. 64**

**Citrus Avenue/Jurupa Street** – Signalize the Citrus Avenue/Jurupa Street intersection. Widen the northbound Citrus Avenue approach from one left-turn lane, one through lane, and one right-turn lane to consist of one left-turn lane, two through lanes, and one right-turn lane. Widen the southbound Citrus Avenue approach from one left-turn lane and one shared through/right-turn lane to consist of two left-turn lanes, one through lane, and one shared through/right-turn lane. Widen the eastbound Jurupa Street approach from one left-turn lane, two through lanes, and one shared through/right-turn lane to consist of one left-turn lane, four through lanes, and one right-turn lane. Widen the westbound Jurupa Street approach from one left-turn lane, one through lane, and one shared through/right-turn lane to consist of one left-turn lane, three through lanes, and one right-turn lane. *(This recommended improvement is consistent with Improvement No. 26.)*

**Improvement No. 65**

**Sierra Avenue/Slover Avenue** – Widen the eastbound Slover Avenue approach from two left-turn lanes, two through lanes, and one right-turn lane to consist of two left-turn lanes, four through lanes, and one right-turn lane. Widen the westbound Slover Avenue approach from two left-turn lanes, two through lanes, and two right-turn lanes to consist of two left-turn lanes, three through

lanes, and two right-turn lanes. *(This recommended improvement is consistent with Improvement No. 27.)*

**Improvement No. 66**

**Sierra Avenue/Jurupa Street** – Widen the southbound Sierra Avenue approach from two left-turn lanes, two through lanes, and one right-turn lane to consist of two left-turn lane, two through lanes, and two right-turn lanes. Widen the westbound Jurupa Street approach from two left-turn lanes, two through lanes, and one right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane. *(This recommended improvement is consistent with Improvement No. 28.)*

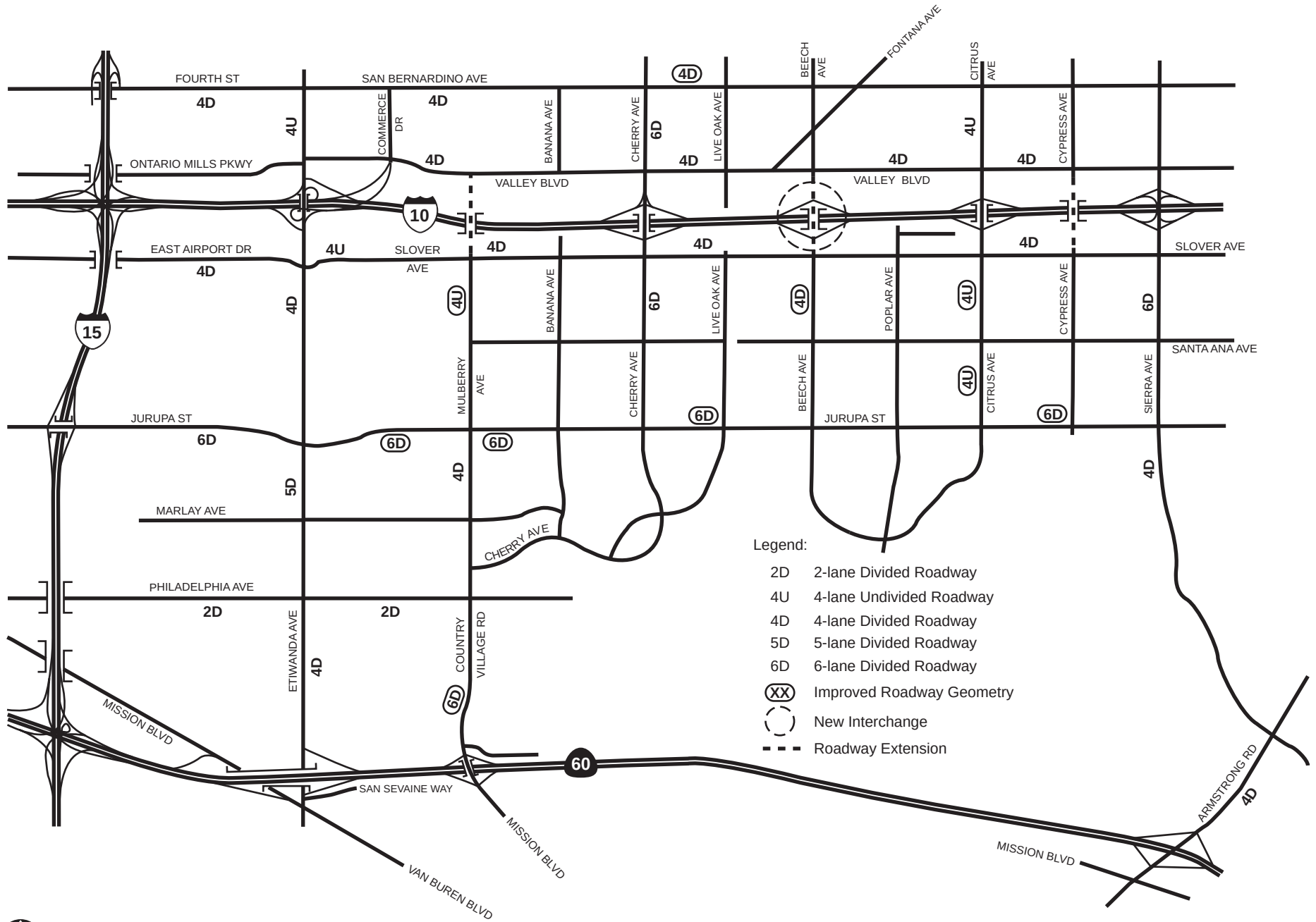
**Improvement No. 67**

**Armstrong Road/SR-60 Eastbound Ramps** – Contribute towards preparation of a Project Study Report to improve operations, circulation, and access at the Armstrong Road/SR-60 interchange. *(This intersection improvement is identical to Improvement No. 29.)*

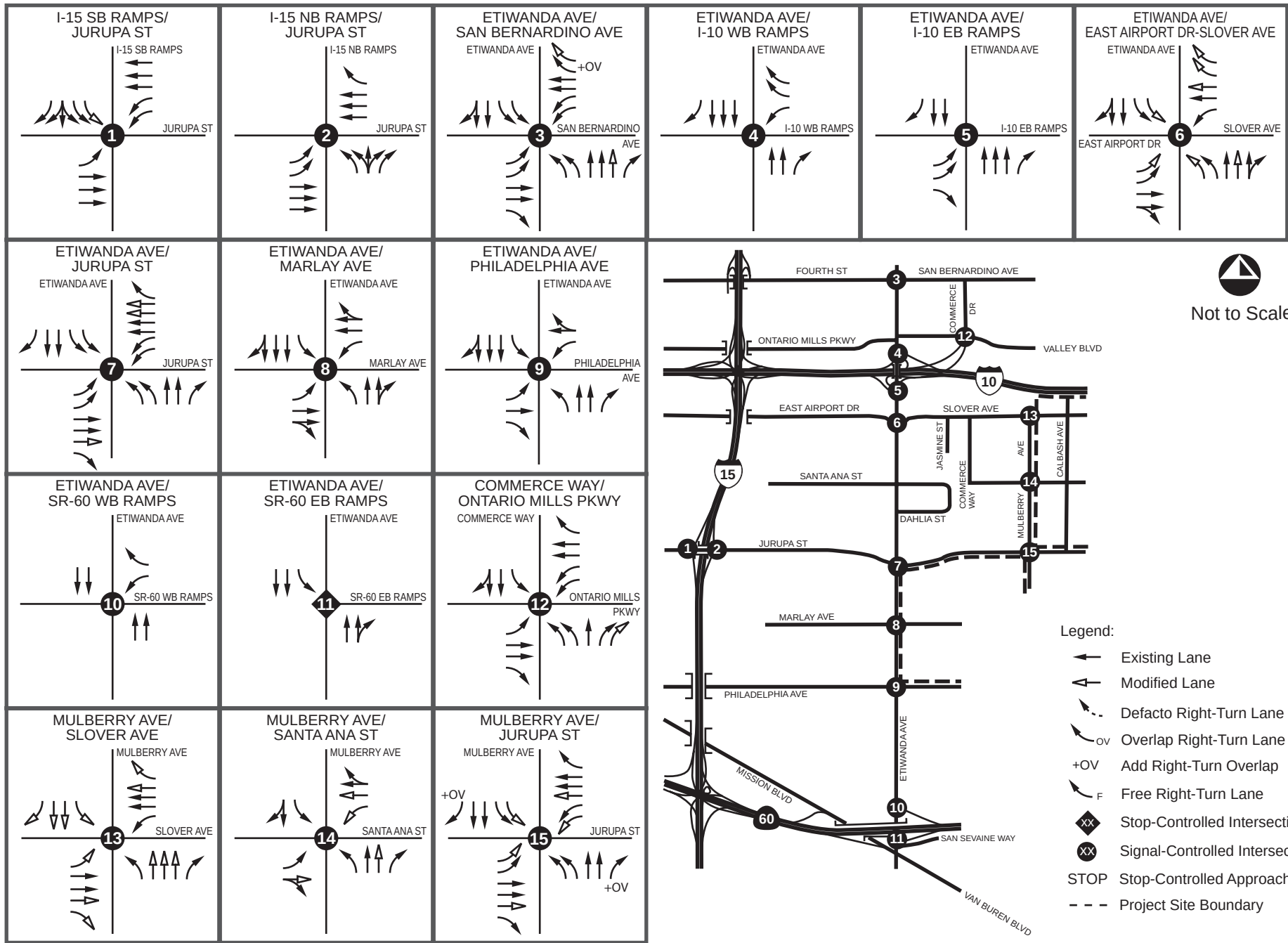
Exhibit 37 shows the improved forecast year 2030 with project conditions roadway segment geometry and circulation system. Exhibits 38 through 40 show improved forecast year 2030 with project conditions study intersection geometry.

**Improved Forecast Year 2030 With Project Conditions Roadway Segment LOS**

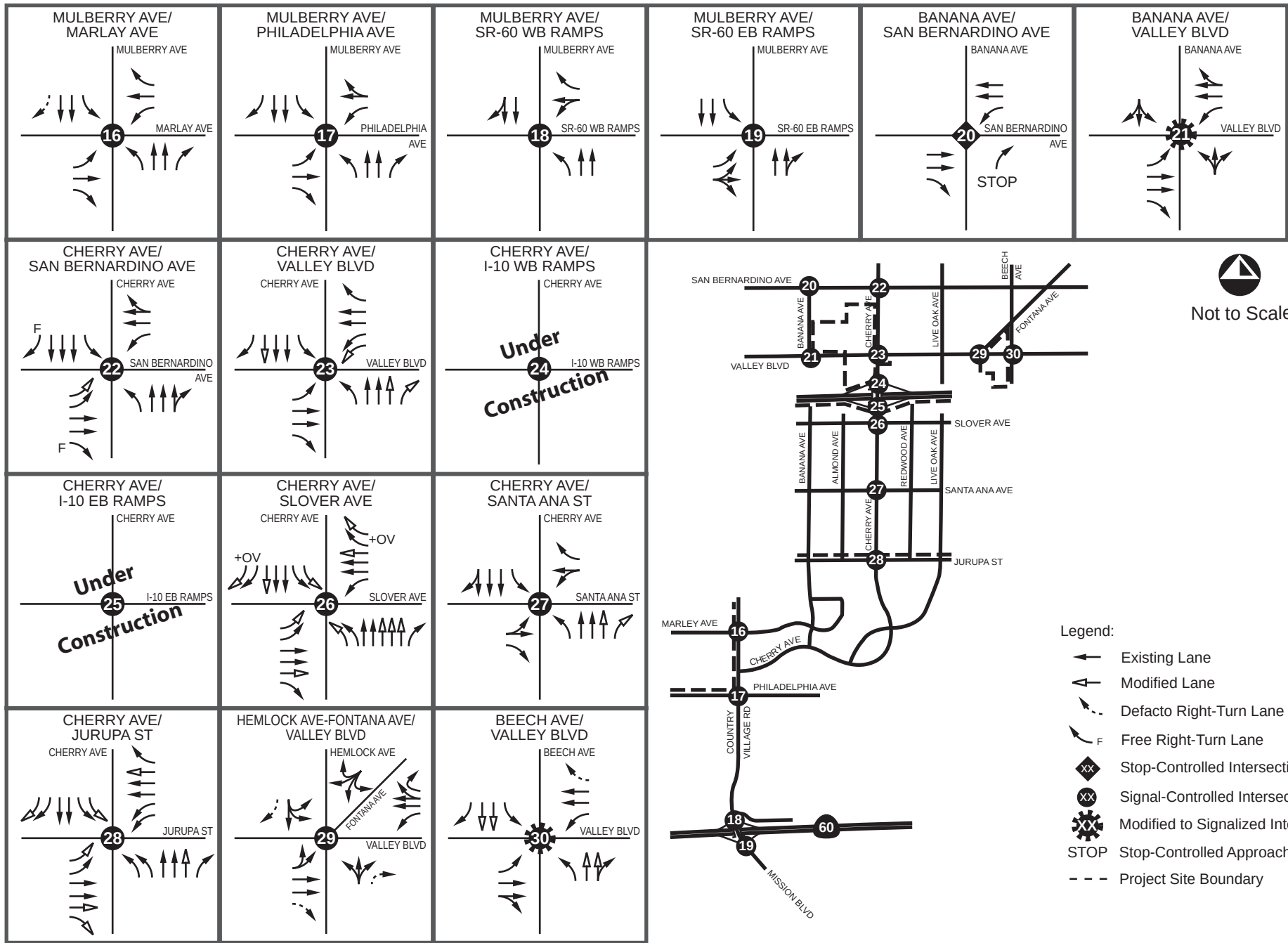
Table 17 summarizes improved forecast year 2030 with project conditions roadway segment ADT volumes and corresponding LOS assuming implementation of the recommended roadway segment improvements.



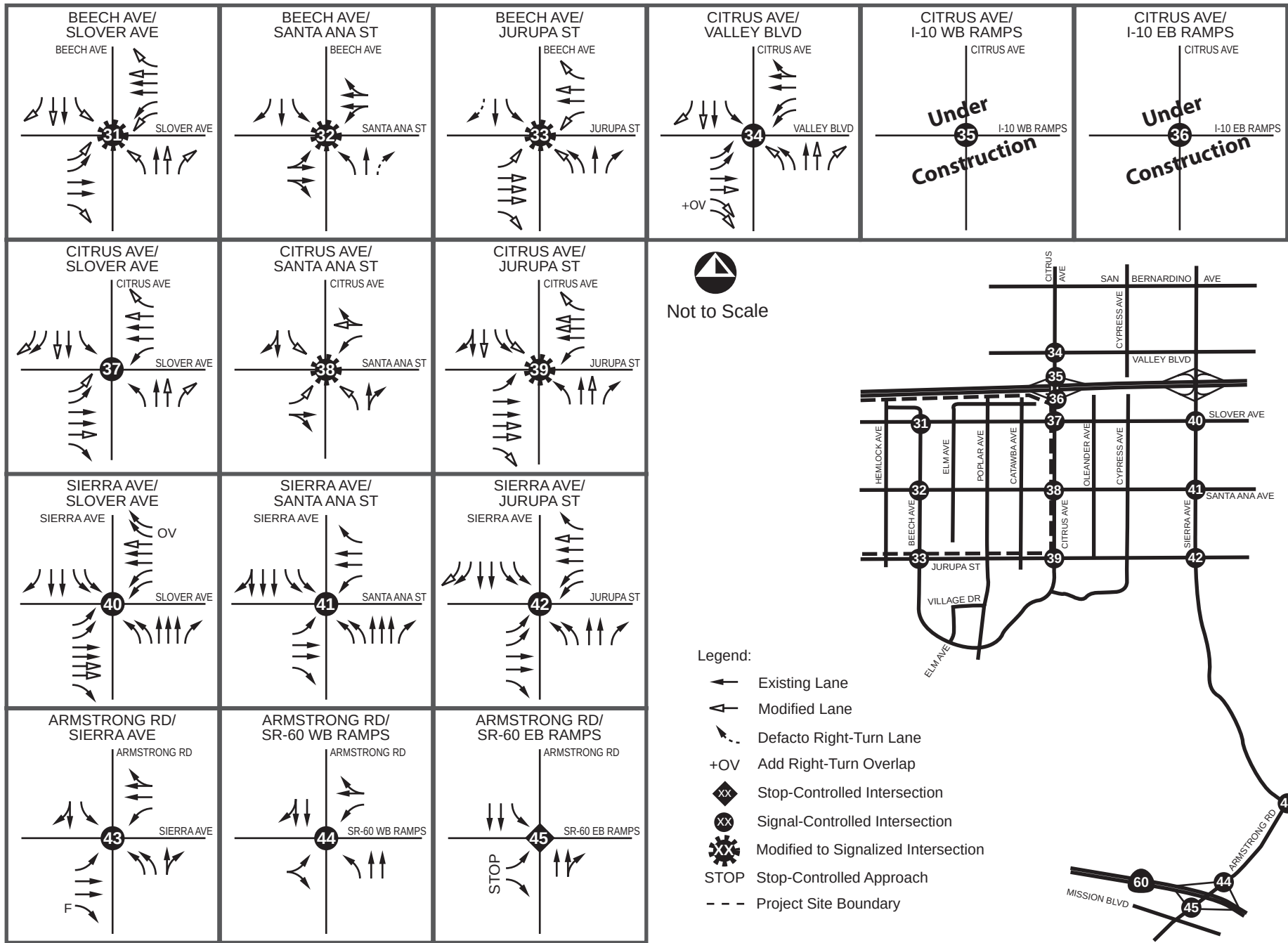
## Improved Forecast Year 2030 With Project Conditions Roadway Segment Geometry/Circulation System



## Area 1 - Improved Forecast Year 2030 With Project Conditions Study Intersection Geometry



## Area 2 - Improved Forecast Year 2030 With Project Conditions Study Intersection Geometry





**Table 17**  
**Improved Forecast Year 2030 With Project Conditions Roadway Segment ADT & LOS**

| Study Roadway Segment                                           | LOS E Capacity | Forecast 2030 WP ADT Volumes | Volume to Capacity Ratio | LOS |
|-----------------------------------------------------------------|----------------|------------------------------|--------------------------|-----|
| Fourth St btwn I-15 Fwy and Etiwanda Ave                        | 33,000         | 14,746                       | 0.447                    | A   |
| East Airport Drive btwn I-15 Fwy and Etiwanda Ave               | 33,000         | 26,753                       | 0.811                    | D   |
| Jurupa St btwn I-15 Fwy and Etiwanda Ave                        | 49,000         | 48,529                       | 0.990                    | E   |
| Philadelphia Ave btwn I-15 Fwy Etiwanda Ave                     | 12,500         | 4,087                        | 0.327                    | A   |
| Etiwanda Ave btwn San Bernardino Ave and I-10 WB Ramps          | 33,000         | 27,696                       | 0.839                    | D   |
| Etiwanda Ave btwn I-10 EB Ramps and Jurupa St                   | 33,000         | 31,415                       | 0.952                    | E   |
| Etiwanda Ave btwn Jurupa St and Philadelphia Ave                | 41,000         | 20,327                       | 0.496                    | A   |
| Etiwanda Ave btwn Philadelphia Ave and SR-60 WB Ramps           | 36,000         | 24,079                       | 0.669                    | B   |
| Slover Ave btwn Etiwanda Ave and Mulberry Ave                   | 36,000         | 28,161                       | 0.782                    | C   |
| Jurupa St btwn Etiwanda Ave and Mulberry Ave                    | 54,000         | 39,560                       | 0.733                    | C   |
| Philadelphia Ave btwn Etiwanda Ave and Mulberry-Country Village | 12,000         | 3,601                        | 0.300                    | A   |
| San Bernardino Ave btwn Etiwanda Ave and Cherry Ave             | 36,000         | 24,006                       | 0.667                    | B   |
| Valley Blvd btwn Commerce Drive and Cherry Ave                  | 36,000         | 25,419                       | 0.706                    | C   |
| Mulberry Ave btwn Slover Ave and Jurupa Ave                     | 36,000         | 23,524                       | 0.653                    | B   |
| Mulberry Ave btwn Jurupa St and Philadelphia Ave                | 36,000         | 21,389                       | 0.594                    | A   |
| Country Village Rd btwn Philadelphia Ave and SR-60 WB Ramps     | 54,000         | 36,194                       | 0.670                    | B   |
| Slover Ave btwn Mulberry Ave and Cherry Ave                     | 36,000         | 32,209                       | 0.895                    | D   |
| Jurupa St btwn Mulberry Ave and Cherry Ave                      | 54,000         | 43,475                       | 0.805                    | D   |
| Cherry Ave btwn San Bernardino Ave and I-10 WB Ramps            | 54,000         | 39,662                       | 0.734                    | C   |
| Cherry Ave btwn I-10 EB Ramps and Jurupa St                     | 54,000         | 42,069                       | 0.779                    | C   |
| San Bernardino Ave btwn Cherry Ave and Fontana Ave              | 36,000         | 11,127                       | 0.309                    | A   |
| Valley Blvd btwn Cherry Ave and Beech Ave                       | 36,000         | 17,559                       | 0.488                    | A   |
| Slover Ave btwn Cherry Ave and Citrus Ave                       | 36,000         | 32,254                       | 0.896                    | D   |
| Jurupa St btwn Cherry Ave and Citrus Ave                        | 54,000         | 43,689                       | 0.809                    | C   |
| Beech Ave btwn Slover Ave and Jurupa St                         | 36,000         | 15,738                       | 0.437                    | A   |
| Valley Blvd btwn Beech Ave and Citrus Ave                       | 36,000         | 21,988                       | 0.611                    | B   |
| Citrus Ave btwn San Bernardino Ave and I-10 WB Ramps            | 36,000         | 26,468                       | 0.735                    | C   |
| Citrus Ave btwn I-10 EB Ramps and Santa Ana Ave                 | 36,000         | 19,328                       | 0.537                    | A   |
| Citrus Ave btwn Santa Ana Ave and Jurupa St                     | 36,000         | 17,546                       | 0.487                    | A   |
| Valley Blvd btwn Citrus Ave and Sierra Ave                      | 36,000         | 14,950                       | 0.415                    | A   |
| Slover Ave btwn Citrus Ave and Sierra Ave                       | 36,000         | 32,272                       | 0.896                    | D   |
| Jurupa St btwn Citrus Ave and Sierra Ave                        | 54,000         | 40,601                       | 0.752                    | C   |
| Sierra Ave btwn Slover Ave and Jurupa St                        | 54,000         | 28,849                       | 0.534                    | A   |
| Sierra Ave btwn Jurupa St and Armstrong Rd                      | 36,000         | 25,820                       | 0.717                    | C   |
| Armstrong Rd btwn Sierra Ave and SR-60 WB Ramps                 | 36,000         | 24,808                       | 0.689                    | B   |

**Note:** EB = eastbound; WB = westbound; btwn = between.

As shown in Table 17, assuming implementation of the identified roadway segment improvements, the study roadway segments are forecast to operate at an acceptable LOS according to agency performance criteria for forecast year 2030 with project conditions. Note two roadway segments are forecast to operate at LOS E, which are located in the City of Ontario, where LOS E satisfies acceptable operations.

#### **Improved Forecast Year 2030 With Project Conditions Study Intersection LOS**

Table 18 summarizes improved forecast year 2030 with project conditions a.m. peak hour and p.m. peak hour LOS of the improved study intersections assuming identified intersection improvements (Improvements 37 through 50); detailed LOS analysis sheets are contained in Appendix B.

**Table 18**  
**Improved Forecast Year 2030 With Project**  
**Conditions AM & PM Peak Hour Intersection LOS**

| Study Intersection                          | Forecast Year 2030 Without Project Conditions |                      | Improved Forecast Year 2030 With Project Conditions |              |
|---------------------------------------------|-----------------------------------------------|----------------------|-----------------------------------------------------|--------------|
|                                             | AM Peak Hour                                  | PM Peak Hour         | AM Peak Hour                                        | PM Peak Hour |
|                                             | Delay – LOS                                   | Delay – LOS          | Delay – LOS                                         | Delay – LOS  |
| 1 – I-15 SB Ramps/Jurupa St                 | 27.7 – C                                      | 34.1 – C             | 42.5 – D                                            | 23.9 – C     |
| 3 – Etiwanda Ave/San Bernardino Ave         | 24.7 – C                                      | 28.4 – C             | 27.2 – C                                            | 32.7 – C     |
| 6 – Etiwanda Ave/East Airport Dr-Slover Ave | 42.6 – D                                      | <b>111.5 – F</b>     | 54.3 – D                                            | 46.2 – D     |
| 7 – Etiwanda Ave/Jurupa St                  | 29.3 – C                                      | 36.9 – D             | 38.3 – D                                            | 42.6 – D     |
| 12 – Commerce Dr-I-10 WB Ramps/Valley Blvd  | 25.0 – C                                      | 39.5 – D             | 28.7 – C                                            | 30.1 – C     |
| 13 – Mulberry Ave/Slover Ave                | 21.3 – C                                      | 20.3 – C             | 44.1 – D                                            | 38.7 – D     |
| 14 – Mulberry Ave/Santa Ana Ave             | 19.0 – B                                      | 18.0 – B             | 31.3 – C                                            | 32.9 – C     |
| 15 – Mulberry Ave/Jurupa St                 | 29.4 – C                                      | <b>65.9 – E</b>      | 45.4 – D                                            | 48.4 – D     |
| 21 – Banana Ave/Valley Blvd                 | 26.2 – D                                      | <b>99.7 – F</b>      | 2.6 – A                                             | 3.8 – A      |
| 22 – Cherry Ave/San Bernardino Ave          | 24.9 – C                                      | 28.5 – C             | 23.1 – C                                            | 41.9 – D     |
| 23 – Cherry Ave/Valley Blvd                 | 35.4 – D                                      | 40.9 – D             | 53.4 – D                                            | 53.1 – D     |
| 26 – Cherry Ave/Slover Ave                  | 37.1 – D                                      | 34.4 – C             | 49.8 – D                                            | 49.6 – D     |
| 27 – Cherry Ave/Santa Ana Ave               | 20.7 – C                                      | 13.6 – B             | 37.3 – D                                            | 26.7 – C     |
| 28 – Cherry Ave/Jurupa St                   | 31.6 – C                                      | 27.0 – C             | 54.6 – D                                            | 51.6 – D     |
| 30 – Beech Ave/Valley Blvd                  | 21.2 – C                                      | <b>102.7 – F</b>     | 22.9 – C                                            | 30.0 – C     |
| 31 – Beech Ave/Slover Ave                   | 14.2 – B                                      | 17.4 – C             | 38.7 – D                                            | 49.0 – D     |
| 32 – Beech Ave/Santa Ana Ave                | 10.1 – B                                      | 11.1 – B             | 20.8 – C                                            | 22.2 – C     |
| 33 – Beech Ave/Jurupa St                    | <b>59.4 – F</b>                               | <b>107.7 – F</b>     | 49.8 – D                                            | 30.7 – C     |
| 34 – Citrus Ave/Valley Blvd                 | <b>82.3 – F</b>                               | <b>77.1 – E</b>      | 38.9 – D                                            | 52.6 – D     |
| 37 – Citrus Ave/Slover Ave                  | 54.7 – D                                      | 34.4 – C             | 49.9 – D                                            | 52.1 – D     |
| 38 – Citrus Ave/Santa Ana Ave               | 16.9 – C                                      | 33.0 – D             | 54.0 – D                                            | 40.0 – D     |
| 39 – Citrus Ave/Jurupa St                   | 29.0 – D                                      | <b>64.0 – F</b>      | 54.4 – D                                            | 33.7 – C     |
| 40 – Sierra Ave/Slover Ave                  | 25.0 – C                                      | 33.0 – C             | 37.7 – D                                            | 46.0 – D     |
| 42 – Sierra Ave/Jurupa St                   | 29.0 – C                                      | 28.4 – C             | 41.8 – D                                            | 38.8 – D     |
| 45 – Armstrong Rd/SR-60 EB Ramps            | <b>640.2 – F</b>                              | <b>&gt;999.9 – F</b> | TBD                                                 | TBD          |

**Note:** NB = Northbound; SB = Southbound; EB = Eastbound; WB = Westbound; delay shown in seconds per vehicle; deficient intersection operation shown in **bold**; TBD = To be determined pending outcome of Project Study Report.

As shown in Table 18, assuming implementation of the identified intersection improvements, the study intersections are forecast to operate at an acceptable LOS according to agency performance criteria for improved forecast year 2030 with project conditions.

## IMPROVEMENTS IMPLEMENTATION

The purpose of this traffic analysis has been to identify roadway and intersection improvements required to provide acceptable operations assuming implementation of the proposed Specific Plan. It is recommended future development projects within the SWIP shall conduct separate traffic studies. As determined by the subsequent traffic studies, traffic improvements identified in this report shall be implemented as a condition of the approved project, either through direct construction by the project applicant and/or through development impact fees.

Monitoring of traffic generation and phasing of development within the SWIP and adjacent land uses to defer or eliminate improvements due to potential circulation impact changes or reduced land use intensities. This monitoring will be achieved through project specific traffic studies with land use in excess of 100 dwelling units or 100,000 square feet of non-residential land use. Final authority and approval of traffic studies is the City of Fontana.

The following potential funding sources are identified with an understanding that additional sources are likely. Improvements may be funded through a combination of sources such as:

- Developer Mitigation as shown on Individual Traffic Studies;
- City Capital Improvement Projects;
- Developer Impact fees, designated for use on roadways which have been identified in the City Measure I Nexus Study;
- Redevelopment Agency Funding; and
- Transportation Grant Funding.

## IMPROVEMENTS

The following improvements are identified to achieve acceptable operations at the deficient roadway segments for forecast existing with project conditions:

- |                          |                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Improvement No. 1</b> | <b>Mulberry Avenue</b> – Consistent with City of Fontana Circulation Master Plan, construct Mulberry Avenue connection from Slover Avenue to Valley Boulevard over I-10 freeway. This improvement is identified to provide additional north-south capacity, reducing forecast traffic on Etiwanda Avenue and Cherry Avenue.                                                                                               |
| <b>Improvement No. 2</b> | <b>Beech Avenue</b> – Consistent with City of Fontana Circulation Master Plan, construct Beech Avenue from Slover Avenue to Valley Boulevard including an interchange with I-10. This improvement is consistent with City of Fontana Circulation Master Plan. This improvement is identified to provide additional north-south capacity and freeway access, reducing forecast traffic on Cherry Avenue and Citrus Avenue. |
| <b>Improvement No. 3</b> | <b>Jurupa Street between Etiwanda Avenue and Mulberry Avenue</b> – Consistent with the City of Fontana Circulation Master Plan, widen the study roadway segment from a 4-lane divided roadway segment to a 6-lane divided roadway segment. This                                                                                                                                                                           |

improvement is included in the City of Fontana 7-year CIP, but is not yet fully funded.

- Improvement No. 4**      **Mulberry Avenue between Slover Avenue and Jurupa Avenue**  
– Consistent with the City of Fontana Circulation Master Plan, widen the study roadway segment from a 2-lane undivided roadway segment to a 4-lane undivided roadway segment.
- Improvement No. 5**      **Jurupa Street between Mulberry Avenue and Cherry Avenue** –  
Consistent with the City of Fontana Circulation Master Plan, widen the study roadway segment from a 4-lane divided roadway to a 6-lane divided roadway. This improvement is included in the City of Fontana 7-year CIP, but is not yet fully funded.
- Improvement No. 6**      **Beech Avenue between Slover Avenue and Jurupa Street** –  
Consistent with the City of Fontana Circulation Master Plan, widen the study roadway segment from a 2-lane divided roadway to a 4-lane divided roadway.
- Improvement No. 7**      **Citrus Avenue between I-10 Eastbound Ramps and Santa Ana Avenue** – Consistent with the City of Fontana Circulation Master Plan, widen the study roadway segment from a 2-lane undivided roadway segment to a 4-lane undivided roadway segment.
- Improvement No. 8**      **Citrus Avenue between Santa Ana Avenue and Jurupa Street**  
– Consistent with the City of Fontana Circulation Master Plan, widen the study roadway segment from a 2-lane undivided roadway segment to a 4-lane undivided roadway segment.

The following improvements are identified to achieve acceptable operations at the affected study intersections for forecast existing with project conditions assuming implementation of the identified roadway segment improvements:

- Improvement No. 9**      **Etiwanda Avenue/San Bernardino Avenue** – Widen the northbound Etiwanda Avenue approach from two left-turn lanes, two through lanes, and one right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane. Widen the westbound San Bernardino Avenue approach from two left-turn lanes, one through lane, and one shared through/right-turn lane to consist of two left-turn lanes, two through lanes, and one right-turn lane. Additionally, modify the westbound San Bernardino Avenue signal phasing to include a westbound right-turn overlap, which will preclude U-turn movement from southbound to northbound Etiwanda Avenue.
- Improvement No. 10**      **Etiwanda Avenue/East Airport Drive-Slover Avenue** – Widen the northbound Etiwanda Avenue approach from one left-turn lane, one through lane, and one shared through/right-turn lane to consist of two left-turn lanes, one through lane, and one shared through/right-turn lane. Widen the southbound Etiwanda Avenue approach from one left-turn lane, one through lane, and one

shared through/right-turn lane to consist of two left-turn lanes, one through lane, and one shared through/right-turn lane. Widen the westbound Slover Avenue approach from one left-turn lane, one through lane, and one shared through/right-turn lane to consist of one left-turn lane, two through lanes, and two right-turn lanes.

**Improvement No. 11**

**Etiwanda Avenue/Jurupa Street** – Widen the eastbound Jurupa Street approach from two left-turn lanes, two through lanes, and one right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane. Widen the westbound Jurupa Street approach from two left-turn lanes, two through lanes, and one right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane.

**Improvement No. 12**

**Mulberry Avenue/Slover Avenue** – In concert with construction of the extension of Mulberry Avenue north of Slover Avenue, widen the northbound Mulberry Avenue approach from one left-turn lane and one right-turn lane to consist of one left-turn lane, two through lanes, and one right-turn lane. Construct and stripe the southbound Mulberry Avenue approach to consist of one left-turn lane, two through lanes, and one right-turn lane. Widen the eastbound Slover Avenue approach from two through lanes and one shared through/right-turn lane to consist of one left-turn lane, two through lanes, and one shared through/right-turn lane. Widen the westbound Slover Avenue approach from one left-turn lane and two through lanes to consist of one left-turn lane, two through lanes, and one right-turn lane. Additionally, modify the signal phasing to consist of protected left-turn phasing.

**Improvement No. 13**

**Mulberry Avenue/Santa Ana Avenue** – Widen the northbound Mulberry Avenue approach from one left-turn lane, one through lane, and one right-turn lane to consist of one left-turn lane, two through lanes, and one right-turn lane. Re-stripe the eastbound Santa Ana Avenue approach from one shared left-turn/through lane and one right-turn lane to consist of one left-turn lane and one shared through/right-turn lane. Widen the westbound Santa Ana Avenue approach from one shared left-turn/through/right-turn lane to consist of one left-turn lane, one through lane, and one shared through/right-turn lane. Additionally, modify the east-west signal phasing from permitted left-turns to protected left-turns.

**Improvement No. 14**

**Mulberry Avenue/Jurupa Street** – Modify the northbound Mulberry Avenue signal phasing to include a northbound right-turn overlap, which will preclude U-turn movement from westbound to eastbound Jurupa Street. Widen the southbound Mulberry Avenue approach from one left-turn lane, two through lanes, and one right-turn lane to consist of two left-turn lanes, two through lanes, and one right-turn lane. Additionally, modify the southbound Mulberry Avenue signal phasing to include a southbound right-turn overlap, which will preclude U-turn movement from eastbound to westbound Jurupa Avenue. Widen

the eastbound Jurupa Street approach from one left-turn lane, two through lanes, and one right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane. Widen the westbound Jurupa Avenue approach from one left-turn lane, two through lanes, and one right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane.

**Improvement No. 15**

**Banana Avenue/Valley Boulevard** – Signalize the Banana Avenue/Valley Boulevard intersection. According to the City of Fontana, the Banana Avenue/Valley Boulevard intersection satisfies traffic signal warrants and is in Pre-Construction.

**Improvement No. 16**

**Cherry Avenue/Valley Boulevard** – Widen the northbound Cherry Avenue approach from one left-turn lane, two through lanes, and one defacto right-turn lane to consist of one left-turn lane, three through lanes, and one right-turn lane. Widen the southbound Cherry Avenue approach from one left-turn lane, two through lanes, and one right-turn lane to consist of one left-turn lane, three through lanes, and one right-turn lane. Widen the westbound Valley Boulevard approach from one left-turn lane, two through lanes, and one right-turn lane to consist of two left-turn lanes, two through lanes, and one right-turn lane.

**Improvement No. 17**

**Cherry Avenue/Slover Avenue** – Widen the northbound Cherry Avenue approach from one left-turn lane, two through lanes, and one right-turn lane to consist of one left-turn lane, four through lanes and one right-turn lane. Widen the southbound Cherry Avenue approach from one left-turn lane, one through lane, and one shared through/right-turn lane to consist of two left-turn lanes, four through lanes, and two right-turn lanes. Widen the eastbound Slover Avenue approach from one left-turn lane, two through lanes, and one defacto right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane. Widen the westbound Slover Avenue approach from one left-turn lane, two through lanes, and one right-turn lane to consist of two left-turn lanes, three through lanes, and two right-turn lanes.

**Improvement No. 18**

**Cherry Avenue/Jurupa Street** – Widen the northbound Cherry Avenue approach from two left-turn lanes, two through lanes, and one right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane. Widen the southbound Cherry Avenue approach from two left-turn lanes, two through lanes, and one right-turn lane to consist of two left-turn lanes, three through lanes, and two right-turn lanes. Widen the eastbound Jurupa Avenue approach from two left-turn lanes, two through lanes, and one shared through/right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane. Widen the westbound Jurupa Street approach from two left-turn lanes, two through lanes, and one right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane.

- Improvement No. 19**      **Beech Avenue/Valley Boulevard** – Signalize the Beech Avenue/Valley Boulevard intersection. Widen the northbound Beech Avenue approach from one shared left-turn/through lane and one right-turn lane to consist of one left-turn lane, one through lane, and one shared through/right-turn lane. Widen the southbound Beech Avenue approach from one shared left-turn/through lane and one right-turn lane to consist of one left-turn lane, two through lanes, and one right-turn lane.
- Improvement No. 20**      **Beech Avenue/Slover Avenue** – Signalize the Beech Avenue/Slover Avenue intersection. Widen the northbound Beech Avenue approach from one shared left-turn/through/right-turn lane to consist of one left-turn lane, two through lanes, and one right-turn lane. Widen the southbound Beech Avenue approach from one shared left-turn/through/right-turn lane to consist of one left-turn lane, two through lanes, and one right-turn lane. Widen the eastbound Slover Avenue approach from one left-turn lane, one through lane, and one shared through/right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane. Widen the westbound Slover Avenue approach from one left-turn lane, one through lane, and one shared through/right-turn lane to consist of one left-turn lane, three through lanes, and one right-turn lane.
- Improvement No. 21**      **Beech Avenue/Santa Ana Avenue** – Signalize the Beech Avenue/Santa Ana Avenue intersection.
- Improvement No. 22**      **Beech Avenue/Jurupa Street** – Signalize the Beech Avenue/Jurupa Street intersection. Widen the eastbound Jurupa Street approach from one shared left-turn/through lane and one shared through/right-turn lane to consist of one left-turn lane, two through lanes, and one right-turn lane. Widen the westbound Jurupa Street approach from one shared left-turn/through/right-turn lane to consist of one left-turn lane, two through lanes, and one right-turn lane.
- Improvement No. 23**      **Citrus Avenue/Valley Boulevard** – Widen the northbound Citrus Avenue approach from one left-turn lane, one through lane, and one shared through/right-turn lane to consist of two left-turn lanes, one through lane, and one shared through/right-turn lane. Widen the southbound Citrus Avenue approach from one left-turn lane, one through lane, and one shared through/right-turn lane to consist of one left-turn lane, two through lanes, and one right-turn lane. Widen the eastbound Valley Boulevard approach from two left-turn lanes, one through lane, and one shared through/right-turn lane to consist of two left-turn lanes, two through lanes, and two right-turn lanes.
- Improvement No. 24**      **Citrus Avenue/Slover Avenue** – Widen the northbound Citrus Avenue approach from one left-turn lane and one shared through/right-turn lane to consist of one left-turn lane, two through



lanes, and one right-turn lane. Widen the southbound Citrus Avenue approach from one left-turn lane, one through lane, and one right-turn lane to consist of one left-turn lane, two through lanes, and two right-turn lanes. Widen the eastbound Slover Avenue approach from one left-turn lane, two through lanes, and one defacto right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane. Widen the westbound Slover Avenue approach from one left-turn lane, one through lane, and one shared through/right-turn lane to consist of one left-turn lane, three through lanes, and one right-turn lane.

**Improvement No. 25**

**Citrus Avenue/Santa Ana Avenue** – Signalize the Citrus Avenue/Santa Ana Avenue intersection. Widen the northbound Citrus Avenue approach from one shared left-turn/through/right-turn lane to consist of one left-turn lane and one shared through/right-turn lane. Widen the southbound Citrus Avenue approach from one shared left-turn/through/right-turn lane to consist of one left-turn lane and one shared through/right-turn lane. Widen the eastbound Santa Ana Avenue approach from one shared left-turn/through/right-turn lane to consist of one left-turn lane and one shared through/right-turn lane. Re-stripe the westbound Santa Ana Avenue approach from one shared left-turn/through lane and one right-turn lane to consist of one left-turn lane and one shared through/right-turn lane.

**Improvement No. 26**

**Citrus Avenue/Jurupa Street** – Signalize the Citrus Avenue/Jurupa Street intersection. Widen the southbound Citrus Avenue approach from one left-turn lane and one shared through/right-turn lane to consist of one left-turn lane, one through lane, and one shared through/right-turn lane. Widen the eastbound Jurupa Street approach from one left-turn lane, two through lanes, and one shared through/right-turn lane to consist of one left-turn lane, three through lanes, and one right-turn lane. Widen the westbound Jurupa Street approach from one left-turn lane, one through lane, and one shared through/right-turn lane to consist of one left-turn lane, three through lanes, and one right-turn lane.

**Improvement No. 27**

**Sierra Avenue/Slover Avenue** – Widen the eastbound Slover Avenue approach from two left-turn lanes, two through lanes, and one right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane.

**Improvement No. 28**

**Sierra Avenue/Jurupa Street** – Widen the southbound Sierra Avenue approach from two left-turn lanes, two through lanes, and one right-turn lane to consist of two left-turn lane, two through lanes, and two right-turn lanes. Widen the eastbound Jurupa Street approach from one left-turn lane, one shared left-turn/through lane, one through lane, and one right-turn lane to consist of two left-turn lanes, two through lanes, and one right-turn lane. Widen the westbound Jurupa Street approach from one left-

turn lane, one through lane, and one right-turn lane to consist of one left-turn lane, three through lanes, and one right-turn lane. Improvements have recently been constructed at this intersection satisfying the lane configuration recommended.

**Improvement No. 29**      **Armstrong Road/SR-60 Eastbound Ramps** – Contribute towards preparation of a Project Study Report to improve operations, circulation, and access at the Armstrong Road/SR-60 interchange.

The following improvements are identified to achieve acceptable operations at the deficient roadway segments for forecast year 2030 with project conditions:

**Improvement No. 30**      **Mulberry Avenue** – Consistent with City of Fontana Circulation Master Plan, construct Mulberry Avenue connection from Slover Avenue to Valley Boulevard over I-10 freeway. This improvement is identified to provide additional north-south capacity, reducing forecast traffic on Etiwanda Avenue and Cherry Avenue. *[Identical to Improvement Number 1.]*

**Improvement No. 31**      **Beech Avenue** – Consistent with City of Fontana Circulation Master Plan, construct Beech Avenue from Slover Avenue to Valley Boulevard including an interchange with I-10. This improvement is consistent with City of Fontana Circulation Master Plan. This improvement is identified to provide additional north-south capacity and freeway access, reducing forecast traffic on Cherry Avenue and Citrus Avenue. *[Identical to Improvement Number 2.]*

**Improvement No. 32**      **Cypress Avenue** – Consistent with City of Fontana Circulation Master Plan, construct Cypress Avenue from Slover Avenue to Valley Boulevard over I-10 freeway. This improvement is consistent with City of Fontana Circulation Master Plan. This improvement is identified to provide additional north-south capacity, reducing forecast traffic on Cherry Avenue and Citrus Avenue. This improvement has recently been implemented by the City of Fontana providing the overcrossing connecting Cypress Avenue between Slover Avenue to Valley Boulevard over I-10.

**Improvement No. 33**      **Jurupa Street between Etiwanda Avenue and Mulberry Avenue** – Consistent with the City of Fontana Circulation Master Plan, widen the study roadway segment from a 4-lane divided roadway segment to a 6-lane divided roadway segment. This improvement is included in the City of Fontana 7-year CIP, but is not yet fully funded. *[Identical to Improvement Number 3.]*

**Improvement No. 34**      **Mulberry Avenue between Slover Avenue and Jurupa Street** – Consistent with the City of Fontana Circulation Master Plan, widen the study roadway segment from a 2-lane undivided roadway segment to a 4-lane undivided roadway segment. *[Identical to Improvement Number 4.]*

- Improvement No. 35**      **Country Village Road between Philadelphia Avenue and SR-60 Westbound Ramps** – Consistent with the County of Riverside Circulation Master Plan, widen the study roadway segment from a 4-lane undivided roadway segment to a 6-lane divided roadway segment. Since this improvement is within the jurisdiction of the recently incorporated City of Jurupa Valley, implementation by the City of Fontana cannot be assured. Therefore, this improvement should be included in the planning and collection of fees and coordination with the appropriate lead agency is needed to help administer the improvement.
- Improvement No. 36**      **Jurupa Street between Mulberry Avenue and Cherry Avenue** – Consistent with the City of Fontana Circulation Master Plan, widen the study roadway segment from a 4-lane divided roadway to a 6-lane divided roadway. This improvement is included in the City of Fontana 7-year CIP, but is not yet fully funded. *[Identical to Improvement Number 5.]*
- Improvement No. 37**      **San Bernardino Avenue between Cherry Avenue and Fontana Avenue** – Consistent with the City of Fontana Circulation Master Plan, widen the study roadway segment from a 2-lane divided roadway to a 4-lane divided roadway. Since this improvement is within the jurisdiction of the County of San Bernardino, implementation by the City of Fontana cannot be assured. Therefore, this improvement should be included in the planning and collection of fees and coordination with the appropriate lead agency is needed to help administer the improvement.
- Improvement No. 38**      **Jurupa Street between Cherry Avenue and Citrus Avenue** – Consistent with the City of Fontana Circulation Master Plan, widen the study roadway segment from a 5-lane divided roadway to a 6-lane divided roadway. A portion of this improvement has recently been implemented by the City of Fontana providing the capacity for a 6-lane roadway between Poplar Avenue and Citrus Avenue.
- Improvement No. 39**      **Beech Avenue between Slover Avenue and Jurupa Street** – Consistent with the City of Fontana Circulation Master Plan, widen the study roadway segment from a 2-lane divided roadway to a 4-lane divided roadway. *[Identical to Improvement Number 6.]*
- Improvement No. 40**      **Citrus Avenue between I-10 Eastbound Ramps and Santa Ana Avenue** – Consistent with the City of Fontana Circulation Master Plan, widen the study roadway segment from a 2-lane undivided roadway segment to a 4-lane undivided roadway segment. *[Identical to Improvement Number 7.]*
- Improvement No. 41**      **Citrus Avenue between Santa Ana Avenue and Jurupa Street** – Consistent with the City of Fontana Circulation Master Plan, widen the study roadway segment from a 2-lane undivided roadway segment to a 4-lane undivided roadway segment. *[Identical to Improvement Number 8.]*

**Improvement No. 42**      **Jurupa Street between Citrus Avenue and Sierra Avenue –** Consistent with the City of Fontana Circulation Master Plan, widen the study roadway segment from a 5-lane divided roadway to a 6-lane divided roadway. This improvement has recently been implemented by the City of Fontana providing the capacity for a 6-lane roadway between Citrus Avenue and Sierra Avenue.

The following improvements are identified to achieve acceptable operations at the affected study intersections for forecast year 2030 with project conditions assuming implementation of the identified roadway segment improvements:

**Improvement No. 43**      **I-15 Southbound Ramps/Jurupa Street –** Widen the southbound I-15 Southbound Off-Ramp from one left-turn lane, one shared left-turn/through/right-turn lane, and one right-turn lane to consist of two left-turn lanes, one through lane, and one right-turn lane.

**Improvement No. 44**      **Etiwanda Avenue/San Bernardino Avenue –** Widen the northbound Etiwanda Avenue approach from two left-turn lanes, two through lanes, and one right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane. Widen the westbound San Bernardino Avenue approach from two left-turn lanes, one through lane, and one shared through/right-turn lane to consist of two left-turn lanes, two through lanes, and two right-turn lanes. Additionally, modify the westbound San Bernardino Avenue signal phasing to include a westbound right-turn overlap, which will preclude U-turn movement from southbound to northbound Etiwanda Avenue. *(This recommended improvement is consistent with Improvement No. 9.)*

**Improvement No. 45**      **Etiwanda Avenue/East Airport Drive-Slover Avenue –** Widen the northbound Etiwanda Avenue approach from one left-turn lane, one through lane, and one shared through/right-turn lane to consist of two left-turn lanes, two through lanes, and one shared through/right-turn lane. Widen the southbound Etiwanda Avenue approach from one left-turn lane, one through lane, and one shared through/right-turn lane to consist of two left-turn lanes, one through lane, and one shared through/right-turn lane. Widen the eastbound East Airport Drive approach from one left-turn lane, one through lane, and one shared through/right-turn lane to consist of two left-turn lanes, one through lane, and one shared through/right-turn lane. Widen the westbound Slover Avenue approach from one left-turn lane, one through lane, and one shared through/right-turn lane to consist of one left-turn lane, two through lanes, and two right-turn lanes. *(This recommended improvement is consistent with Improvement No. 10.)*

**Improvement No. 46**      **Etiwanda Avenue/Jurupa Street –** Widen the eastbound Jurupa Street approach from two left-turn lanes, two through lanes, and one right-turn lane to consist of two left-turn lanes, three through

lanes, and one right-turn lane. Widen the westbound Jurupa Street approach from two left-turn lanes, two through lanes, and one right-turn lane to consist of two left-turn lanes, four through lanes, and one right-turn lane. *(This recommended improvement is consistent with Improvement No. 11.)*

**Improvement No. 47**

**Commerce Way/Ontario Mills Parkway** – Widen the northbound Commerce Way approach from two left-turn lanes, one through lane, and one right-turn lane.

**Improvement No. 48**

**Mulberry Avenue/Slover Avenue** – In concert with construction of the extension of Mulberry Avenue north of Slover Avenue, widen the northbound Mulberry Avenue approach from one left-turn lane and one right-turn lane to consist of one left-turn lane, two through lanes, and one right-turn lane. Construct and stripe the southbound Mulberry Avenue approach to consist of one left-turn lane, three through lanes, and one right-turn lane. Widen the eastbound Slover Avenue approach from two through lanes and one shared through/right-turn lane to consist of one left-turn lane, three through lanes, and one right-turn lane. Widen the westbound Slover Avenue approach from one left-turn lane and two through lanes to consist of one left-turn lane, three through lanes, and one right-turn lane. Additionally, modify the signal phasing to consist of protected left-turn phasing. *(This recommended improvement is consistent with Improvement No. 12.)*

**Improvement No. 49**

**Mulberry Avenue/Santa Ana Avenue** – Widen the northbound Mulberry Avenue approach from one left-turn lane, one through lane, and one right-turn lane to consist of one left-turn lane, two through lanes, and one right-turn lane. Re-stripe the eastbound Santa Ana Avenue approach from one shared left-turn/through lane and one right-turn lane to consist of one left-turn lane and one shared through/right-turn lane. Widen the westbound Santa Ana Avenue approach from one shared left-turn/through/right-turn lane to consist of one left-turn lane, one through lane, and one shared through/right-turn lane. Additionally, modify the east-west signal phasing from permitted left-turns to protected left-turns. *(This recommended improvement is identical to Improvement No. 13.)*

**Improvement No. 50**

**Mulberry Avenue/Jurupa Street** – Modify the northbound Mulberry Avenue signal phasing to include a northbound right-turn overlap, which will preclude U-turn movement from westbound to eastbound Jurupa Street. Widen the southbound Mulberry Avenue approach from one left-turn lane, two through lanes, and one right-turn lane to consist of two left-turn lanes, two through lanes, and one right-turn lane. Additionally, modify the southbound Mulberry Avenue signal phasing to include a southbound right-turn overlap, which will preclude U-turn movement from eastbound to westbound Jurupa Avenue. Widen

the eastbound Jurupa Street approach from one left-turn lane, two through lanes, and one right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane. Widen the westbound Jurupa Avenue approach from one left-turn lane, two through lanes, and one right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane. *(This recommended improvement is identical to Improvement No. 14.)*

**Improvement No. 51**

**Banana Avenue/Valley Boulevard** – Signalize the Banana Avenue/Valley Boulevard intersection. According to the City of Fontana, the Banana Avenue/Valley Boulevard intersection satisfies traffic signal warrants and is in Pre-Construction. *(This improvement is identical to Improvement No. 15.)*

**Improvement No. 52**

**Cherry Avenue/San Bernardino Avenue** – Widen the eastbound San Bernardino Avenue approach from one left-turn lane, two through lanes, and one right-turn lane to consist of two left-turn lanes, two through lanes, and one right-turn lane.

**Improvement No. 53**

**Cherry Avenue/Valley Boulevard** – Widen the northbound Cherry Avenue approach from one left-turn lane, two through lanes, and one right-turn lane to consist of one left-turn lane, three through lanes, and defacto one right-turn lane. Widen the southbound Cherry Avenue approach from one left-turn lane, two through lanes, and one right-turn lane to consist of one left-turn lane, three through lanes, and one right-turn lane. Widen the westbound Valley Boulevard approach from one left-turn lane, two through lanes, and one right-turn lane to consist of two left-turn lanes, two through lanes, and one right-turn lane. *(This recommended improvement is identical to Improvement No. 16.)*

**Improvement No. 54**

**Cherry Avenue/Slover Avenue** – Widen the northbound Cherry Avenue approach from one left-turn lane, two through lanes, and one right-turn lane to consist of two left-turn lanes, five through lanes and one right-turn lane. Widen the southbound Cherry Avenue approach from one left-turn lane, one through lane, and one shared through/right-turn lane to consist of two left-turn lanes, three through lanes, and two right-turn lanes. Additionally, modify the southbound Cherry Avenue signal phasing to include a southbound right-turn overlap, which will preclude U-turn movement from eastbound to westbound Slover Avenue. Widen the eastbound Slover Avenue approach from one left-turn lane, two through lanes, and one defacto right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane. Widen the westbound Slover Avenue approach from one left-turn lane, two through lanes, and one right-turn lane to consist of one left-turn lane, three through lanes, and two right-turn lanes. Additionally, modify the westbound Slover Avenue signal phasing to include a westbound right-turn overlap, which will preclude U-turn movement from southbound to northbound Cherry Avenue.

*(This recommended improvement is consistent with Improvement No. 17.)*

- Improvement No. 55**      **Cherry Avenue/Santa Ana Avenue** – Widen the southbound Cherry Avenue approach from one left-turn lane, two through lanes, and one shared through/right-turn lane to consist of one left-turn lane, three through lanes, and one right-turn lane.
- Improvement No. 56**      **Cherry Avenue/Jurupa Street** – Widen the northbound Cherry Avenue approach from two left-turn lanes, two through lanes, and one right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane. Widen the southbound Cherry Avenue approach from two left-turn lanes, two through lanes, and one right-turn lane to consist of two left-turn lanes, two through lanes, and two right-turn lanes. Widen the westbound Jurupa Street approach from two left-turn lanes, two through lanes, and one right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane. *(This recommended improvement is consistent with Improvement No. 18.)*
- Improvement No. 57**      **Beech Avenue/Valley Boulevard** – Signalize the Beech Avenue/Valley Boulevard intersection. Widen the northbound Beech Avenue approach from one shared left-turn/through lane and one right-turn lane to consist of one left-turn lane, one through lane, and one shared through/right-turn lane. Widen the southbound Beech Avenue approach from one shared left-turn/through lane and one right-turn lane to consist of one left-turn lane, two through lanes, and one right-turn lane. *(This recommended improvement is identical to Improvement No. 19.)*
- Improvement No. 58**      **Beech Avenue/Slover Avenue** – Signalize the Beech Avenue/Slover Avenue intersection. Widen the northbound Beech Avenue approach from one shared left-turn/through/right-turn lane to consist of one left-turn lane, two through lanes, and one right-turn lane. Widen the southbound Beech Avenue approach from one shared left-turn/through/right-turn lane to consist of one left-turn lane, two through lanes, and one right-turn lane. Widen the eastbound Slover Avenue approach from one left-turn lane, one through lane, and one shared through/right-turn lane to consist of two left-turn lanes, two through lanes, and one right-turn lane. Widen the westbound Slover Avenue approach from one left-turn lane, one through lane, and one shared through/right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane. *(This recommended improvement is consistent with Improvement No. 20.)*
- Improvement No. 59**      **Beech Avenue/Santa Ana Avenue** – Signalize the Beech Avenue/Santa Ana Avenue intersection. *(This recommended improvement is identical to Improvement No. 21.)*

**Improvement No. 60**

**Beech Avenue/Jurupa Street** – Signalize the Beech Avenue/Jurupa Street intersection. Widen the northbound Beech Avenue approach from one left-turn lane, one through lane, and one right-turn lane to consist of two left-turn lanes, one through lane, and one right-turn lane. Widen the eastbound Jurupa Street approach from one shared left-turn/through lane and one shared through/right-turn lane to consist of one left-turn lane, three through lanes, and one right-turn lane. Widen the westbound Jurupa Street approach from one shared left-turn/through/right-turn lane to consist of one left-turn lane, two through lanes, and one right-turn lane. *(This recommended improvement is consistent with Improvement No. 22.)*

**Improvement No. 61**

**Citrus Avenue/Valley Boulevard** – Widen the northbound Citrus Avenue approach from one left-turn lane, one through lane, and one shared through/right-turn lane to consist of two left-turn lanes, two through lanes, and right-turn lane. Widen the southbound Citrus Avenue approach from one left-turn lane, one through lane, and one shared through/right-turn lane to consist of one left-turn lane, two through lanes, and one right-turn lane. Widen the eastbound Valley Boulevard approach from two left-turn lanes, one through lane, and one shared through/right-turn lane to consist of two left-turn lanes, two through lanes, and two right-turn lanes. Additionally, modify the eastbound Valley Boulevard signal phasing to include an eastbound right-turn overlap, which will preclude U-turn movement from northbound to southbound Citrus Avenue. *(This recommended improvement is consistent with Improvement No. 23.)*

**Improvement No. 62**

**Citrus Avenue/Slover Avenue** – Widen the northbound Citrus Avenue approach from one left-turn lane and one shared through/right-turn lane to consist of one left-turn lane, two through lanes, and one right-turn lane. Widen the southbound Citrus Avenue approach from one left-turn lane, one through lane, and one right-turn lane to consist of one left-turn lane, two through lanes, and two right-turn lanes. Widen the eastbound Slover Avenue approach from one left-turn lane, two through lanes, and one defacto right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane. Widen the westbound Slover Avenue approach from one left-turn lane, one through lane, and one shared through/right-turn lane to consist of one left-turn lane, three through lanes, and one right-turn lane. *(This recommended improvement is identical to Improvement No. 24.)*

**Improvement No. 63**

**Citrus Avenue/Santa Ana Avenue** – Signalize the Citrus Avenue/Santa Ana Avenue intersection. Widen the northbound Citrus Avenue approach from one shared left-turn/through/right-turn lane to consist of one left-turn lane and one shared through/right-turn lane. Widen the southbound Citrus Avenue approach from one shared left-turn/through/right-turn lane to consist of one left-turn lane and one shared through/right-turn



lane. Widen the eastbound Santa Ana Avenue approach from one shared left-turn/through/right-turn lane to consist of one left-turn lane and one shared through/right-turn lane. Re-stripe the westbound Santa Ana Avenue approach from one shared left-turn/through lane and one right-turn lane to consist of one left-turn lane and one shared through/right-turn lane. *(This recommended improvement is identical to Improvement No. 25.)*

**Improvement No. 64**

**Citrus Avenue/Jurupa Street** – Signalize the Citrus Avenue/Jurupa Street intersection. Widen the northbound Citrus Avenue approach from one left-turn lane, one through lane, and one right-turn lane to consist of one left-turn lane, two through lanes, and one right-turn lane. Widen the southbound Citrus Avenue approach from one left-turn lane and one shared through/right-turn lane to consist of two left-turn lanes, one through lane, and one shared through/right-turn lane. Widen the eastbound Jurupa Street approach from one left-turn lane, two through lanes, and one shared through/right-turn lane to consist of one left-turn lane, four through lanes, and one right-turn lane. Widen the westbound Jurupa Street approach from one left-turn lane, one through lane, and one shared through/right-turn lane to consist of one left-turn lane, three through lanes, and one right-turn lane. *(This recommended improvement is consistent with Improvement No. 26.)*

**Improvement No. 65**

**Sierra Avenue/Slover Avenue** – Widen the eastbound Slover Avenue approach from two left-turn lanes, two through lanes, and one right-turn lane to consist of two left-turn lanes, four through lanes, and one right-turn lane. Widen the westbound Slover Avenue approach from two left-turn lanes, two through lanes, and two right-turn lanes to consist of two left-turn lanes, three through lanes, and two right-turn lanes. *(This recommended improvement is consistent with Improvement No. 27.)*

**Improvement No. 66**

**Sierra Avenue/Jurupa Street** – Widen the southbound Sierra Avenue approach from two left-turn lanes, two through lanes, and one right-turn lane to consist of two left-turn lane, two through lanes, and two right-turn lanes. Widen the westbound Jurupa Street approach from two left-turn lanes, two through lanes, and one right-turn lane to consist of two left-turn lanes, three through lanes, and one right-turn lane. *(This recommended improvement is consistent with Improvement No. 28.)*

**Improvement No. 67**

**Armstrong Road/SR-60 Eastbound Ramps** – Contribute towards preparation of a Project Study Report to improve operations, circulation, and access at the Armstrong Road/SR-60 interchange. *(This intersection improvement is identical to Improvement No. 29.)*

## **CIRCULATION CONSIDERATIONS**

As requested, discussion has been provided regarding potential circulation improvements that require a high level of coordination with other agencies. The three circulation connections discussed below consist of:

1. Extension of Santa Ana Avenue just east of Live Oak Avenue over Union Pacific Railroad;
2. Northeast corner widening at Etiwanda Avenue at Philadelphia Street; and
3. Extension of Philadelphia Street across San Sevaire Flood Control Channel.

Improvements or extension of the facilities identified above would require coordination with Union Pacific Railroad, the County of San Bernardino, and the County of Riverside.

### **Santa Ana Avenue Circulation**

Santa Ana Avenue is discontinuous between Live Oak Avenue and Hemlock Avenue at the Union Pacific Railroad (UPRR) which is oriented in a north-south direction. In the past, the City of Fontana has worked connecting Santa Ana Avenue across the railroad, however, easements to extend the street haven't been acquired, and the extension has remained outstanding. Extension of Santa Ana Avenue would provide improved capacity for east/west motorists, alleviating potential demand on parallel roadways such as Jurupa Avenue and Slover Avenue.

The SWIP project traffic analysis did not identify the need for circulation improvements to Slover Avenue beyond the currently constructed roadway cross-section. However, the SWIP project traffic analysis identified the need to widen Jurupa Avenue consistent with the City of Fontana General Plan Circulation Element. Since the extension of Santa Ana Avenue across the UPRR only provides minor improvement to east/west traffic operations, it is recommended the extension be considered again at a future date as appropriate.

### **Etiwanda Avenue/Philadelphia Street Intersection**

Widening of the eastbound Philadelphia Street approach at the Etiwanda Avenue/Philadelphia Street intersection is limited due to the north/south UPRR crossing of Philadelphia Street on the east leg of the intersection. While Philadelphia Street is widened to ultimate cross-section west of the Etiwanda Avenue/Philadelphia Street intersection, the east leg of the intersection operates as a two-lane undivided roadway with a westbound left-turn lane at the intersection. Additional easements to enlarge the UPRR crossing, and to obtain right-of-way from the privately owned property at the northeast corner of the Etiwanda Avenue/Philadelphia Street intersection, would provide the opportunity to enhance intersection operations with additional east/west through lanes, or an additional westbound right-turn lane. Provision of a westbound right-turn lane would improve operations while large vehicles maneuver from Philadelphia Street to Etiwanda Avenue, without potentially encroaching into the adjacent lane.

The SWIP project traffic analysis did not identify the need for circulation improvements to the Etiwanda Avenue/Philadelphia Street intersection beyond the currently constructed intersection. Since no additional improvements are required at the Etiwanda Avenue/Philadelphia Street intersection to implement the SWIP project, it is recommended the widening of the westbound approach be considered again at a future date as appropriate.

## **Philadelphia Street Circulation**

Philadelphia Street is discontinuous between Etiwanda Avenue and Mulberry Avenue at the San Sevaine Flood Control Channel (SSFCC) which is oriented in a north-south direction. In the past, the City of Fontana has discussed connecting Philadelphia Street across the channel, however, concerns regarding potential through traffic, including heavy trucks adjacent the residential community south of Philadelphia Street, have limited resolution of the matter. Extension of Philadelphia Street would provide improved capacity for east/west motorists, alleviating potential demand on parallel roadways such as Marlay Avenue, San Sevaine Way, and State Route 60 (SR-60). Philadelphia Street provides the boundary between the City of Fontana and the County of Riverside. South of Philadelphia Street, Mulberry Avenue changes names within the County of Riverside to Country Village Road. Country Village Road provides a full-access interchange at SR-60, while the Etiwanda Avenue interchange providing access to SR-60 to and from the east due to restrictions from the UPRR which trends in a northwest/southeast direction. Motorists from the City of Fontana traveling to westbound SR-60 must proceed to Mission Boulevard to access the westbound direct ramps. Since operations at the Country Village Road/SR-60 interchange are not limited by rail, the Country Village Road/SR-60 interchange may appear more attractive to motorists within the City of Fontana.

The SWIP project traffic analysis did not identify the need for circulation improvements to arterials in the vicinity of the discontinuity in Philadelphia Street beyond applicable General Plan Circulation Elements. While the connection of the two discontinuous Philadelphia Street segments at the SSFCC could help facilitate east/west traffic operations, the connectivity gain may be contrasted by potential effects on the nearby residential neighborhood. Therefore, it is recommended the extension be considered at a future date as appropriate.

## **CONCLUSIONS**

When accounting for displaced land uses, the proposed project is forecast to generate approximately 219,929 net new daily trips, which include approximately 21,091 a.m. net new peak hour trips and approximately 22,880 p.m. net new peak hour trips.

Since the collection of baseline traffic data for this analysis, improvements have been implemented at the following locations:

- Cypress Avenue overcrossing providing vehicular connectivity between Slover Avenue and Valley Boulevard over I-10;
- Sierra Avenue/Jurupa Street intersection improvements; and
- Jurupa Avenue widening to a 6-lane roadway between Sierra Avenue to Poplar Avenue with traffic signals at Sierra Avenue, Cypress Avenue, Citrus Avenue, and Poplar Avenue.

Both the Cherry Avenue/I-10 and the Citrus Avenue/I-10 interchanges are in construction phase as of September 2011, with completion of construction anticipated in the year 2013.

Improvements are identified at the following roadway segments to achieve acceptable operations at the deficient roadway segments for forecast existing with project conditions:

- Mulberry Avenue;
- Beech Avenue;

- Jurupa Street between Etiwanda Avenue and Mulberry Avenue;
- Mulberry Avenue between Slover Avenue and Jurupa Street;
- Jurupa Street between Mulberry Avenue and Cherry Avenue;
- Beech Avenue between Slover Avenue and Jurupa Avenue;
- Citrus Avenue between I-10 Eastbound Ramps and Santa Ana Avenue; and
- Citrus Avenue between Santa Ana Avenue and Jurupa Street.

Improvements are identified at the following study intersections to achieve acceptable operations at the deficient intersections for forecast existing with project conditions:

- Etiwanda Avenue/San Bernardino Avenue;
- Etiwanda Avenue/East Airport Drive-Slover Avenue;
- Etiwanda Avenue/Jurupa Street;
- Mulberry Avenue/Slover Avenue;
- Mulberry Avenue/Santa Ana Avenue;
- Mulberry Avenue/Jurupa Street;
- Banana Avenue/Valley Boulevard;
- Cherry Avenue/Valley Boulevard;
- Cherry Avenue/Slover Avenue;
- Cherry Avenue/Jurupa Street;
- Beech Avenue/Valley Boulevard;
- Beech Avenue/Slover Avenue;
- Beech Avenue/Santa Ana Avenue;
- Beech Avenue/Jurupa Street;
- Citrus Avenue/Valley Boulevard;
- Citrus Avenue/Slover Avenue;
- Citrus Avenue/Santa Ana Avenue;
- Citrus Avenue/Jurupa Street;
- Sierra Avenue/Slover Avenue;
- Sierra Avenue/Jurupa Street; and
- Armstrong Road/SR-60 Eastbound Ramps.

Roadway segment improvements are identified at the following roadway segments to achieve acceptable operations at the deficient roadway segments for forecast year 2030 with project conditions:

- Mulberry Avenue;
- Beech Avenue;

- Cypress Avenue;
- Jurupa Street between Etiwanda Avenue and Mulberry Avenue;
- Mulberry Avenue between Slover Avenue and Jurupa Street;
- Country Village Road between Philadelphia Avenue and SR-60 Westbound Ramps;
- Jurupa Street between Mulberry Avenue and Cherry Avenue;
- San Bernardino Avenue between Cherry Avenue and Fontana Avenue;
- Jurupa Street between Cherry Avenue and Citrus Avenue;
- Beech Avenue between Slover Avenue and Jurupa Street;
- Citrus Avenue between I-10 Eastbound Ramps and Santa Ana Avenue;
- Citrus Avenue between Santa Ana Avenue and Jurupa Street; and
- Jurupa Street between Citrus Avenue and Sierra Avenue.

Improvements are identified at the following study intersections to achieve acceptable operations at the deficient intersections for forecast year 2030 with project conditions:

- I-15 Southbound Ramps/Jurupa Street;
- Etiwanda Avenue/San Bernardino Avenue;
- Etiwanda Avenue/East Airport Drive-Slover Avenue;
- Etiwanda Avenue/Jurupa Street;
- Commerce Way/Ontario Mills Parkway;
- Mulberry Avenue/Slover Avenue;
- Mulberry Avenue/Santa Ana Avenue;
- Mulberry Avenue/Jurupa Street;
- Banana Avenue/Valley Boulevard;
- Cherry Avenue/San Bernardino Avenue;
- Cherry Avenue/Valley Boulevard;
- Cherry Avenue/Slover Avenue;
- Cherry Avenue/Santa Ana Avenue;
- Cherry Avenue/Jurupa Street;
- Beech Avenue/Valley Boulevard;
- Beech Avenue/Slover Avenue;
- Beech Avenue/Santa Ana Avenue;
- Beech Avenue/Jurupa Street;
- Citrus Avenue/Valley Boulevard;
- Citrus Avenue/Slover Avenue;

- Citrus Avenue/Santa Ana Avenue;
- Citrus Avenue/Jurupa Street;
- Sierra Avenue/Slover Avenue;
- Sierra Avenue/Jurupa Street; and
- Armstrong Road/SR-60 Eastbound Ramps.

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## **APPENDIX A**

### **Existing Count Data**



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## **Roadway Segments**

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# 24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

PREPARED BY PACIFIC TRAFFIC DATA SERVICES

DATE: 02/19/09 THURSDAY  
JOB #: CA09-0220-1-001

CITY: FONTANA  
LOCATION: SAN BERNARDINO W/O ETTIWANDA

| AM TIME | EASTBOUND |    |     |     |    |   | WESTBOUND |       |     |    |     |    | EASTBOUND |       |         |     |       |    | WESTBOUND |     |    |    |       |         | TOTAL |       |    |    |     |   |    |       |
|---------|-----------|----|-----|-----|----|---|-----------|-------|-----|----|-----|----|-----------|-------|---------|-----|-------|----|-----------|-----|----|----|-------|---------|-------|-------|----|----|-----|---|----|-------|
|         | 1         | 2  | 3   | 4   | 5  | 6 | 1         | 2     | 3   | 4  | 5   | 6  | 1         | 2     | 3       | 4   | 5     | 6  | 1         | 2   | 3  | 4  | 5     | 6       |       |       |    |    |     |   |    |       |
| 0:00    | 2         | 0  | 0   | 0   | 0  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 88        | 4   | 1  | 5  | 1     | 0       | 99    |       |    |    |     |   |    |       |
| 0:15    | 2         | 0  | 0   | 0   | 0  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 81        | 5   | 1  | 8  | 0     | 0       | 95    |       |    |    |     |   |    |       |
| 0:30    | 1         | 0  | 0   | 0   | 0  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 84        | 2   | 2  | 6  | 0     | 0       | 94    |       |    |    |     |   |    |       |
| 0:45    | 1         | 0  | 0   | 0   | 0  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 92        | 5   | 3  | 5  | 1     | 0       | 106   |       |    |    |     |   |    |       |
| 1:00    | 2         | 0  | 0   | 0   | 0  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 87        | 2   | 2  | 7  | 0     | 0       | 98    |       |    |    |     |   |    |       |
| 1:15    | 0         | 0  | 0   | 0   | 0  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 66        | 4   | 1  | 7  | 1     | 0       | 79    |       |    |    |     |   |    |       |
| 1:30    | 4         | 0  | 0   | 0   | 0  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 59        | 7   | 1  | 5  | 0     | 0       | 72    |       |    |    |     |   |    |       |
| 1:45    | 2         | 0  | 0   | 0   | 0  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 77        | 1   | 1  | 4  | 0     | 0       | 83    |       |    |    |     |   |    |       |
| 2:00    | 0         | 0  | 0   | 0   | 0  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 82        | 4   | 2  | 6  | 1     | 0       | 95    |       |    |    |     |   |    |       |
| 2:15    | 5         | 0  | 0   | 0   | 0  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 80        | 2   | 1  | 11 | 0     | 1       | 95    |       |    |    |     |   |    |       |
| 2:30    | 2         | 0  | 0   | 0   | 0  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 59        | 3   | 2  | 6  | 2     | 1       | 73    |       |    |    |     |   |    |       |
| 2:45    | 0         | 0  | 0   | 0   | 0  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 95        | 1   | 0  | 3  | 0     | 0       | 99    |       |    |    |     |   |    |       |
| 3:00    | 2         | 0  | 0   | 0   | 0  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 115       | 3   | 1  | 7  | 0     | 0       | 126   |       |    |    |     |   |    |       |
| 3:15    | 3         | 0  | 0   | 0   | 0  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 144       | 5   | 2  | 12 | 1     | 0       | 164   |       |    |    |     |   |    |       |
| 3:30    | 5         | 0  | 0   | 0   | 0  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 168       | 4   | 4  | 5  | 0     | 0       | 181   |       |    |    |     |   |    |       |
| 3:45    | 6         | 0  | 0   | 0   | 0  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 186       | 6   | 0  | 3  | 0     | 0       | 196   |       |    |    |     |   |    |       |
| 4:00    | 5         | 0  | 0   | 0   | 0  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 246       | 6   | 1  | 8  | 0     | 0       | 261   |       |    |    |     |   |    |       |
| 4:15    | 5         | 0  | 0   | 0   | 0  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 201       | 5   | 2  | 2  | 1     | 0       | 211   |       |    |    |     |   |    |       |
| 4:30    | 10        | 1  | 1   | 3   | 0  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 226       | 4   | 2  | 10 | 2     | 0       | 244   |       |    |    |     |   |    |       |
| 4:45    | 8         | 0  | 1   | 0   | 0  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 185       | 0   | 0  | 7  | 0     | 0       | 192   |       |    |    |     |   |    |       |
| 5:00    | 11        | 0  | 2   | 2   | 0  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 233       | 1   | 0  | 5  | 0     | 0       | 239   |       |    |    |     |   |    |       |
| 5:15    | 15        | 0  | 3   | 1   | 0  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 210       | 1   | 0  | 2  | 1     | 0       | 214   |       |    |    |     |   |    |       |
| 5:30    | 31        | 3  | 3   | 4   | 0  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 224       | 2   | 0  | 2  | 0     | 1       | 229   |       |    |    |     |   |    |       |
| 5:45    | 28        | 1  | 4   | 5   | 0  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 134       | 2   | 0  | 8  | 1     | 1       | 146   |       |    |    |     |   |    |       |
| 6:00    | 36        | 2  | 4   | 5   | 0  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 120       | 2   | 0  | 7  | 0     | 0       | 129   |       |    |    |     |   |    |       |
| 6:15    | 33        | 3  | 3   | 4   | 0  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 135       | 2   | 0  | 6  | 1     | 0       | 144   |       |    |    |     |   |    |       |
| 6:30    | 35        | 4  | 3   | 2   | 0  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 116       | 2   | 0  | 2  | 0     | 1       | 121   |       |    |    |     |   |    |       |
| 6:45    | 42        | 1  | 5   | 8   | 0  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 128       | 1   | 0  | 4  | 0     | 0       | 133   |       |    |    |     |   |    |       |
| 7:00    | 53        | 7  | 9   | 16  | 1  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 101       | 0   | 1  | 2  | 0     | 0       | 104   |       |    |    |     |   |    |       |
| 7:15    | 49        | 2  | 3   | 11  | 1  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 88        | 0   | 2  | 2  | 1     | 0       | 93    |       |    |    |     |   |    |       |
| 7:30    | 77        | 2  | 4   | 18  | 0  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 95        | 1   | 0  | 3  | 0     | 0       | 99    |       |    |    |     |   |    |       |
| 7:45    | 90        | 2  | 3   | 27  | 1  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 77        | 2   | 0  | 2  | 0     | 0       | 81    |       |    |    |     |   |    |       |
| 8:00    | 63        | 3  | 4   | 8   | 1  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 62        | 2   | 0  | 1  | 0     | 0       | 65    |       |    |    |     |   |    |       |
| 8:15    | 59        | 4  | 4   | 11  | 1  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 50        | 2   | 1  | 0  | 0     | 0       | 53    |       |    |    |     |   |    |       |
| 8:30    | 62        | 3  | 3   | 16  | 1  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 40        | 1   | 0  | 0  | 0     | 0       | 41    |       |    |    |     |   |    |       |
| 8:45    | 65        | 5  | 1   | 19  | 0  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 20        | 0   | 0  | 1  | 0     | 0       | 21    |       |    |    |     |   |    |       |
| 9:00    | 51        | 5  | 2   | 22  | 0  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 16        | 1   | 0  | 1  | 0     | 0       | 18    |       |    |    |     |   |    |       |
| 9:15    | 59        | 6  | 2   | 16  | 2  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 11        | 1   | 0  | 0  | 0     | 0       | 12    |       |    |    |     |   |    |       |
| 9:30    | 44        | 4  | 3   | 28  | 1  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 19        | 0   | 1  | 2  | 0     | 0       | 22    |       |    |    |     |   |    |       |
| 9:45    | 56        | 5  | 3   | 20  | 1  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 15        | 1   | 0  | 1  | 0     | 0       | 17    |       |    |    |     |   |    |       |
| 10:00   | 42        | 2  | 5   | 16  | 1  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 8         | 0   | 0  | 0  | 0     | 0       | 8     |       |    |    |     |   |    |       |
| 10:15   | 55        | 3  | 5   | 11  | 0  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 5         | 0   | 0  | 0  | 0     | 0       | 5     |       |    |    |     |   |    |       |
| 10:30   | 51        | 5  | 4   | 13  | 0  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 6         | 0   | 1  | 3  | 0     | 0       | 9     |       |    |    |     |   |    |       |
| 10:45   | 62        | 2  | 2   | 15  | 0  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 6         | 1   | 0  | 0  | 0     | 0       | 7     |       |    |    |     |   |    |       |
| 11:00   | 66        | 2  | 2   | 18  | 1  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 3         | 0   | 0  | 0  | 0     | 0       | 8     |       |    |    |     |   |    |       |
| 11:15   | 78        | 4  | 3   | 9   | 0  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 2         | 0   | 0  | 0  | 0     | 0       | 8     |       |    |    |     |   |    |       |
| 11:30   | 55        | 5  | 2   | 16  | 0  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 2         | 0   | 0  | 1  | 0     | 0       | 7     |       |    |    |     |   |    |       |
| 11:45   | 62        | 2  | 3   | 11  | 1  | 0 | 0         | 0     | 0   | 0  | 0   | 0  | 0         | 0     | 0       | 0   | 0     | 0  | 0         | 0   | 0  | 0  | 0     | 0       | 5     |       |    |    |     |   |    |       |
| TOTAL   | 1,495     | 90 | 102 | 378 | 14 | 0 | 2,079     | 1,748 | 121 | 22 | 253 | 18 | 0         | 2,162 | 7:30 AM | 505 | 4,347 | 98 | 35        | 183 | 14 | 6  | 4,683 | 3:45 PM | 912   | 2,301 | 93 | 34 | 194 | 0 | 12 | 2,634 |

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| CLASS 1 | PASSENGER VEHICLES | CLASS 4 | 4 OR MORE AXLE TRUCKS |
|---------|--------------------|---------|-----------------------|
| CLASS 2 | 2-AXLE TRUCKS      | CLASS 5 | RECREATION VEHICLES   |
| CLASS 3 | 3-AXLE TRUCKS      | CLASS 6 | BUSES                 |

## PREPARED BY PACIFIC TRAFFIC DATA SERVICES

**CITY:** FONTANA  
**LOCATION:** EAST AIRPORT W/O ETIOWANDA

[illegible]

|                |                    |                |                       |
|----------------|--------------------|----------------|-----------------------|
| <b>CLASS 1</b> | PASSENGER VEHICLES | <b>CLASS 4</b> | 4 OR MORE AXLE TRUCKS |
| <b>CLASS 2</b> | 2-AXLE TRUCKS      | <b>CLASS 5</b> | RECREATION VEHICLES   |
| <b>CLASS 3</b> | 3-AXLE TRUCKS      | <b>CLASS 6</b> | BUSES                 |

## PREPARED BY PACIFIC TRAFFIC DATA SERVICES

**CITY:** FONTANA  
**LOCATION:** JURUPA W/O ETLWANDA

[illegible]

| CLASS 1 | PASSENGER VEHICLES | CLASS 4 | 4 OR MORE AXLE TRUCKS |
|---------|--------------------|---------|-----------------------|
| CLASS 2 | 2-AXLE TRUCKS      | CLASS 5 | RECREATION VEHICLES   |
| CLASS 3 | 3-AXLE TRUCKS      | CLASS 6 | BUSES                 |

# 24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

PREPARED BY PACIFIC TRAFFIC DATA SERVICES

DATE: 02/19/09  
JOB #: CA09-0220-1-004

THURSDAY

CITY: FONTANA  
LOCATION: PHILADELPHIA W/O ETI WANDA

| TIME                 | EASTBOUND |    |    |    |   |   | WESTBOUND |                      |    |    |    |   | EASTBOUND |       |     |                      |    |    | WESTBOUND |   |       |     |     |                      | TOTAL |    |   |       |     |    |
|----------------------|-----------|----|----|----|---|---|-----------|----------------------|----|----|----|---|-----------|-------|-----|----------------------|----|----|-----------|---|-------|-----|-----|----------------------|-------|----|---|-------|-----|----|
|                      | 1         | 2  | 3  | 4  | 5 | 6 | TOTAL     | 1                    | 2  | 3  | 4  | 5 | 6         | TOTAL | 1   | 2                    | 3  | 4  | 5         | 6 | TOTAL | 1   | 2   | 3                    | 4     | 5  | 6 | TOTAL |     |    |
| 0:00                 | 1         | 0  | 0  | 0  | 0 | 0 | 1         | 0                    | 0  | 0  | 0  | 0 | 0         | 0     | 25  | 0                    | 0  | 0  | 0         | 0 | 0     | 25  | 13  | 0                    | 0     | 0  | 0 | 13    |     |    |
| 0:15                 | 0         | 0  | 0  | 0  | 0 | 0 | 0         | 0                    | 0  | 0  | 0  | 0 | 0         | 0     | 18  | 0                    | 0  | 0  | 0         | 0 | 0     | 18  | 14  | 0                    | 0     | 3  | 0 | 17    |     |    |
| 0:30                 | 1         | 0  | 0  | 0  | 0 | 0 | 1         | 0                    | 0  | 0  | 1  | 0 | 0         | 2     | 20  | 0                    | 1  | 2  | 0         | 0 | 0     | 23  | 15  | 0                    | 0     | 2  | 0 | 17    |     |    |
| 0:45                 | 0         | 0  | 0  | 1  | 0 | 0 | 1         | 2                    | 0  | 0  | 0  | 0 | 0         | 2     | 15  | 0                    | 0  | 0  | 2         | 0 | 0     | 16  | 12  | 2                    | 0     | 2  | 0 | 16    |     |    |
| 1:00                 | 0         | 0  | 1  | 0  | 0 | 0 | 1         | 1                    | 0  | 1  | 1  | 0 | 0         | 3     | 26  | 0                    | 0  | 2  | 2         | 0 | 0     | 28  | 9   | 2                    | 2     | 2  | 0 | 15    |     |    |
| 1:15                 | 0         | 0  | 0  | 0  | 0 | 0 | 0         | 2                    | 0  | 0  | 1  | 0 | 0         | 3     | 22  | 0                    | 2  | 2  | 0         | 0 | 0     | 26  | 8   | 0                    | 1     | 2  | 0 | 11    |     |    |
| 1:30                 | 1         | 0  | 0  | 0  | 0 | 0 | 1         | 0                    | 1  | 0  | 0  | 2 | 0         | 3     | 10  | 0                    | 0  | 2  | 0         | 0 | 0     | 12  | 22  | 0                    | 0     | 4  | 0 | 26    |     |    |
| 1:45                 | 0         | 0  | 0  | 0  | 0 | 0 | 0         | 3                    | 1  | 0  | 0  | 0 | 0         | 4     | 5   | 0                    | 0  | 3  | 0         | 0 | 0     | 8   | 16  | 1                    | 0     | 0  | 0 | 18    |     |    |
| 2:00                 | 0         | 0  | 0  | 0  | 0 | 0 | 0         | 2                    | 0  | 0  | 0  | 0 | 0         | 2     | 11  | 2                    | 1  | 0  | 0         | 0 | 0     | 14  | 23  | 0                    | 0     | 0  | 0 | 24    |     |    |
| 2:15                 | 1         | 0  | 0  | 0  | 0 | 0 | 1         | 5                    | 0  | 0  | 1  | 2 | 0         | 8     | 16  | 0                    | 0  | 0  | 0         | 0 | 0     | 16  | 21  | 0                    | 2     | 0  | 0 | 23    |     |    |
| 2:30                 | 1         | 0  | 0  | 2  | 0 | 0 | 3         | 8                    | 1  | 0  | 0  | 0 | 0         | 9     | 22  | 0                    | 2  | 4  | 0         | 0 | 0     | 28  | 16  | 0                    | 0     | 1  | 0 | 23    |     |    |
| 2:45                 | 5         | 0  | 0  | 2  | 0 | 0 | 7         | 8                    | 0  | 0  | 0  | 0 | 0         | 8     | 18  | 3                    | 0  | 0  | 0         | 0 | 0     | 21  | 20  | 0                    | 0     | 4  | 0 | 24    |     |    |
| 3:00                 | 6         | 0  | 0  | 1  | 0 | 0 | 7         | 9                    | 0  | 0  | 1  | 0 | 0         | 10    | 28  | 1                    | 0  | 2  | 0         | 0 | 0     | 31  | 15  | 2                    | 3     | 2  | 0 | 22    |     |    |
| 3:15                 | 5         | 0  | 0  | 0  | 0 | 0 | 5         | 8                    | 1  | 0  | 2  | 0 | 0         | 11    | 19  | 0                    | 1  | 2  | 0         | 0 | 0     | 22  | 11  | 1                    | 0     | 3  | 0 | 15    |     |    |
| 3:30                 | 5         | 0  | 0  | 0  | 0 | 0 | 5         | 1                    | 0  | 2  | 0  | 0 | 0         | 3     | 15  | 30                   | 0  | 4  | 1         | 0 | 0     | 35  | 22  | 0                    | 2     | 2  | 0 | 26    |     |    |
| 3:45                 | 5         | 1  | 0  | 0  | 0 | 0 | 6         | 10                   | 0  | 0  | 0  | 0 | 0         | 10    | 15  | 0                    | 2  | 3  | 0         | 0 | 0     | 24  | 16  | 0                    | 1     | 4  | 0 | 21    |     |    |
| 4:00                 | 2         | 2  | 0  | 0  | 0 | 0 | 4         | 6                    | 1  | 0  | 1  | 0 | 0         | 8     | 30  | 0                    | 0  | 0  | 0         | 0 | 0     | 30  | 19  | 2                    | 0     | 5  | 0 | 26    |     |    |
| 4:15                 | 4         | 0  | 1  | 1  | 0 | 0 | 6         | 12                   | 2  | 0  | 2  | 0 | 0         | 7     | 29  | 1                    | 0  | 2  | 0         | 0 | 0     | 32  | 15  | 0                    | 0     | 5  | 0 | 20    |     |    |
| 4:30                 | 8         | 0  | 1  | 0  | 0 | 0 | 9         | 12                   | 2  | 0  | 2  | 0 | 0         | 16    | 47  | 2                    | 0  | 0  | 0         | 0 | 0     | 49  | 21  | 0                    | 0     | 4  | 0 | 25    |     |    |
| 4:45                 | 8         | 0  | 0  | 0  | 0 | 0 | 8         | 6                    | 0  | 0  | 4  | 3 | 0         | 13    | 34  | 0                    | 0  | 1  | 1         | 0 | 0     | 36  | 11  | 1                    | 1     | 2  | 0 | 15    |     |    |
| 5:00                 | 5         | 0  | 0  | 0  | 0 | 0 | 5         | 11                   | 0  | 0  | 0  | 0 | 0         | 11    | 32  | 0                    | 2  | 2  | 0         | 0 | 0     | 36  | 16  | 1                    | 1     | 2  | 0 | 20    |     |    |
| 5:15                 | 9         | 1  | 0  | 2  | 0 | 0 | 12        | 8                    | 2  | 0  | 0  | 0 | 0         | 10    | 22  | 0                    | 0  | 2  | 0         | 0 | 0     | 24  | 20  | 1                    | 2     | 1  | 0 | 24    |     |    |
| 5:30                 | 8         | 0  | 3  | 2  | 0 | 0 | 13        | 5                    | 3  | 1  | 1  | 0 | 0         | 10    | 34  | 1                    | 1  | 0  | 0         | 0 | 0     | 36  | 18  | 0                    | 0     | 1  | 0 | 19    |     |    |
| 5:45                 | 8         | 0  | 3  | 2  | 0 | 0 | 13        | 15                   | 0  | 2  | 0  | 0 | 0         | 17    | 23  | 0                    | 0  | 2  | 0         | 0 | 0     | 25  | 19  | 0                    | 2     | 2  | 1 | 24    |     |    |
| 6:00                 | 11        | 1  | 2  | 1  | 0 | 0 | 15        | 11                   | 0  | 0  | 4  | 0 | 0         | 15    | 33  | 0                    | 0  | 1  | 0         | 0 | 0     | 34  | 10  | 1                    | 1     | 3  | 0 | 15    |     |    |
| 6:15                 | 15        | 2  | 1  | 2  | 0 | 0 | 20        | 26                   | 0  | 0  | 0  | 0 | 0         | 26    | 37  | 0                    | 2  | 3  | 0         | 0 | 0     | 42  | 15  | 0                    | 0     | 7  | 0 | 22    |     |    |
| 6:30                 | 28        | 0  | 2  | 0  | 0 | 0 | 30        | 16                   | 1  | 1  | 0  | 0 | 0         | 18    | 28  | 1                    | 0  | 0  | 0         | 0 | 0     | 29  | 16  | 0                    | 0     | 3  | 1 | 20    |     |    |
| 6:45                 | 22        | 0  | 0  | 0  | 5 | 0 | 27        | 22                   | 0  | 0  | 0  | 0 | 0         | 22    | 20  | 0                    | 0  | 1  | 0         | 0 | 0     | 21  | 22  | 1                    | 2     | 5  | 0 | 30    |     |    |
| 7:00                 | 19        | 0  | 0  | 4  | 0 | 0 | 23        | 26                   | 0  | 0  | 1  | 0 | 0         | 27    | 16  | 0                    | 0  | 0  | 0         | 0 | 0     | 16  | 8   | 0                    | 1     | 1  | 0 | 10    |     |    |
| 7:15                 | 28        | 0  | 2  | 0  | 0 | 0 | 30        | 18                   | 0  | 0  | 2  | 0 | 0         | 30    | 21  | 2                    | 1  | 2  | 0         | 0 | 0     | 26  | 6   | 0                    | 0     | 0  | 0 | 6     |     |    |
| 7:30                 | 23        | 1  | 0  | 3  | 0 | 0 | 27        | 30                   | 2  | 0  | 3  | 0 | 0         | 35    | 17  | 0                    | 0  | 0  | 0         | 0 | 0     | 17  | 12  | 0                    | 0     | 0  | 0 | 12    |     |    |
| 7:45                 | 20        | 0  | 1  | 5  | 0 | 0 | 26        | 34                   | 2  | 0  | 2  | 0 | 0         | 38    | 22  | 0                    | 0  | 0  | 0         | 0 | 0     | 22  | 10  | 0                    | 0     | 0  | 0 | 10    |     |    |
| 8:00                 | 14        | 1  | 3  | 6  | 0 | 0 | 24        | 23                   | 0  | 0  | 0  | 0 | 0         | 23    | 18  | 2                    | 0  | 1  | 0         | 0 | 0     | 21  | 8   | 0                    | 0     | 1  | 0 | 9     |     |    |
| 8:15                 | 20        | 3  | 0  | 4  | 0 | 0 | 27        | 24                   | 0  | 0  | 1  | 0 | 0         | 25    | 10  | 0                    | 1  | 0  | 0         | 0 | 0     | 11  | 13  | 0                    | 0     | 0  | 0 | 13    |     |    |
| 8:30                 | 21        | 0  | 0  | 5  | 0 | 0 | 26        | 25                   | 0  | 2  | 3  | 0 | 0         | 30    | 8   | 1                    | 0  | 0  | 0         | 0 | 0     | 9   | 12  | 0                    | 0     | 0  | 0 | 12    |     |    |
| 8:45                 | 20        | 0  | 1  | 6  | 0 | 0 | 27        | 18                   | 1  | 0  | 1  | 0 | 0         | 20    | 15  | 0                    | 0  | 1  | 0         | 0 | 0     | 16  | 10  | 0                    | 0     | 0  | 0 | 10    |     |    |
| 9:00                 | 18        | 0  | 2  | 2  | 0 | 0 | 22        | 23                   | 0  | 0  | 2  | 0 | 0         | 25    | 11  | 0                    | 0  | 0  | 0         | 0 | 0     | 11  | 13  | 1                    | 0     | 0  | 0 | 14    |     |    |
| 9:15                 | 15        | 1  | 0  | 2  | 0 | 0 | 18        | 22                   | 1  | 1  | 2  | 0 | 0         | 26    | 10  | 0                    | 0  | 0  | 0         | 0 | 0     | 10  | 16  | 0                    | 0     | 0  | 0 | 16    |     |    |
| 9:30                 | 10        | 0  | 0  | 0  | 0 | 0 | 10        | 16                   | 0  | 0  | 1  | 0 | 0         | 17    | 8   | 0                    | 0  | 0  | 0         | 0 | 0     | 8   | 9   | 0                    | 0     | 0  | 0 | 8     |     |    |
| 9:45                 | 18        | 0  | 3  | 0  | 0 | 0 | 21        | 17                   | 0  | 0  | 0  | 0 | 0         | 17    | 8   | 0                    | 0  | 0  | 0         | 0 | 0     | 8   | 9   | 0                    | 0     | 0  | 0 | 9     |     |    |
| 10:00                | 20        | 0  | 0  | 1  | 0 | 0 | 21        | 21                   | 0  | 0  | 5  | 0 | 0         | 26    | 8   | 0                    | 0  | 0  | 0         | 0 | 0     | 8   | 7   | 0                    | 0     | 0  | 0 | 7     |     |    |
| 10:15                | 22        | 0  | 0  | 2  | 0 | 0 | 24        | 15                   | 1  | 0  | 1  | 0 | 0         | 17    | 6   | 0                    | 0  | 0  | 1         | 0 | 0     | 7   | 5   | 0                    | 0     | 0  | 0 | 5     |     |    |
| 10:30                | 21        | 1  | 0  | 0  | 0 | 0 | 22        | 17                   | 0  | 2  | 2  | 0 | 0         | 21    | 5   | 0                    | 0  | 0  | 0         | 0 | 0     | 5   | 6   | 0                    | 0     | 0  | 0 | 6     |     |    |
| 10:45                | 18        | 0  | 2  | 1  | 0 | 0 | 21        | 20                   | 0  | 0  | 0  | 0 | 0         | 20    | 5   | 0                    | 0  | 0  | 0         | 0 | 0     | 5   | 5   | 0                    | 0     | 0  | 0 | 5     |     |    |
| 11:00                | 26        | 1  | 1  | 0  | 0 | 0 | 28        | 16                   | 0  | 0  | 4  | 0 | 0         | 20    | 2   | 0                    | 0  | 0  | 0         | 0 | 0     | 2   | 5   | 0                    | 0     | 0  | 0 | 5     |     |    |
| 11:15                | 15        | 2  | 1  | 2  | 0 | 0 | 20        | 11                   | 2  | 0  | 2  | 0 | 0         | 15    | 2   | 0                    | 0  | 0  | 0         | 0 | 0     | 2   | 4   | 0                    | 0     | 0  | 0 | 4     |     |    |
| 11:30                | 19        | 0  | 0  | 0  | 0 | 0 | 19        | 15                   | 1  | 1  | 1  | 0 | 0         | 18    | 1   | 0                    | 0  | 1  | 0         | 0 | 0     | 2   | 2   | 0                    | 1     | 0  | 0 | 3     |     |    |
| 11:45                | 23        | 0  | 0  | 0  | 0 | 0 | 23        | 10                   | 0  | 0  | 0  | 0 | 0         | 20    | 2   | 0                    | 0  | 0  | 0         | 0 | 0     | 2   | 3   | 0                    | 0     | 0  | 0 | 3     |     |    |
| TOTAL                | 549       | 17 | 23 | 69 | 0 | 0 | 658       | 600                  | 24 | 20 | 56 | 0 | 0         | 700   | 868 | 16                   | 20 | 43 | 2         | 2 | 0     | 949 | 617 | 16                   | 23    | 74 | 2 | 0     | 732 |    |
| AM PEAK HOUR 6:30 AM |           |    |    |    |   |   | 110       | AM PEAK HOUR 7:30 AM |    |    |    |   |           |       | 121 | PM PEAK HOUR 4:15 PM |    |    |           |   |       |     | 153 | PM PEAK HOUR 3:30 PM |       |    |   |       |     | 93 |
| AM PEAK VOLUME       |           |    |    |    |   |   |           | AM PEAK VOLUME       |    |    |    |   |           |       |     | PM PEAK VOLUME       |    |    |           |   |       |     |     | PM PEAK VOLUME       |       |    |   |       |     |    |

|         |                    |         |                       |
|---------|--------------------|---------|-----------------------|
| CLASS 1 | PASSENGER VEHICLES | CLASS 4 | 4 OR MORE AXLE TRUCKS |
| CLASS 2 | 2-AXLE TRUCKS      | CLASS 5 | RECREATION VEHICLES   |
| CLASS 3 | 3-AXLE TRUCKS      | CLASS 6 | BUSES                 |

|             |       |      |      |      |      |      |        |       |      |      |      |      |      |        |
|-------------|-------|------|------|------|------|------|--------|-------|------|------|------|------|------|--------|
| DAILY TOTAL | 1,417 | 33   | 43   | 112  | 2    | 0    | 1,607  | 1,217 | 40   | 43   | 130  | 2    | 0    | 1,432  |
| % OF TOTAL  | 88.2% | 2.1% | 2.7% | 7.0% | 0.1% | 0.0% | 100.0% | 85.0% | 2.8% | 3.0% | 9.1% | 0.1% | 0.0% | 100.0% |

# 24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

PREPARED BY PACIFIC TRAFFIC DATA SERVICES

DATE: 02/19/09  
JOB #: CA09-0220-1-005

THURSDAY

CITY: FONTANA  
LOCATION: ETIWAANDA S/O SAN BERNARDINO

| AM TIME | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |  |  | NORTHBOUND |  |  |  |  |  | SOUTHBOUND |  |  |  |  |  | TOTAL |  |  |  |  |  | PM |  |  |  |
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### 24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

PREPARED BY PACIFIC TRAFFIC DATA SERVICES

DATE: 02/19/09 THURSDAY

CITY: FONTANA

JOB #: CA09-0220-1-006

**LOCATION:** ETIOWANDA S/O E AIRPORT

| AM<br>TIME | NORTHBOUND |    |     |     |    |   | TOTAL | SOUTHBOUND |    |     |     |   |   | TOTAL | PM    |       |     |     |     |   | TOTAL | NORTHBOUND |       |     |     |     |    | TOTAL | SOUTHBOUND |              |         |     |  |  | TOTAL |
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|            | 1          | 2  | 3   | 4   | 5  | 6 |       | 1          | 2  | 3   | 4   | 5 | 6 |       | Time  | 1     | 2   | 3   | 4   | 5 |       | 6          | 1     | 2   | 3   | 4   | 5  |       | 6          |              |         |     |  |  |       |
|            |            |    |     |     |    |   |       |            |    |     |     |   |   |       |       |       |     |     |     |   |       |            |       |     |     |     |    |       |            |              |         |     |  |  |       |
| 0:00       | 2          | 0  | 0   | 5   | 0  | 0 | 7     | 2          | 0  | 0   | 0   | 3 | 0 | 0     | 5     | 12:00 | 119 | 0   | 0   | 0 | 9     | 0          | 0     | 128 | 70  | 0   | 0  | 8     | 0          | 0            | 78      |     |  |  |       |
| 0:15       | 4          | 0  | 2   | 6   | 0  | 0 | 12    | 2          | 0  | 0   | 0   | 0 | 0 | 2     | 12:15 | 126   | 0   | 2   | 12  | 0 | 0     | 0          | 140   | 95  | 2   | 3   | 9  | 0     | 1          | 110          |         |     |  |  |       |
| 0:30       | 10         | 0  | 2   | 2   | 0  | 0 | 14    | 2          | 0  | 0   | 2   | 0 | 0 | 4     | 12:30 | 105   | 0   | 3   | 15  | 0 | 1     | 1          | 124   | 88  | 0   | 2   | 5  | 0     | 0          | 95           |         |     |  |  |       |
| 0:45       | 6          | 0  | 1   | 2   | 0  | 0 | 9     | 1          | 0  | 2   | 2   | 0 | 0 | 5     | 12:45 | 98    | 1   | 2   | 8   | 0 | 0     | 0          | 109   | 100 | 1   | 2   | 4  | 0     | 0          | 107          |         |     |  |  |       |
| 1:00       | 2          | 0  | 2   | 1   | 0  | 0 | 5     | 2          | 2  | 0   | 1   | 0 | 0 | 4     | 13:00 | 99    | 0   | 2   | 8   | 0 | 0     | 0          | 109   | 77  | 2   | 2   | 8  | 0     | 0          | 89           |         |     |  |  |       |
| 1:15       | 3          | 1  | 0   | 3   | 0  | 0 | 7     | 4          | 0  | 0   | 0   | 0 | 0 | 5     | 13:15 | 78    | 0   | 1   | 10  | 0 | 0     | 0          | 89    | 62  | 3   | 2   | 5  | 0     | 1          | 73           |         |     |  |  |       |
| 1:30       | 5          | 0  | 0   | 3   | 0  | 0 | 8     | 5          | 0  | 1   | 0   | 0 | 0 | 6     | 13:30 | 88    | 0   | 2   | 8   | 0 | 0     | 1          | 99    | 95  | 2   | 5   | 6  | 0     | 0          | 108          |         |     |  |  |       |
| 1:45       | 5          | 0  | 0   | 2   | 0  | 0 | 7     | 8          | 0  | 0   | 2   | 0 | 0 | 10    | 13:45 | 84    | 2   | 0   | 8   | 0 | 0     | 0          | 94    | 80  | 2   | 4   | 8  | 0     | 0          | 94           |         |     |  |  |       |
| 2:00       | 5          | 1  | 1   | 5   | 0  | 0 | 12    | 7          | 0  | 0   | 3   | 0 | 0 | 10    | 14:00 | 95    | 2   | 0   | 16  | 0 | 0     | 0          | 113   | 81  | 0   | 2   | 10 | 0     | 0          | 93           |         |     |  |  |       |
| 2:15       | 8          | 0  | 2   | 4   | 0  | 0 | 14    | 12         | 2  | 2   | 4   | 0 | 0 | 20    | 14:15 | 77    | 0   | 1   | 11  | 0 | 0     | 0          | 89    | 99  | 0   | 6   | 15 | 0     | 0          | 120          |         |     |  |  |       |
| 2:30       | 8          | 2  | 0   | 2   | 0  | 0 | 12    | 15         | 1  | 0   | 2   | 0 | 0 | 18    | 14:30 | 105   | 0   | 2   | 15  | 0 | 0     | 1          | 123   | 98  | 0   | 5   | 18 | 0     | 1          | 122          |         |     |  |  |       |
| 2:45       | 8          | 0  | 0   | 0   | 0  | 0 | 8     | 26         | 1  | 0   | 2   | 0 | 0 | 29    | 14:45 | 115   | 0   | 5   | 20  | 0 | 0     | 0          | 140   | 101 | 2   | 2   | 22 | 0     | 0          | 127          |         |     |  |  |       |
| 3:00       | 18         | 1  | 3   | 0   | 0  | 0 | 22    | 33         | 1  | 1   | 5   | 0 | 0 | 40    | 15:00 | 126   | 1   | 2   | 10  | 0 | 0     | 0          | 139   | 88  | 4   | 5   | 26 | 0     | 0          | 123          |         |     |  |  |       |
| 3:15       | 13         | 2  | 2   | 1   | 0  | 0 | 18    | 31         | 2  | 0   | 6   | 0 | 0 | 39    | 15:15 | 105   | 0   | 2   | 22  | 0 | 0     | 0          | 103   | 105 | 2   | 6   | 20 | 0     | 0          | 133          |         |     |  |  |       |
| 3:30       | 11         | 2  | 2   | 2   | 0  | 0 | 17    | 22         | 0  | 0   | 6   | 0 | 0 | 28    | 15:30 | 88    | 0   | 3   | 11  | 0 | 0     | 1          | 109   | 132 | 2   | 2   | 18 | 0     | 1          | 155          |         |     |  |  |       |
| 3:45       | 15         | 3  | 0   | 2   | 2  | 1 | 21    | 33         | 0  | 0   | 6   | 0 | 0 | 39    | 15:45 | 95    | 2   | 2   | 10  | 0 | 0     | 0          | 105   | 121 | 0   | 5   | 33 | 0     | 2          | 161          |         |     |  |  |       |
| 4:00       | 28         | 0  | 2   | 5   | 0  | 0 | 35    | 45         | 1  | 2   | 8   | 0 | 0 | 56    | 16:00 | 179   | 0   | 4   | 12  | 0 | 0     | 0          | 195   | 141 | 2   | 4   | 31 | 0     | 0          | 178          |         |     |  |  |       |
| 4:15       | 33         | 0  | 0   | 4   | 0  | 0 | 37    | 28         | 0  | 2   | 7   | 0 | 0 | 37    | 16:15 | 186   | 2   | 2   | 18  | 0 | 0     | 0          | 208   | 145 | 2   | 6   | 25 | 0     | 2          | 180          |         |     |  |  |       |
| 4:30       | 26         | 1  | 3   | 5   | 0  | 0 | 35    | 33         | 0  | 2   | 5   | 1 | 0 | 41    | 16:30 | 195   | 1   | 2   | 13  | 0 | 0     | 1          | 211   | 162 | 3   | 6   | 28 | 0     | 0          | 199          |         |     |  |  |       |
| 4:45       | 31         | 0  | 2   | 2   | 1  | 0 | 36    | 42         | 0  | 1   | 10  | 0 | 0 | 53    | 16:45 | 239   | 3   | 0   | 22  | 1 | 1     | 1          | 266   | 160 | 5   | 5   | 20 | 0     | 0          | 190          |         |     |  |  |       |
| 5:00       | 66         | 0  | 2   | 3   | 0  | 0 | 71    | 68         | 0  | 4   | 8   | 0 | 0 | 80    | 17:00 | 199   | 2   | 2   | 28  | 0 | 0     | 0          | 231   | 181 | 5   | 11  | 26 | 0     | 1          | 224          |         |     |  |  |       |
| 5:15       | 40         | 1  | 0   | 3   | 0  | 1 | 45    | 95         | 1  | 6   | 12  | 0 | 0 | 114   | 17:15 | 163   | 0   | 8   | 32  | 0 | 0     | 0          | 203   | 146 | 2   | 8   | 8  | 0     | 0          | 164          |         |     |  |  |       |
| 5:30       | 85         | 0  | 0   | 5   | 0  | 0 | 90    | 89         | 0  | 2   | 8   | 0 | 0 | 99    | 17:30 | 188   | 1   | 5   | 33  | 0 | 0     | 0          | 227   | 135 | 2   | 5   | 6  | 0     | 0          | 148          |         |     |  |  |       |
| 5:45       | 91         | 2  | 2   | 10  | 1  | 0 | 106   | 95         | 3  | 6   | 8   | 0 | 0 | 112   | 17:45 | 157   | 0   | 4   | 25  | 0 | 0     | 1          | 187   | 126 | 4   | 6   | 8  | 0     | 0          | 144          |         |     |  |  |       |
| 6:00       | 81         | 2  | 1   | 15  | 0  | 0 | 99    | 80         | 2  | 2   | 6   | 1 | 1 | 92    | 18:00 | 170   | 0   | 6   | 10  | 0 | 0     | 0          | 136   | 120 | 0   | 8   | 9  | 0     | 0          | 137          |         |     |  |  |       |
| 6:15       | 88         | 2  | 5   | 8   | 1  | 1 | 105   | 77         | 1  | 2   | 9   | 0 | 0 | 89    | 18:15 | 151   | 1   | 5   | 8   | 0 | 0     | 0          | 165   | 115 | 2   | 6   | 10 | 0     | 0          | 133          |         |     |  |  |       |
| 6:30       | 123        | 0  | 6   | 8   | 0  | 0 | 137   | 126        | 5  | 2   | 8   | 0 | 0 | 141   | 18:30 | 162   | 2   | 2   | 6   | 0 | 0     | 1          | 173   | 118 | 0   | 2   | 15 | 0     | 0          | 135          |         |     |  |  |       |
| 6:45       | 115        | 0  | 6   | 6   | 0  | 0 | 127   | 135        | 1  | 3   | 10  | 0 | 0 | 149   | 18:45 | 132   | 2   | 5   | 5   | 0 | 0     | 0          | 144   | 100 | 0   | 4   | 8  | 0     | 1          | 113          |         |     |  |  |       |
| 7:00       | 107        | 1  | 2   | 12  | 2  | 0 | 124   | 151        | 0  | 2   | 15  | 0 | 0 | 168   | 19:00 | 144   | 3   | 4   | 4   | 0 | 0     | 0          | 155   | 126 | 0   | 2   | 5  | 0     | 0          | 133          |         |     |  |  |       |
| 7:15       | 110        | 0  | 7   | 15  | 0  | 0 | 132   | 175        | 2  | 2   | 22  | 0 | 1 | 202   | 19:15 | 151   | 2   | 2   | 4   | 0 | 0     | 0          | 159   | 88  | 0   | 1   | 6  | 0     | 0          | 95           |         |     |  |  |       |
| 7:30       | 131        | 2  | 5   | 20  | 1  | 1 | 160   | 206        | 0  | 5   | 32  | 0 | 0 | 243   | 19:30 | 106   | 5   | 5   | 5   | 0 | 0     | 0          | 121   | 90  | 0   | 0   | 1  | 0     | 0          | 91           |         |     |  |  |       |
| 7:45       | 132        | 2  | 5   | 22  | 0  | 0 | 161   | 195        | 0  | 6   | 20  | 0 | 0 | 221   | 19:45 | 126   | 5   | 6   | 6   | 0 | 0     | 0          | 143   | 50  | 2   | 0   | 2  | 0     | 0          | 54           |         |     |  |  |       |
| 8:00       | 162        | 3  | 6   | 16  | 0  | 0 | 187   | 151        | 1  | 6   | 16  | 0 | 0 | 174   | 20:00 | 99    | 6   | 2   | 6   | 0 | 0     | 0          | 113   | 55  | 0   | 0   | 2  | 0     | 0          | 57           |         |     |  |  |       |
| 8:15       | 126        | 5  | 8   | 12  | 1  | 1 | 153   | 112        | 0  | 5   | 18  | 0 | 1 | 136   | 20:15 | 85    | 5   | 2   | 8   | 0 | 0     | 0          | 100   | 68  | 0   | 0   | 3  | 0     | 0          | 71           |         |     |  |  |       |
| 8:30       | 151        | 4  | 5   | 18  | 0  | 0 | 178   | 103        | 0  | 5   | 22  | 0 | 0 | 130   | 20:30 | 70    | 0   | 1   | 7   | 0 | 0     | 0          | 78    | 50  | 0   | 0   | 2  | 0     | 0          | 52           |         |     |  |  |       |
| 8:45       | 145        | 2  | 5   | 17  | 1  | 0 | 170   | 123        | 1  | 5   | 35  | 1 | 0 | 165   | 20:45 | 77    | 3   | 2   | 6   | 0 | 0     | 0          | 88    | 45  | 0   | 1   | 0  | 0     | 0          | 46           |         |     |  |  |       |
| 9:00       | 131        | 2  | 2   | 10  | 0  | 0 | 145   | 115        | 2  | 5   | 20  | 0 | 0 | 142   | 21:00 | 62    | 0   | 0   | 5   | 0 | 0     | 0          | 38    | 67  | 32  | 0   | 0  | 6     | 0          | 0            | 38      |     |  |  |       |
| 9:15       | 142        | 2  | 2   | 19  | 0  | 1 | 166   | 126        | 0  | 8   | 12  | 0 | 1 | 147   | 21:15 | 40    | 0   | 0   | 6   | 0 | 0     | 0          | 46    | 33  | 1   | 0   | 0  | 0     | 0          | 34           |         |     |  |  |       |
| 9:30       | 140        | 3  | 3   | 20  | 0  | 0 | 166   | 88         | 2  | 6   | 18  | 0 | 0 | 114   | 21:30 | 51    | 0   | 0   | 2   | 0 | 0     | 0          | 53    | 12  | 0   | 1   | 0  | 0     | 0          | 34           |         |     |  |  |       |
| 9:45       | 135        | 2  | 2   | 16  | 1  | 0 | 156   | 95         | 0  | 5   | 20  | 0 | 0 | 120   | 21:45 | 22    | 1   | 1   | 2   | 0 | 0     | 0          | 26    | 15  | 0   | 0   | 2  | 0     | 0          | 17           |         |     |  |  |       |
| 10:00      | 144        | 2  | 4   | 22  | 0  | 0 | 172   | 103        | 1  | 8   | 16  | 0 | 0 | 128   | 22:00 | 32    | 0   | 0   | 0   | 0 | 0     | 0          | 32    | 11  | 0   | 1   | 1  | 0     | 0          | 13           |         |     |  |  |       |
| 10:15      | 132        | 1  | 6   | 18  | 2  | 1 | 160   | 112        | 0  | 3   | 11  | 0 | 1 | 127   | 22:15 | 35    | 2   | 0   | 0   | 0 | 0     | 0          | 37    | 18  | 1   | 2   | 1  | 0     | 0          | 22           |         |     |  |  |       |
| 10:30      | 126        | 2  | 3   | 20  | 0  | 0 | 151   | 106        | 0  | 3   | 10  | 0 | 0 | 119   | 22:30 | 20    | 2   | 0   | 1   | 0 | 0     | 0          | 23    | 9   | 0   | 2   | 2  | 0     | 0          | 13           |         |     |  |  |       |
| 10:45      | 105        | 3  | 2   | 16  | 0  | 0 | 126   | 95         | 1  | 5   | 5   | 0 | 0 | 106   | 22:45 | 16    | 0   | 0   | 0   | 0 | 0     | 0          | 16    | 9   | 0   | 0   | 0  | 3     | 0          | 0            | 12      |     |  |  |       |
| 11:00      | 115        | 2  | 2   | 11  | 0  | 0 | 130   | 99         | 0  | 2   | 12  | 1 | 0 | 114   | 23:00 | 11    | 0   | 0   | 0   | 0 | 0     | 0          | 11    | 2   | 0   | 0   | 0  | 3     | 0          | 0            | 5       |     |  |  |       |
| 11:15      | 118        | 2  | 5   | 13  | 0  | 0 | 138   | 85         | 0  | 4   | 14  | 0 | 1 | 104   | 23:15 | 15    | 1   | 0   | 0   | 0 | 0     | 0          | 16    | 12  | 0   | 1   | 0  | 0     | 0          | 13           |         |     |  |  |       |
| 11:30      | 126        | 1  | 4   | 10  | 0  | 0 | 141   | 77         | 1  | 2   | 5   | 0 | 0 | 85    | 23:30 | 8     | 0   | 1   | 4   | 0 | 0     | 0          | 13    | 6   | 0   | 0   | 0  | 0     | 0          | 6            |         |     |  |  |       |
| 11:45      | 101        | 2  | 1   | 9   | 0  | 0 | 113   | 95         | 2  | 5   | 8   | 0 | 0 | 110   | 23:45 | 8     | 0   | 0   | 2   | 0 | 0     | 0          | 10    | 6   | 0   | 1   | 1  | 0     | 0          | 8            |         |     |  |  |       |
| TOTAL      | 3,509      | 63 | 125 | 431 | 11 | 6 | 4,145 | 3,530      | 36 | 132 | 474 | 4 | 6 | 4,182 | TOTAL | 4,902 | 57  | 100 | 473 | 1 | 7     | 5,540      | 3,878 | 53  | 136 | 449 | 0  | 10    | 4,526      | PM PEAK HOUR | 4:15 PM | 793 |  |  |       |
|            |            |    |     |     |    |   |       |            |    |     |     |   |   |       |       |       |     |     |     |   |       |            |       |     |     |     |    |       |            |              |         |     |  |  |       |

|             | PASSENGER VEHICLES |      |      |      |      |               |        |       |      |      | 4 OR MORE AXLE TRUCKS |      |      |       |        |               |       |       |      |      |               |       |      |      |       |      |      |        |
|-------------|--------------------|------|------|------|------|---------------|--------|-------|------|------|-----------------------|------|------|-------|--------|---------------|-------|-------|------|------|---------------|-------|------|------|-------|------|------|--------|
|             | CLASS 1            |      |      |      |      | CLASS 2       |        |       |      |      | CLASS 3               |      |      |       |        | CLASS 4       |       |       |      |      | CLASS 5       |       |      |      |       |      |      |        |
|             | 2-AXLE TRUCKS      |      |      |      |      | 3-AXLE TRUCKS |        |       |      |      | 4-AXLE TRUCKS         |      |      |       |        | 5-AXLE TRUCKS |       |       |      |      | 6-AXLE TRUCKS |       |      |      |       |      |      |        |
| DAILY TOTAL | 8,411              | 120  | 225  | 904  | 12   | 13            | 9,685  | 7,408 | 89   | 268  | 923                   | 4    | 16   | 8,708 | 86,800 | 1,200         | 2,300 | 9,300 | 0.1% | 0.1% | 100.0%        | 85.1% | 1.0% | 3.1% | 10.6% | 0.0% | 0.2% | 100.0% |
| % OF TOTAL  | 86.8%              | 1.2% | 2.3% | 9.3% | 0.1% | 0.1%          | 100.0% | 76.0% | 0.9% | 0.9% | 2.6%                  | 0.0% | 0.2% | 76.0% | 86.8%  | 1.2%          | 2.3%  | 9.3%  | 0.1% | 0.1% | 100.0%        | 85.1% | 1.0% | 3.1% | 10.6% | 0.0% | 0.2% | 100.0% |

# 24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

PREPARED BY PACIFIC TRAFFIC DATA SERVICES

DATE: 02/19/09  
JOB #: CA09-0220-1-007

THURSDAY

CITY: FONTANA  
LOCATION: ETIWANDA S/O JURUPA

| AM TIME | NORTHBOUND |    |    |     |   |   | SOUTHBOUND |       |    |    |     |   | NORTHBOUND |       |       |       |    |    | SOUTHBOUND |   |   |       |   |       | TOTAL |
|---------|------------|----|----|-----|---|---|------------|-------|----|----|-----|---|------------|-------|-------|-------|----|----|------------|---|---|-------|---|-------|-------|
|         | 1          | 2  | 3  | 4   | 5 | 6 | 1          | 2     | 3  | 4  | 5   | 6 | 1          | 2     | 3     | 4     | 5  | 6  | 1          | 2 | 3 | 4     | 5 | 6     |       |
| 0:00    | 2          | 0  | 0  | 0   | 0 | 0 | 4          | 0     | 0  | 0  | 0   | 0 | 63         | 0     | 0     | 0     | 7  | 0  | 0          | 0 | 0 | 0     | 0 | 0     | 70    |
| 0:15    | 3          | 0  | 0  | 0   | 0 | 0 | 5          | 0     | 0  | 0  | 0   | 0 | 84         | 0     | 2     | 5     | 0  | 0  | 0          | 0 | 0 | 0     | 0 | 0     | 91    |
| 0:30    | 5          | 0  | 1  | 2   | 0 | 0 | 8          | 0     | 0  | 3  | 0   | 0 | 9          | 12:30 | 78    | 1     | 2  | 6  | 0          | 0 | 0 | 0     | 0 | 0     | 87    |
| 0:45    | 12         | 0  | 0  | 2   | 0 | 0 | 15         | 5     | 1  | 0  | 4   | 0 | 10         | 12:45 | 84    | 2     | 1  | 6  | 0          | 0 | 0 | 0     | 0 | 0     | 94    |
| 1:00    | 9          | 0  | 0  | 2   | 0 | 0 | 11         | 5     | 0  | 0  | 5   | 0 | 10         | 13:00 | 86    | 0     | 0  | 8  | 0          | 0 | 0 | 0     | 0 | 0     | 79    |
| 1:15    | 8          | 0  | 1  | 2   | 0 | 0 | 11         | 10    | 0  | 0  | 0   | 0 | 10         | 13:15 | 70    | 0     | 0  | 8  | 0          | 0 | 0 | 0     | 0 | 0     | 69    |
| 1:30    | 8          | 1  | 2  | 1   | 0 | 0 | 12         | 6     | 0  | 1  | 2   | 0 | 9          | 13:30 | 66    | 2     | 1  | 7  | 0          | 0 | 0 | 0     | 0 | 0     | 89    |
| 1:45    | 12         | 0  | 0  | 3   | 0 | 0 | 15         | 5     | 2  | 0  | 1   | 0 | 8          | 13:45 | 78    | 3     | 2  | 5  | 0          | 0 | 0 | 0     | 0 | 0     | 104   |
| 2:00    | 18         | 0  | 1  | 0   | 0 | 0 | 19         | 5     | 0  | 0  | 0   | 0 | 5          | 14:00 | 75    | 0     | 0  | 4  | 0          | 0 | 0 | 0     | 0 | 0     | 90    |
| 2:15    | 33         | 0  | 0  | 0   | 0 | 0 | 33         | 12    | 1  | 1  | 1   | 0 | 15         | 14:15 | 94    | 3     | 1  | 5  | 0          | 0 | 0 | 0     | 0 | 0     | 92    |
| 2:30    | 16         | 2  | 0  | 1   | 0 | 0 | 19         | 9     | 1  | 0  | 0   | 0 | 10         | 14:30 | 99    | 0     | 2  | 10 | 0          | 0 | 0 | 0     | 0 | 0     | 110   |
| 2:45    | 28         | 0  | 1  | 2   | 0 | 0 | 31         | 8     | 0  | 0  | 2   | 0 | 10         | 14:45 | 89    | 2     | 0  | 11 | 0          | 0 | 0 | 0     | 0 | 0     | 100   |
| 3:00    | 22         | 0  | 0  | 4   | 0 | 0 | 26         | 8     | 0  | 1  | 5   | 0 | 14         | 15:00 | 112   | 2     | 0  | 15 | 0          | 0 | 0 | 0     | 0 | 0     | 126   |
| 3:15    | 16         | 3  | 0  | 0   | 0 | 0 | 21         | 15    | 2  | 0  | 5   | 0 | 22         | 15:15 | 105   | 0     | 0  | 8  | 0          | 0 | 0 | 0     | 0 | 0     | 117   |
| 3:30    | 20         | 3  | 1  | 2   | 0 | 0 | 26         | 20    | 2  | 0  | 4   | 0 | 26         | 15:30 | 126   | 0     | 2  | 8  | 0          | 0 | 0 | 0     | 0 | 0     | 152   |
| 3:45    | 28         | 4  | 0  | 0   | 0 | 0 | 32         | 15    | 0  | 4  | 3   | 0 | 22         | 15:45 | 115   | 0     | 1  | 6  | 0          | 0 | 0 | 0     | 0 | 0     | 136   |
| 4:00    | 33         | 0  | 0  | 1   | 0 | 0 | 34         | 30    | 1  | 2  | 3   | 0 | 36         | 16:00 | 136   | 2     | 3  | 12 | 1          | 0 | 0 | 0     | 0 | 0     | 140   |
| 4:15    | 32         | 1  | 2  | 2   | 0 | 0 | 37         | 40    | 1  | 3  | 5   | 0 | 49         | 16:15 | 105   | 3     | 3  | 10 | 0          | 0 | 0 | 0     | 0 | 0     | 144   |
| 4:30    | 44         | 0  | 2  | 4   | 0 | 0 | 50         | 60    | 0  | 2  | 4   | 0 | 66         | 16:30 | 175   | 2     | 2  | 5  | 0          | 0 | 0 | 0     | 0 | 0     | 143   |
| 4:45    | 50         | 0  | 0  | 5   | 0 | 0 | 55         | 55    | 2  | 2  | 5   | 0 | 64         | 16:45 | 135   | 0     | 4  | 6  | 0          | 0 | 0 | 0     | 0 | 0     | 136   |
| 5:00    | 63         | 1  | 2  | 2   | 0 | 0 | 68         | 58    | 0  | 4  | 6   | 0 | 68         | 17:00 | 142   | 2     | 2  | 8  | 0          | 0 | 0 | 0     | 0 | 0     | 173   |
| 5:15    | 72         | 2  | 1  | 0   | 1 | 0 | 76         | 77    | 0  | 1  | 8   | 0 | 86         | 17:15 | 107   | 1     | 0  | 8  | 0          | 0 | 0 | 0     | 0 | 0     | 191   |
| 5:30    | 80         | 0  | 0  | 10  | 0 | 0 | 90         | 67    | 1  | 2  | 5   | 0 | 75         | 17:30 | 126   | 2     | 0  | 10 | 0          | 0 | 0 | 0     | 0 | 0     | 169   |
| 5:45    | 88         | 0  | 2  | 9   | 0 | 0 | 99         | 90    | 0  | 2  | 6   | 0 | 98         | 17:45 | 115   | 3     | 1  | 1  | 0          | 0 | 0 | 0     | 0 | 0     | 131   |
| 6:00    | 84         | 3  | 3  | 8   | 0 | 0 | 98         | 88    | 2  | 3  | 5   | 0 | 99         | 18:00 | 125   | 3     | 2  | 8  | 0          | 0 | 0 | 0     | 0 | 0     | 114   |
| 6:15    | 126        | 2  | 3  | 10  | 0 | 0 | 141        | 101   | 2  | 0  | 7   | 1 | 111        | 18:15 | 105   | 2     | 4  | 5  | 0          | 0 | 0 | 0     | 0 | 0     | 128   |
| 6:30    | 115        | 1  | 1  | 5   | 0 | 1 | 123        | 126   | 3  | 0  | 7   | 0 | 136        | 18:30 | 117   | 0     | 2  | 6  | 0          | 0 | 0 | 0     | 0 | 0     | 138   |
| 6:45    | 106        | 2  | 1  | 5   | 0 | 0 | 114        | 115   | 1  | 2  | 8   | 0 | 126        | 18:45 | 89    | 2     | 5  | 5  | 0          | 0 | 0 | 0     | 0 | 0     | 120   |
| 7:00    | 118        | 2  | 2  | 6   | 0 | 0 | 128        | 108   | 0  | 1  | 10  | 0 | 119        | 19:00 | 99    | 2     | 0  | 2  | 0          | 0 | 0 | 0     | 0 | 0     | 128   |
| 7:15    | 100        | 3  | 2  | 8   | 0 | 0 | 113        | 118   | 2  | 1  | 5   | 0 | 127        | 19:15 | 96    | 2     | 1  | 2  | 0          | 0 | 0 | 0     | 0 | 0     | 127   |
| 7:30    | 141        | 2  | 1  | 12  | 1 | 1 | 158        | 127   | 4  | 3  | 11  | 0 | 145        | 19:30 | 101   | 3     | 0  | 3  | 0          | 0 | 0 | 0     | 0 | 0     | 112   |
| 7:45    | 144        | 1  | 2  | 15  | 0 | 1 | 163        | 123   | 2  | 3  | 12  | 0 | 140        | 19:45 | 87    | 2     | 0  | 2  | 0          | 0 | 0 | 0     | 0 | 0     | 90    |
| 8:00    | 143        | 2  | 4  | 8   | 1 | 0 | 158        | 84    | 2  | 2  | 13  | 0 | 101        | 20:00 | 80    | 0     | 1  | 2  | 0          | 0 | 0 | 0     | 0 | 0     | 90    |
| 8:15    | 112        | 3  | 0  | 10  | 1 | 1 | 127        | 97    | 3  | 1  | 15  | 0 | 117        | 20:15 | 70    | 1     | 0  | 1  | 0          | 0 | 0 | 0     | 0 | 0     | 60    |
| 8:30    | 124        | 2  | 1  | 5   | 0 | 0 | 132        | 95    | 4  | 0  | 10  | 0 | 109        | 20:30 | 63    | 0     | 1  | 0  | 0          | 0 | 0 | 0     | 0 | 0     | 57    |
| 8:45    | 114        | 2  | 2  | 6   | 0 | 1 | 125        | 93    | 2  | 5  | 5   | 0 | 105        | 20:45 | 51    | 0     | 0  | 0  | 0          | 0 | 0 | 0     | 0 | 0     | 44    |
| 9:00    | 104        | 4  | 2  | 8   | 0 | 0 | 118        | 88    | 0  | 4  | 15  | 0 | 107        | 21:00 | 44    | 1     | 0  | 0  | 0          | 0 | 0 | 0     | 0 | 0     | 56    |
| 9:15    | 122        | 2  | 3  | 10  | 1 | 0 | 138        | 87    | 0  | 5  | 15  | 0 | 108        | 21:15 | 23    | 0     | 0  | 0  | 0          | 0 | 0 | 0     | 0 | 0     | 28    |
| 9:30    | 96         | 2  | 4  | 5   | 0 | 0 | 107        | 95    | 1  | 3  | 10  | 0 | 109        | 21:30 | 15    | 0     | 1  | 2  | 0          | 0 | 0 | 0     | 0 | 0     | 15    |
| 9:45    | 90         | 3  | 0  | 11  | 0 | 0 | 104        | 88    | 2  | 2  | 2   | 0 | 94         | 21:45 | 10    | 1     | 0  | 0  | 0          | 0 | 0 | 0     | 0 | 0     | 12    |
| 10:00   | 88         | 4  | 0  | 16  | 0 | 1 | 109        | 67    | 4  | 0  | 6   | 0 | 77         | 22:00 | 18    | 0     | 0  | 1  | 0          | 0 | 0 | 0     | 0 | 0     | 24    |
| 10:15   | 87         | 2  | 4  | 5   | 0 | 0 | 98         | 78    | 2  | 3  | 11  | 0 | 95         | 22:15 | 6     | 0     | 0  | 0  | 0          | 0 | 0 | 0     | 0 | 0     | 18    |
| 10:30   | 84         | 1  | 2  | 7   | 0 | 0 | 94         | 44    | 0  | 4  | 7   | 0 | 55         | 22:30 | 6     | 0     | 0  | 0  | 0          | 0 | 0 | 0     | 0 | 0     | 8     |
| 10:45   | 77         | 3  | 2  | 5   | 0 | 1 | 88         | 51    | 1  | 3  | 8   | 0 | 63         | 22:45 | 3     | 0     | 0  | 0  | 0          | 0 | 0 | 0     | 0 | 0     | 9     |
| 11:00   | 90         | 0  | 2  | 5   | 0 | 0 | 97         | 68    | 0  | 2  | 5   | 0 | 75         | 23:00 | 5     | 0     | 0  | 0  | 0          | 0 | 0 | 0     | 0 | 0     | 8     |
| 11:15   | 68         | 2  | 0  | 6   | 0 | 0 | 76         | 72    | 0  | 1  | 6   | 0 | 80         | 23:15 | 5     | 1     | 0  | 0  | 0          | 0 | 0 | 0     | 0 | 0     | 10    |
| 11:30   | 55         | 1  | 0  | 5   | 0 | 0 | 61         | 84    | 1  | 0  | 8   | 0 | 93         | 23:30 | 4     | 0     | 1  | 4  | 0          | 0 | 0 | 0     | 0 | 0     | 12    |
| 11:45   | 84         | 0  | 1  | 7   | 0 | 1 | 93         | 55    | 0  | 2  | 7   | 0 | 64         | 23:45 | 8     | 0     | 0  | 2  | 0          | 0 | 0 | 0     | 0 | 0     | 3     |
| TOTAL   | 3,174      | 66 | 58 | 245 | 5 | 8 | 3,556      | 2,767 | 52 | 75 | 285 | 1 | 6          | 3,186 | TOTAL | 3,695 | 50 | 47 | 225        | 1 | 6 | 4,024 | 9 | 4,175 | 669   |

| CLASS 1     | CLASS 2 | CLASS 3 | PASSENGER VEHICLES |  |  |  |  |  | CLASS 4 |  |  |  |  |  | 4 OR MORE AXLE TRUCKS |  |  |  |  |  |      |  |  |  |  |  |      |  |  |  |  |  |      |  |  |  |  |  |        |  |  |  |  |  |       |  |  |  |  |  |      |  |  |  |  |  |      |  |  |  |  |  |      |  |  |  |  |  |      |  |  |  |  |  |      |  |  |  |  |  |        |  |  |  |  |  |
|-------------|---------|---------|--------------------|--|--|--|--|--|---------|--|--|--|--|--|-----------------------|--|--|--|--|--|------|--|--|--|--|--|------|--|--|--|--|--|------|--|--|--|--|--|--------|--|--|--|--|--|-------|--|--|--|--|--|------|--|--|--|--|--|------|--|--|--|--|--|------|--|--|--|--|--|------|--|--|--|--|--|------|--|--|--|--|--|--------|--|--|--|--|--|
|             |         |         | 2-AXLE TRUCKS      |  |  |  |  |  | CLASS 5 |  |  |  |  |  | RECREATION VEHICLES   |  |  |  |  |  |      |  |  |  |  |  |      |  |  |  |  |  |      |  |  |  |  |  |        |  |  |  |  |  |       |  |  |  |  |  |      |  |  |  |  |  |      |  |  |  |  |  |      |  |  |  |  |  |      |  |  |  |  |  |      |  |  |  |  |  |        |  |  |  |  |  |
| CLASS 3     |         |         | 3-AXLE TRUCKS      |  |  |  |  |  | CLASS 6 |  |  |  |  |  | BUSES                 |  |  |  |  |  |      |  |  |  |  |  |      |  |  |  |  |  |      |  |  |  |  |  |        |  |  |  |  |  |       |  |  |  |  |  |      |  |  |  |  |  |      |  |  |  |  |  |      |  |  |  |  |  |      |  |  |  |  |  |      |  |  |  |  |  |        |  |  |  |  |  |
| DAILY TOTAL |         |         | 6,869              |  |  |  |  |  | 116     |  |  |  |  |  | 105                   |  |  |  |  |  | 470  |  |  |  |  |  | 6    |  |  |  |  |  | 14   |  |  |  |  |  | 7,580  |  |  |  |  |  | 6,540 |  |  |  |  |  | 103  |  |  |  |  |  | 171  |  |  |  |  |  | 531  |  |  |  |  |  | 1    |  |  |  |  |  | 15   |  |  |  |  |  | 7,361  |  |  |  |  |  |
| % OF TOTAL  |         |         | 90.6%              |  |  |  |  |  | 1.5%    |  |  |  |  |  | 1.4%                  |  |  |  |  |  | 6.2% |  |  |  |  |  | 0.1% |  |  |  |  |  | 0.2% |  |  |  |  |  | 100.0% |  |  |  |  |  | 88.8% |  |  |  |  |  | 1.4% |  |  |  |  |  | 2.3% |  |  |  |  |  | 7.2% |  |  |  |  |  | 0.0% |  |  |  |  |  | 0.2% |  |  |  |  |  | 100.0% |  |  |  |  |  |



# 24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

PREPARED BY PACIFIC TRAFFIC DATA SERVICES

DATE: 02/19/09  
THURSDAY

CITY: FONTANA  
LOCATION: SLOVER E/O ETIWANDA

| AM<br>TIME | NORTHBOUND |    |    |     |   |   | SOUTHBOUND |       |    |    |     |   | NORTHBOUND |       |       |    |     |     | SOUTHBOUND |    |       |         |       |    | TOTAL |     |   |    |       |         |
|------------|------------|----|----|-----|---|---|------------|-------|----|----|-----|---|------------|-------|-------|----|-----|-----|------------|----|-------|---------|-------|----|-------|-----|---|----|-------|---------|
|            | 1          | 2  | 3  | 4   | 5 | 6 | 1          | 2     | 3  | 4  | 5   | 6 | 1          | 2     | 3     | 4  | 5   | 6   | 1          | 2  | 3     | 4       | 5     | 6  |       |     |   |    |       |         |
| 0:00       | 2          | 0  | 0  | 2   | 0 | 0 | 4          | 3     | 0  | 0  | 0   | 0 | 5          | 12:00 | 55    | 0  | 0   | 6   | 0          | 0  | 1     | 62      | 35    | 0  | 0     | 6   | 0 | 0  | 41    |         |
| 0:15       | 1          | 0  | 0  | 0   | 0 | 0 | 1          | 2     | 0  | 0  | 0   | 0 | 5          | 12:15 | 62    | 3  | 2   | 8   | 0          | 0  | 1     | 75      | 44    | 2  | 0     | 7   | 0 | 0  | 53    |         |
| 0:30       | 4          | 0  | 0  | 0   | 0 | 0 | 4          | 0     | 0  | 0  | 3   | 0 | 3          | 12:30 | 68    | 2  | 2   | 5   | 0          | 0  | 0     | 77      | 50    | 2  | 2     | 5   | 0 | 0  | 59    |         |
| 0:45       | 9          | 0  | 0  | 0   | 0 | 0 | 9          | 2     | 0  | 0  | 0   | 0 | 2          | 12:45 | 60    | 2  | 3   | 5   | 0          | 0  | 0     | 70      | 41    | 1  | 3     | 5   | 0 | 1  | 51    |         |
| 1:00       | 10         | 0  | 0  | 0   | 0 | 0 | 10         | 1     | 0  | 0  | 0   | 0 | 1          | 13:00 | 51    | 2  | 2   | 8   | 0          | 0  | 0     | 63      | 45    | 2  | 3     | 5   | 0 | 0  | 55    |         |
| 1:15       | 12         | 0  | 1  | 0   | 0 | 0 | 13         | 6     | 0  | 0  | 0   | 0 | 6          | 13:15 | 44    | 4  | 1   | 7   | 0          | 1  | 1     | 57      | 50    | 0  | 0     | 6   | 0 | 0  | 56    |         |
| 1:30       | 6          | 0  | 0  | 0   | 0 | 0 | 6          | 5     | 0  | 0  | 0   | 0 | 5          | 13:30 | 59    | 2  | 0   | 4   | 0          | 0  | 0     | 65      | 68    | 0  | 0     | 8   | 1 | 1  | 78    |         |
| 1:45       | 5          | 0  | 0  | 0   | 0 | 0 | 5          | 10    | 0  | 0  | 1   | 0 | 0          | 13:45 | 88    | 2  | 0   | 5   | 0          | 0  | 0     | 95      | 66    | 0  | 0     | 5   | 0 | 0  | 71    |         |
| 2:00       | 2          | 0  | 0  | 0   | 0 | 0 | 2          | 13    | 0  | 0  | 0   | 0 | 13         | 14:00 | 84    | 1  | 1   | 5   | 1          | 0  | 0     | 92      | 62    | 10 | 0     | 5   | 0 | 0  | 77    |         |
| 2:15       | 1          | 0  | 0  | 0   | 0 | 0 | 1          | 6     | 1  | 1  | 0   | 0 | 8          | 14:15 | 56    | 0  | 2   | 6   | 0          | 0  | 1     | 61      | 59    | 0  | 1     | 9   | 0 | 0  | 69    |         |
| 2:30       | 2          | 0  | 0  | 0   | 0 | 0 | 2          | 12    | 0  | 0  | 1   | 0 | 13         | 14:30 | 55    | 5  | 3   | 8   | 0          | 0  | 1     | 75      | 80    | 1  | 0     | 5   | 1 | 1  | 88    |         |
| 2:45       | 5          | 0  | 1  | 0   | 0 | 0 | 6          | 10    | 0  | 0  | 2   | 0 | 12         | 14:45 | 45    | 0  | 3   | 5   | 0          | 0  | 0     | 53      | 95    | 2  | 0     | 8   | 0 | 1  | 106   |         |
| 3:00       | 5          | 0  | 0  | 0   | 0 | 0 | 5          | 8     | 0  | 0  | 3   | 0 | 0          | 15:00 | 44    | 1  | 0   | 8   | 0          | 0  | 0     | 53      | 126   | 2  | 0     | 5   | 0 | 0  | 133   |         |
| 3:15       | 8          | 0  | 0  | 1   | 0 | 0 | 9          | 8     | 1  | 1  | 2   | 0 | 0          | 15:15 | 41    | 1  | 0   | 5   | 1          | 1  | 1     | 49      | 115   | 0  | 0     | 5   | 0 | 0  | 120   |         |
| 3:30       | 9          | 0  | 2  | 0   | 0 | 0 | 11         | 8     | 0  | 0  | 0   | 0 | 8          | 15:30 | 35    | 2  | 2   | 10  | 0          | 0  | 0     | 49      | 108   | 0  | 1     | 4   | 0 | 0  | 113   |         |
| 3:45       | 9          | 0  | 1  | 0   | 0 | 0 | 10         | 15    | 0  | 0  | 0   | 0 | 15         | 15:45 | 55    | 3  | 2   | 5   | 0          | 0  | 0     | 65      | 126   | 1  | 0     | 8   | 0 | 0  | 135   |         |
| 4:00       | 11         | 0  | 0  | 2   | 0 | 0 | 13         | 10    | 0  | 0  | 2   | 0 | 0          | 16:00 | 66    | 3  | 0   | 8   | 1          | 1  | 1     | 79      | 131   | 2  | 0     | 10  | 0 | 0  | 143   |         |
| 4:15       | 16         | 0  | 0  | 2   | 0 | 0 | 18         | 18    | 1  | 0  | 2   | 1 | 0          | 16:15 | 70    | 3  | 2   | 1   | 2          | 2  | 2     | 80      | 143   | 2  | 1     | 10  | 2 | 1  | 159   |         |
| 4:30       | 22         | 0  | 0  | 2   | 0 | 0 | 24         | 20    | 0  | 1  | 2   | 0 | 0          | 16:30 | 82    | 4  | 3   | 12  | 0          | 0  | 0     | 101     | 165   | 3  | 0     | 15  | 0 | 0  | 183   |         |
| 4:45       | 18         | 0  | 0  | 3   | 0 | 0 | 21         | 26    | 3  | 0  | 2   | 0 | 0          | 16:45 | 62    | 2  | 4   | 15  | 0          | 0  | 0     | 83      | 142   | 3  | 0     | 12  | 0 | 0  | 157   |         |
| 5:00       | 32         | 0  | 0  | 0   | 0 | 0 | 32         | 40    | 2  | 0  | 1   | 0 | 0          | 17:00 | 88    | 2  | 2   | 10  | 0          | 0  | 0     | 102     | 135   | 2  | 0     | 20  | 0 | 0  | 157   |         |
| 5:15       | 32         | 0  | 0  | 0   | 0 | 0 | 32         | 31    | 1  | 0  | 2   | 0 | 0          | 17:15 | 62    | 0  | 2   | 10  | 0          | 1  | 1     | 75      | 108   | 0  | 1     | 16  | 0 | 1  | 126   |         |
| 5:30       | 62         | 0  | 0  | 2   | 0 | 0 | 64         | 42    | 1  | 1  | 0   | 0 | 0          | 17:30 | 55    | 1  | 3   | 5   | 2          | 0  | 0     | 66      | 105   | 0  | 0     | 11  | 0 | 1  | 117   |         |
| 5:45       | 51         | 0  | 0  | 1   | 0 | 0 | 52         | 33    | 1  | 0  | 1   | 0 | 1          | 17:45 | 40    | 2  | 4   | 5   | 0          | 0  | 0     | 51      | 101   | 1  | 0     | 5   | 0 | 0  | 107   |         |
| 6:00       | 48         | 1  | 0  | 2   | 0 | 0 | 51         | 32    | 3  | 0  | 2   | 0 | 0          | 18:00 | 48    | 3  | 4   | 5   | 0          | 0  | 1     | 61      | 88    | 2  | 0     | 4   | 0 | 0  | 94    |         |
| 6:15       | 45         | 1  | 2  | 6   | 0 | 0 | 54         | 40    | 0  | 0  | 2   | 1 | 0          | 18:15 | 44    | 2  | 2   | 6   | 0          | 0  | 0     | 54      | 95    | 2  | 0     | 2   | 0 | 1  | 100   |         |
| 6:30       | 55         | 2  | 2  | 8   | 0 | 0 | 67         | 55    | 3  | 0  | 3   | 0 | 0          | 18:30 | 51    | 0  | 3   | 8   | 0          | 0  | 0     | 62      | 99    | 0  | 0     | 3   | 0 | 0  | 102   |         |
| 6:45       | 62         | 0  | 2  | 8   | 0 | 0 | 72         | 51    | 0  | 1  | 3   | 0 | 1          | 18:45 | 30    | 0  | 3   | 5   | 0          | 1  | 39    | 77      | 0     | 0  | 3     | 0   | 0 | 80 |       |         |
| 7:00       | 88         | 0  | 3  | 5   | 0 | 1 | 97         | 60    | 1  | 0  | 3   | 0 | 1          | 19:00 | 33    | 0  | 3   | 5   | 0          | 0  | 0     | 41      | 84    | 1  | 1     | 2   | 0 | 0  | 88    |         |
| 7:15       | 89         | 2  | 2  | 3   | 0 | 0 | 96         | 79    | 2  | 2  | 9   | 0 | 0          | 19:15 | 38    | 1  | 1   | 4   | 0          | 0  | 0     | 44      | 68    | 1  | 0     | 2   | 1 | 1  | 73    |         |
| 7:30       | 90         | 1  | 2  | 10  | 0 | 0 | 103        | 102   | 2  | 0  | 5   | 0 | 0          | 19:30 | 31    | 0  | 109 | 19  | 0          | 1  | 2     | 0       | 34    | 50 | 0     | 0   | 1 | 0  | 1     | 52      |
| 7:45       | 112        | 0  | 0  | 15  | 0 | 0 | 127        | 104   | 3  | 0  | 5   | 0 | 1          | 19:45 | 33    | 1  | 0   | 2   | 0          | 0  | 1     | 37      | 45    | 0  | 0     | 5   | 0 | 0  | 50    |         |
| 8:00       | 95         | 0  | 2  | 7   | 0 | 0 | 104        | 89    | 3  | 3  | 10  | 0 | 0          | 20:00 | 28    | 2  | 1   | 0   | 1          | 2  | 2     | 34      | 44    | 1  | 0     | 2   | 0 | 0  | 47    |         |
| 8:15       | 70         | 0  | 1  | 5   | 0 | 0 | 76         | 81    | 2  | 2  | 15  | 0 | 0          | 20:15 | 15    | 0  | 2   | 0   | 0          | 1  | 0     | 19      | 35    | 0  | 0     | 1   | 0 | 0  | 36    |         |
| 8:30       | 76         | 2  | 2  | 6   | 1 | 1 | 88         | 88    | 2  | 0  | 20  | 0 | 0          | 20:30 | 11    | 0  | 0   | 1   | 0          | 0  | 0     | 12      | 26    | 0  | 1     | 3   | 0 | 0  | 30    |         |
| 8:45       | 75         | 1  | 0  | 8   | 0 | 0 | 84         | 70    | 2  | 0  | 16  | 1 | 0          | 20:45 | 8     | 0  | 0   | 0   | 0          | 0  | 0     | 8       | 12    | 0  | 2     | 3   | 0 | 1  | 18    |         |
| 9:00       | 70         | 3  | 0  | 12  | 0 | 0 | 85         | 55    | 1  | 1  | 11  | 0 | 0          | 21:00 | 12    | 1  | 1   | 0   | 0          | 0  | 0     | 14      | 10    | 1  | 0     | 1   | 0 | 0  | 12    |         |
| 9:15       | 88         | 2  | 2  | 15  | 0 | 0 | 107        | 56    | 1  | 0  | 15  | 0 | 0          | 21:15 | 16    | 2  | 0   | 2   | 0          | 0  | 0     | 20      | 15    | 0  | 0     | 0   | 0 | 0  | 15    |         |
| 9:30       | 81         | 2  | 1  | 10  | 0 | 0 | 94         | 40    | 0  | 2  | 10  | 0 | 1          | 21:30 | 10    | 0  | 0   | 1   | 0          | 0  | 0     | 12      | 18    | 0  | 0     | 0   | 0 | 0  | 18    |         |
| 9:45       | 65         | 1  | 2  | 8   | 1 | 0 | 77         | 62    | 0  | 0  | 9   | 1 | 1          | 21:45 | 8     | 0  | 0   | 0   | 0          | 0  | 0     | 8       | 9     | 1  | 0     | 1   | 0 | 0  | 11    |         |
| 10:00      | 66         | 2  | 2  | 5   | 0 | 0 | 75         | 58    | 1  | 0  | 5   | 0 | 0          | 22:00 | 8     | 0  | 2   | 0   | 0          | 0  | 0     | 10      | 12    | 0  | 1     | 0   | 0 | 0  | 13    |         |
| 10:15      | 51         | 2  | 0  | 9   | 0 | 0 | 62         | 68    | 0  | 0  | 8   | 0 | 0          | 22:15 | 8     | 0  | 0   | 0   | 0          | 0  | 0     | 8       | 6     | 0  | 0     | 0   | 0 | 0  | 6     |         |
| 10:30      | 45         | 0  | 0  | 6   | 0 | 0 | 51         | 67    | 2  | 1  | 9   | 0 | 0          | 22:30 | 5     | 1  | 0   | 2   | 0          | 0  | 0     | 7       | 5     | 1  | 0     | 0   | 0 | 0  | 7     |         |
| 10:45      | 48         | 0  | 2  | 2   | 1 | 0 | 53         | 51    | 3  | 0  | 5   | 0 | 0          | 22:45 | 2     | 1  | 0   | 0   | 0          | 0  | 0     | 3       | 6     | 1  | 0     | 0   | 0 | 0  | 5     |         |
| 11:00      | 50         | 1  | 2  | 5   | 0 | 0 | 58         | 55    | 3  | 0  | 6   | 0 | 0          | 23:00 | 2     | 0  | 0   | 0   | 0          | 0  | 0     | 2       | 2     | 0  | 0     | 1   | 0 | 0  | 0     | 3       |
| 11:15      | 62         | 0  | 1  | 8   | 0 | 0 | 71         | 48    | 2  | 2  | 5   | 1 | 0          | 23:15 | 3     | 0  | 0   | 0   | 0          | 0  | 0     | 3       | 1     | 0  | 0     | 1   | 0 | 0  | 2     |         |
| 11:30      | 70         | 0  | 0  | 8   | 0 | 0 | 78         | 51    | 2  | 0  | 3   | 0 | 0          | 23:30 | 8     | 0  | 0   | 1   | 0          | 0  | 0     | 9       | 12    | 0  | 0     | 1   | 0 | 0  | 13    |         |
| 11:45      | 52         | 1  | 0  | 10  | 0 | 0 | 63         | 35    | 0  | 0  | 5   | 0 | 1          | 23:45 | 1     | 0  | 0   | 1   | 0          | 0  | 0     | 2       | 2     | 0  | 0     | 1   | 0 | 0  | 3     |         |
| TOTAL      | 1,987      | 24 | 35 | 199 | 3 | 2 | 2,250      | 1,826 | 50 | 18 | 213 | 5 | 8          | TOTAL | 1,880 | 61 | 65  | 209 | 10         | 16 | 2,241 | 4:15 PM | 3,331 | 46 | 18    | 230 | 5 | 11 | 3,331 | 4:15 PM |
|            |            |    |    |     |   |   |            |       |    |    |     |   |            |       |       |    |     |     |            |    |       |         |       |    |       |     |   |    |       | 656     |

| TIME        | 1     | 2    | 3    | 4    | 5    | 6    | TOTAL  | PM PEAK HOUR | PM PEAK VOLUME | % OF TOTAL |
|-------------|-------|------|------|------|------|------|--------|--------------|----------------|------------|
| 12:00       | 55    | 0    | 0    | 6    | 0    | 0    | 61     | 18.0%        | 0.3%           | 1.9%       |
| 12:15       | 62    | 3    | 2    | 8    | 0    | 0    | 75     | 21.5%        | 0.4%           | 2.2%       |
| 12:30       | 68    | 2    | 2    | 5    | 0    | 0    | 77     | 22.3%        | 0.4%           | 2.2%       |
| 12:45       | 60    | 2    | 2    | 3    | 5    | 0    | 72     | 21.0%        | 0.3%           | 2.1%       |
| 13:00       | 51    | 2    | 2    | 8    | 0    | 0    | 63     | 18.6%        | 0.3%           | 1.9%       |
| 13:15       | 44    | 4    | 1    | 7    | 0    | 0    | 56     | 16.2%        | 0.2%           | 1.6%       |
| 13:30       | 59    | 2    | 0    | 4    | 0    | 0    | 65     | 19.2%        | 0.3%           | 2.0%       |
| 13:45       | 88    | 2    | 0    | 5    | 0    | 0    | 95     | 27.8%        | 0.4%           | 2.4%       |
| 14:00       | 84    | 1    | 1    | 5    | 1    | 0    | 92     | 27.0%        | 0.4%           | 2.3%       |
| 14:15       | 56    | 0    | 2    | 6    | 0    | 0    | 64     | 18.8%        | 0.3%           | 2.0%       |
| 14:30       | 55    | 5    | 3    | 8    | 0    | 0    | 71     | 20.6%        | 0.3%           | 1.9%       |
| 14:45       | 45    | 0    | 3    | 5    | 0    | 0    | 53     | 15.6%        | 0.2%           | 1.6%       |
| 15:00       | 44    | 1    | 0    | 8    | 0    | 0    | 53     | 15.4%        | 0.2%           | 1.6%       |
| 15:15       | 41    | 1    | 0    | 5    | 1    | 0    | 48     | 14.0%        | 0.2%           | 1.5%       |
| 15:30       | 35    | 2    | 2    | 10   | 0    | 0    | 49     | 14.2%        | 0.2%           | 1.5%       |
| 15:45       | 55    | 2    | 2    | 5    | 0    | 0    | 64     | 18.8%        | 0.3%           | 2.0%       |
| 16:00       | 66    | 3    | 0    | 8    | 1    | 0    | 78     | 22.8%        | 0.4%           | 2.3%       |
| 16:15       | 70    | 3    | 2    | 1    | 2    | 0    | 80     | 23.3%        | 0.4%           | 2.4%       |
| 16:30       | 82    | 4    | 3    | 12   | 0    | 0    | 101    | 29.6%        | 0.5%           | 2.7%       |
| 16:45       | 62    | 2    | 4    | 15   | 0    | 0    | 83     | 24.1%        | 0.4%           | 2.2%       |
| 17:00       | 88    | 2    | 2    | 10   | 0    | 0    | 102    | 30.1%        | 0.5%           | 2.8%       |
| 17:15       | 62    | 0    | 2    | 10   | 0    | 0    | 74     | 21.6%        | 0.3%           | 1.9%       |
| 17:30       | 55    | 1    | 3    | 5    | 2    | 0    | 66     | 19.4%        | 0.3%           | 1.9%       |
| 17:45       | 40    | 2    | 4    | 5    | 0    | 0    | 51     | 14.9%        | 0.2%           | 1.5%       |
| 18:00       | 48    | 3    | 4    | 5    | 0    | 0    | 60     | 17.4%        | 0.2%           | 1.6%       |
| 18:15       | 44    | 2    | 2    | 6    | 0    | 0    | 54     | 15.8%        | 0.2%           | 1.5%       |
| 18:30       | 51    | 0    | 3    | 8    | 0    | 0    | 62     | 18.2%        | 0.3%           | 1.9%       |
| 18:45       | 30    | 0    | 3    | 5    | 0    | 0    | 38     | 11.1%        | 0.2%           | 1.3%       |
| 19:00       | 33    | 0    | 3    | 5    | 0    | 0    | 41     | 12.0%        | 0.2%           | 1.4%       |
| 19:15       | 38    | 1    | 1    | 4    | 0    | 0    | 44     | 12.8%        | 0.2%           | 1.5%       |
| 19:30       | 31    | 0    | 0    | 1    | 2    | 0    | 34     | 9.8%         | 0.2%           | 1.3%       |
| 19:45       | 33    | 1    | 0    | 2    | 0    | 0    | 36     | 10.4%        | 0.2%           | 1.4%       |
| 20:00       | 28    | 2    | 1    | 0    | 1    | 2    | 34     | 9.8%         | 0.2%           | 1.3%       |
| 20:15       | 15    | 0    | 2    | 0    | 0    | 0    | 17     | 4.9%         | 0.1%           | 0.5%       |
| 20:30       | 11    | 0    | 0    | 1    | 0    | 0    | 12     | 3.5%         | 0.1%           | 0.4%       |
| 20:45       | 8     | 0    | 0    | 0    | 0    | 0    | 8      | 2.3%         | 0.0%           | 0.3%       |
| 2           |       |      |      |      |      |      |        |              |                |            |
| DAILY TOTAL | 3,867 | 85   | 100  | 408  | 13   | 18   | 4,491  |              |                |            |
| % OF TOTAL  | 86.1% | 1.9% | 2.2% | 9.1% | 0.3% | 0.4% | 100.0% |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |
|             |       |      |      |      |      |      |        |              |                |            |

# 24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

PREPARED BY PACIFIC TRAFFIC DATA SERVICES

DATE: 02/19/09 THURSDAY  
JOB #: CA09-0220-1-010

CITY: FONTANA  
LOCATION: JURUPA E/O ETIWANDA

| AM<br>TIME | EASTBOUND |    |    |     |   |   | TOTAL | WESTBOUND |    |    |     |   |   | TOTAL | PM<br>Time | EASTBOUND |    |    |     |   |   | TOTAL | WESTBOUND |   |   |     |       |       | TOTAL |    |     |   |     |       |
|------------|-----------|----|----|-----|---|---|-------|-----------|----|----|-----|---|---|-------|------------|-----------|----|----|-----|---|---|-------|-----------|---|---|-----|-------|-------|-------|----|-----|---|-----|-------|
|            | 1         | 2  | 3  | 4   | 5 | 6 |       | 1         | 2  | 3  | 4   | 5 | 6 |       |            | 1         | 2  | 3  | 4   | 5 | 6 |       | 1         | 2 | 3 | 4   | 5     | 6     |       |    |     |   |     |       |
|            |           |    |    |     |   |   |       |           |    |    |     |   |   |       |            |           |    |    |     |   |   |       |           |   |   |     |       |       |       |    |     |   |     |       |
| 0:00       | 3         | 0  | 0  | 2   | 0 | 0 | 5     | 3         | 0  | 0  | 0   | 0 | 0 | 3     | 12:00      | 70        | 1  | 0  | 3   | 0 | 0 | 0     | 0         | 0 | 0 | 74  | 44    | 2     | 0     | 2  | 0   | 0 | 48  |       |
| 0:15       | 2         | 0  | 0  | 0   | 0 | 0 | 2     | 3         | 0  | 0  | 0   | 0 | 0 | 3     | 12:15      | 88        | 0  | 2  | 3   | 0 | 0 | 0     | 0         | 0 | 0 | 93  | 40    | 1     | 0     | 2  | 0   | 0 | 43  |       |
| 0:30       | 2         | 0  | 0  | 0   | 0 | 0 | 2     | 2         | 0  | 0  | 1   | 0 | 0 | 3     | 12:30      | 84        | 0  | 0  | 5   | 0 | 0 | 0     | 0         | 0 | 0 | 89  | 51    | 2     | 0     | 3  | 0   | 1 | 57  |       |
| 0:45       | 5         | 0  | 0  | 1   | 0 | 0 | 6     | 4         | 0  | 0  | 0   | 0 | 0 | 4     | 12:45      | 95        | 2  | 3  | 8   | 0 | 0 | 0     | 0         | 0 | 0 | 108 | 60    | 0     | 1     | 1  | 0   | 0 | 62  |       |
| 1:00       | 6         | 0  | 0  | 2   | 0 | 0 | 8     | 2         | 0  | 0  | 0   | 0 | 0 | 2     | 13:00      | 55        | 3  | 1  | 8   | 0 | 0 | 0     | 0         | 0 | 0 | 67  | 44    | 0     | 0     | 0  | 0   | 0 | 44  |       |
| 1:15       | 6         | 0  | 0  | 0   | 0 | 0 | 6     | 1         | 0  | 0  | 1   | 0 | 0 | 2     | 13:15      | 65        | 0  | 0  | 9   | 1 | 0 | 0     | 0         | 0 | 0 | 75  | 40    | 0     | 1     | 0  | 0   | 0 | 41  |       |
| 1:30       | 10        | 0  | 0  | 0   | 0 | 0 | 10    | 5         | 0  | 0  | 0   | 0 | 0 | 6     | 13:30      | 70        | 3  | 0  | 10  | 0 | 0 | 0     | 0         | 0 | 0 | 83  | 51    | 1     | 1     | 2  | 0   | 0 | 55  |       |
| 1:45       | 12        | 0  | 0  | 2   | 0 | 0 | 14    | 5         | 0  | 0  | 1   | 0 | 0 | 5     | 13:45      | 66        | 2  | 2  | 5   | 0 | 0 | 0     | 0         | 0 | 0 | 75  | 57    | 2     | 0     | 4  | 0   | 0 | 83  |       |
| 2:00       | 15        | 0  | 0  | 2   | 0 | 0 | 17    | 12        | 0  | 0  | 0   | 0 | 0 | 12    | 14:00      | 84        | 2  | 0  | 5   | 0 | 0 | 0     | 0         | 0 | 0 | 91  | 68    | 0     | 2     | 2  | 0   | 1 | 73  |       |
| 2:15       | 9         | 0  | 0  | 1   | 0 | 0 | 11    | 8         | 0  | 0  | 2   | 1 | 0 | 11    | 14:15      | 55        | 3  | 0  | 8   | 0 | 0 | 0     | 0         | 0 | 0 | 66  | 58    | 0     | 0     | 2  | 0   | 0 | 60  |       |
| 2:30       | 9         | 0  | 0  | 1   | 0 | 0 | 10    | 12        | 0  | 0  | 0   | 0 | 0 | 12    | 14:30      | 48        | 4  | 0  | 4   | 0 | 0 | 0     | 0         | 0 | 0 | 56  | 55    | 0     | 0     | 5  | 0   | 0 | 66  |       |
| 2:45       | 8         | 0  | 0  | 0   | 0 | 0 | 8     | 5         | 0  | 0  | 0   | 0 | 0 | 5     | 14:45      | 68        | 2  | 1  | 8   | 0 | 0 | 0     | 0         | 0 | 0 | 80  | 54    | 1     | 0     | 2  | 0   | 0 | 57  |       |
| 3:00       | 10        | 0  | 1  | 2   | 0 | 0 | 13    | 6         | 0  | 0  | 1   | 0 | 0 | 7     | 15:00      | 77        | 1  | 0  | 8   | 1 | 0 | 0     | 0         | 0 | 0 | 87  | 70    | 2     | 3     | 6  | 0   | 0 | 81  |       |
| 3:15       | 15        | 0  | 0  | 3   | 0 | 0 | 18    | 10        | 0  | 0  | 2   | 0 | 0 | 12    | 15:15      | 84        | 1  | 0  | 9   | 0 | 0 | 0     | 0         | 0 | 0 | 94  | 88    | 0     | 2     | 5  | 0   | 0 | 95  |       |
| 3:30       | 20        | 0  | 0  | 3   | 0 | 0 | 23    | 16        | 0  | 0  | 0   | 0 | 0 | 16    | 15:30      | 105       | 0  | 2  | 5   | 0 | 0 | 0     | 0         | 0 | 0 | 113 | 84    | 0     | 2     | 10 | 0   | 1 | 97  |       |
| 3:45       | 16        | 0  | 0  | 3   | 0 | 0 | 19    | 11        | 0  | 0  | 0   | 0 | 0 | 11    | 15:45      | 88        | 0  | 0  | 8   | 0 | 0 | 0     | 0         | 0 | 0 | 96  | 115   | 1     | 0     | 7  | 0   | 0 | 123 |       |
| 4:00       | 11        | 0  | 0  | 2   | 0 | 0 | 13    | 18        | 0  | 0  | 1   | 0 | 0 | 19    | 16:00      | 95        | 4  | 0  | 7   | 0 | 0 | 0     | 0         | 0 | 0 | 106 | 123   | 2     | 1     | 5  | 0   | 0 | 131 |       |
| 4:15       | 26        | 0  | 0  | 0   | 0 | 0 | 26    | 22        | 0  | 0  | 2   | 0 | 0 | 26    | 16:15      | 126       | 0  | 5  | 0   | 0 | 0 | 0     | 0         | 0 | 0 | 133 | 105   | 2     | 0     | 15 | 0   | 0 | 122 |       |
| 4:30       | 33        | 0  | 0  | 0   | 0 | 0 | 33    | 16        | 0  | 0  | 0   | 0 | 0 | 16    | 16:30      | 157       | 5  | 1  | 10  | 0 | 0 | 0     | 0         | 0 | 0 | 174 | 115   | 3     | 0     | 10 | 0   | 1 | 129 |       |
| 4:45       | 31        | 0  | 0  | 1   | 2 | 0 | 34    | 20        | 0  | 0  | 0   | 0 | 0 | 20    | 16:45      | 168       | 1  | 0  | 12  | 1 | 0 | 0     | 0         | 0 | 0 | 182 | 101   | 2     | 0     | 5  | 0   | 0 | 108 |       |
| 5:00       | 40        | 0  | 0  | 4   | 0 | 0 | 44    | 12        | 0  | 0  | 1   | 0 | 0 | 13    | 17:00      | 177       | 0  | 0  | 5   | 0 | 0 | 0     | 0         | 0 | 0 | 182 | 98    | 2     | 2     | 6  | 0   | 0 | 108 |       |
| 5:15       | 33        | 0  | 0  | 3   | 0 | 0 | 35    | 11        | 1  | 0  | 2   | 0 | 0 | 14    | 17:15      | 184       | 0  | 0  | 8   | 0 | 0 | 0     | 0         | 0 | 0 | 192 | 99    | 1     | 3     | 10 | 0   | 0 | 113 |       |
| 5:30       | 35        | 1  | 2  | 5   | 0 | 0 | 43    | 26        | 0  | 1  | 0   | 0 | 0 | 27    | 17:30      | 135       | 4  | 0  | 10  | 0 | 0 | 0     | 0         | 0 | 0 | 150 | 105   | 2     | 0     | 5  | 0   | 0 | 112 |       |
| 5:45       | 45        | 0  | 0  | 6   | 0 | 0 | 51    | 32        | 2  | 0  | 0   | 1 | 0 | 36    | 17:45      | 141       | 2  | 2  | 5   | 1 | 0 | 0     | 0         | 0 | 0 | 151 | 88    | 0     | 0     | 6  | 0   | 0 | 94  |       |
| 6:00       | 62        | 0  | 0  | 5   | 1 | 0 | 68    | 33        | 0  | 2  | 2   | 0 | 0 | 37    | 18:00      | 132       | 2  | 0  | 5   | 0 | 0 | 0     | 0         | 0 | 0 | 139 | 100   | 2     | 1     | 5  | 0   | 0 | 108 |       |
| 6:15       | 66        | 2  | 1  | 8   | 0 | 0 | 77    | 41        | 0  | 0  | 3   | 0 | 0 | 44    | 18:15      | 121       | 2  | 0  | 6   | 0 | 0 | 0     | 0         | 0 | 0 | 129 | 84    | 1     | 0     | 1  | 0   | 0 | 87  |       |
| 6:30       | 70        | 0  | 0  | 2   | 0 | 0 | 72    | 44        | 0  | 0  | 5   | 1 | 0 | 50    | 18:30      | 135       | 1  | 0  | 2   | 0 | 0 | 0     | 0         | 0 | 0 | 138 | 77    | 2     | 0     | 2  | 0   | 0 | 81  |       |
| 6:45       | 84        | 0  | 0  | 7   | 0 | 0 | 91    | 88        | 1  | 0  | 0   | 0 | 0 | 101   | 18:45      | 101       | 0  | 0  | 3   | 0 | 0 | 0     | 0         | 0 | 0 | 104 | 79    | 3     | 0     | 1  | 0   | 0 | 83  |       |
| 7:00       | 88        | 1  | 0  | 0   | 4 | 1 | 94    | 95        | 2  | 0  | 4   | 0 | 0 | 101   | 19:00      | 88        | 0  | 0  | 0   | 0 | 0 | 0     | 0         | 0 | 0 | 88  | 51    | 2     | 0     | 2  | 0   | 0 | 55  |       |
| 7:15       | 95        | 0  | 2  | 5   | 0 | 0 | 102   | 68        | 0  | 0  | 6   | 0 | 0 | 89    | 19:15      | 95        | 1  | 1  | 4   | 0 | 0 | 0     | 0         | 0 | 0 | 101 | 88    | 3     | 1     | 3  | 0   | 0 | 95  |       |
| 7:30       | 106       | 0  | 3  | 1   | 0 | 0 | 110   | 77        | 2  | 3  | 6   | 1 | 0 | 89    | 19:30      | 115       | 0  | 0  | 2   | 0 | 0 | 0     | 0         | 0 | 0 | 117 | 54    | 1     | 0     | 2  | 0   | 0 | 57  |       |
| 7:45       | 115       | 0  | 0  | 5   | 1 | 0 | 121   | 105       | 0  | 0  | 0   | 0 | 0 | 110   | 19:45      | 105       | 0  | 0  | 0   | 0 | 0 | 0     | 0         | 0 | 0 | 105 | 55    | 0     | 0     | 2  | 0   | 0 | 57  |       |
| 8:00       | 126       | 1  | 1  | 8   | 0 | 0 | 136   | 115       | 0  | 2  | 10  | 0 | 0 | 127   | 20:00      | 100       | 0  | 0  | 2   | 0 | 0 | 0     | 0         | 0 | 0 | 102 | 40    | 0     | 0     | 1  | 0   | 0 | 41  |       |
| 8:15       | 101       | 2  | 2  | 10  | 0 | 0 | 115   | 126       | 2  | 0  | 5   | 0 | 0 | 133   | 20:15      | 88        | 0  | 1  | 4   | 0 | 0 | 0     | 0         | 0 | 0 | 93  | 32    | 0     | 0     | 2  | 0   | 0 | 34  |       |
| 8:30       | 88        | 2  | 0  | 5   | 1 | 0 | 96    | 118       | 1  | 1  | 8   | 2 | 0 | 130   | 20:30      | 70        | 0  | 0  | 2   | 0 | 0 | 0     | 0         | 0 | 0 | 72  | 33    | 1     | 1     | 3  | 0   | 0 | 38  |       |
| 8:45       | 84        | 2  | 0  | 6   | 0 | 0 | 92    | 95        | 2  | 0  | 5   | 0 | 0 | 102   | 20:45      | 62        | 0  | 0  | 0   | 0 | 0 | 0     | 0         | 0 | 0 | 62  | 41    | 0     | 0     | 0  | 0   | 0 | 41  |       |
| 9:00       | 70        | 0  | 0  | 8   | 0 | 0 | 78    | 90        | 3  | 0  | 6   | 0 | 0 | 99    | 21:00      | 40        | 0  | 0  | 0   | 0 | 0 | 0     | 0         | 0 | 0 | 40  | 35    | 0     | 0     | 0  | 0   | 0 | 35  |       |
| 9:15       | 77        | 0  | 1  | 7   | 0 | 0 | 85    | 80        | 0  | 0  | 2   | 0 | 0 | 82    | 21:15      | 32        | 1  | 0  | 0   | 0 | 0 | 0     | 0         | 0 | 0 | 33  | 26    | 1     | 0     | 1  | 0   | 0 | 28  |       |
| 9:30       | 68        | 4  | 0  | 10  | 1 | 0 | 83    | 88        | 2  | 1  | 2   | 0 | 0 | 93    | 21:30      | 22        | 0  | 1  | 0   | 0 | 0 | 0     | 0         | 0 | 0 | 21  | 23    | 20    | 0     | 1  | 0   | 0 | 21  |       |
| 9:45       | 95        | 1  | 0  | 5   | 0 | 0 | 101   | 95        | 1  | 0  | 4   | 1 | 0 | 101   | 21:45      | 16        | 0  | 0  | 0   | 0 | 0 | 0     | 0         | 0 | 0 | 16  | 15    | 0     | 0     | 2  | 0   | 0 | 17  |       |
| 10:00      | 55        | 2  | 1  | 5   | 0 | 0 | 63    | 88        | 2  | 0  | 2   | 0 | 0 | 92    | 22:00      | 7         | 0  | 0  | 0   | 0 | 0 | 0     | 0         | 0 | 0 | 7   | 11    | 0     | 0     | 1  | 0   | 0 | 12  |       |
| 10:15      | 68        | 1  | 2  | 9   | 0 | 0 | 80    | 68        | 1  | 0  | 3   | 0 | 0 | 72    | 22:15      | 6         | 0  | 0  | 0   | 0 | 0 | 0     | 0         | 0 | 0 | 6   | 15    | 0     | 0     | 1  | 0   | 0 | 16  |       |
| 10:30      | 77        | 0  | 0  | 8   | 1 | 0 | 86    | 55        | 2  | 1  | 4   | 0 | 0 | 62    | 22:30      | 5         | 0  | 1  | 0   | 0 | 0 | 0     | 0         | 0 | 0 | 6   | 9     | 0     | 0     | 0  | 0   | 0 | 9   |       |
| 10:45      | 51        | 0  | 0  | 5   | 0 | 0 | 56    | 48        | 3  | 0  | 4   | 0 | 0 | 55    | 22:45      | 1         | 1  | 0  | 1   | 0 | 0 | 0     | 0         | 0 | 0 | 3   | 9     | 0     | 0     | 0  | 0   | 0 | 10  |       |
| 11:00      | 62        | 2  | 1  | 6   | 0 | 0 | 71    | 45        | 0  | 0  | 5   | 0 | 0 | 50    | 23:00      | 2         | 0  | 0  | 0   | 0 | 0 | 0     | 0         | 0 | 0 | 2   | 8     | 0     | 0     | 2  | 0   | 0 | 10  |       |
| 11:15      | 55        | 2  | 2  | 6   | 0 | 0 | 65    | 84        | 0  | 0  | 8   | 0 | 0 | 92    | 23:15      | 6         | 0  | 0  | 0   | 0 | 0 | 0     | 0         | 0 | 0 | 6   | 8     | 0     | 0     | 2  | 0   | 0 | 10  |       |
| 11:30      | 45        | 0  | 3  | 7   | 1 | 0 | 56    | 55        | 1  | 0  | 7   | 1 | 0 | 64    | 23:30      | 2         | 0  | 0  | 0   | 1 | 0 | 0     | 0         | 0 | 0 | 3   | 7     | 0     | 0     | 0  | 0   | 0 | 10  |       |
| 11:45      | 62        | 0  | 3  | 5   | 1 | 0 | 71    | 68        | 0  | 0  | 5   | 0 | 0 | 73    | 23:45      | 1         | 0  | 0  | 0   | 1 | 0 | 0     | 0         | 0 | 0 | 2   | 3     | 0     | 0     | 0  | 0   | 0 | 3   |       |
| TOTAL      | 2,272     | 23 | 27 | 190 | 8 | 0 | 2,520 | 2,131     | 30 | 16 | 134 | 7 | 0 | 2,318 | TOTAL      | 3,737     | 50 | 18 | 201 | 4 | 4 | 4     | 4         | 4 | 4 | 4   | 4,014 | 2,733 | 42    | 21 | 150 | 0 | 5   | 2,951 |
|            |           |    |    |     |   |   |       |           |    |    |     |   |   |       |            |           |    |    |     |   |   |       |           |   |   |     |       |       |       |    |     |   | 505 |       |
|            |           |    |    |     |   |   |       |           |    |    |     |   |   |       |            |           |    |    |     |   |   |       |           |   |   |     |       |       |       |    |     |   |     |       |

| CLASS 1            | CLASS 2       | CLASS 3       | CLASS 4               | CLASS 5             | CLASS 6 | DAILY TOTAL | % OF TOTAL |
|--------------------|---------------|---------------|-----------------------|---------------------|---------|-------------|------------|
| PASSENGER VEHICLES | 2-AXLE TRUCKS | 3-AXLE TRUCKS | 4 OR MORE AXLE TRUCKS | RECREATION VEHICLES | BUSES   | 6,009       | 92.0%      |
| 5                  | 5             | 5             | 5                     | 5                   | 5       | 4,864       | 92.3%      |
| 0.1%               | 0.1%          | 0.1%          | 0.1%                  | 0.1%                | 0.1%    | 5,269       | 100.0%     |

| AM PEAK HOUR   | 7:30 AM | 7:45 AM | PM PEAK HOUR   | 4:30 PM | 3:45 PM |
|----------------|---------|---------|----------------|---------|---------|
| AM PEAK VOLUME | 482     | 500     | PM PEAK VOLUME | 730     | 505     |



## PREPARED BY PACIFIC TRAFFIC DATA SERVICES

**CITY:** FONTANA  
**LOCATION:** SAN BERNARDINO E/O COMMERCE

[illegible]

| CLASS 1 | PASSENGER VEHICLES | CLASS 4 | 4 OR MORE AXLE TRUCKS |
|---------|--------------------|---------|-----------------------|
| CLASS 2 | 2-AXLE TRUCKS      | CLASS 5 | RECREATION VEHICLES   |
| CLASS 3 | 3-AXLE TRUCKS      | CLASS 6 | BUSES                 |

# 24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

PREPARED BY PACIFIC TRAFFIC DATA SERVICES

DATE: 02/19/09  
JOB #: CA09-0220-1-013

CITY: FONTANA  
LOCATION: VALLEY E/O COMMERCE

| AM TIME | EASTBOUND |   |    |    |   |   | TOTAL | WESTBOUND |    |   |    |   |     | TOTAL | EASTBOUND |   |    |    |    |   | TOTAL | WESTBOUND |     |   |    |     |     | TOTAL |    |    |   |    |     |
|---------|-----------|---|----|----|---|---|-------|-----------|----|---|----|---|-----|-------|-----------|---|----|----|----|---|-------|-----------|-----|---|----|-----|-----|-------|----|----|---|----|-----|
|         | 1         | 2 | 3  | 4  | 5 | 6 |       | 1         | 2  | 3 | 4  | 5 | 6   |       | 1         | 2 | 3  | 4  | 5  | 6 |       | 1         | 2   | 3 | 4  | 5   | 6   |       |    |    |   |    |     |
| 0:00    | 0         | 0 | 0  | 0  | 0 | 0 | 1     | 0         | 0  | 0 | 0  | 0 | 2   | 12:00 | 66        | 0 | 0  | 0  | 12 | 0 | 0     | 0         | 0   | 0 | 0  | 78  | 70  | 0     | 0  | 2  | 0 | 0  | 72  |
| 0:15    | 2         | 1 | 0  | 0  | 0 | 0 | 3     | 2         | 0  | 0 | 0  | 0 | 2   | 12:15 | 70        | 0 | 0  | 15 | 0  | 0 | 0     | 1         | 0   | 0 | 0  | 85  | 74  | 0     | 0  | 1  | 0 | 0  | 75  |
| 0:30    | 5         | 0 | 0  | 2  | 0 | 0 | 7     | 3         | 0  | 0 | 0  | 0 | 3   | 12:30 | 84        | 1 | 0  | 10 | 0  | 0 | 0     | 0         | 0   | 0 | 0  | 95  | 50  | 1     | 0  | 0  | 0 | 51 |     |
| 0:45    | 2         | 0 | 0  | 1  | 0 | 0 | 3     | 3         | 0  | 0 | 2  | 0 | 5   | 12:45 | 88        | 0 | 1  | 8  | 0  | 0 | 0     | 0         | 0   | 0 | 0  | 97  | 56  | 0     | 0  | 0  | 0 | 56 |     |
| 1:00    | 2         | 0 | 0  | 0  | 0 | 0 | 2     | 1         | 0  | 2 | 1  | 0 | 4   | 13:00 | 81        | 0 | 0  | 13 | 0  | 0 | 0     | 2         | 2   | 0 | 0  | 94  | 88  | 0     | 2  | 2  | 0 | 0  | 92  |
| 1:15    | 5         | 2 | 0  | 1  | 0 | 0 | 8     | 2         | 1  | 0 | 0  | 0 | 3   | 13:15 | 80        | 0 | 0  | 9  | 0  | 0 | 0     | 0         | 0   | 0 | 0  | 89  | 84  | 0     | 1  | 5  | 0 | 0  | 90  |
| 1:30    | 3         | 1 | 0  | 2  | 0 | 0 | 6     | 0         | 0  | 1 | 0  | 0 | 1   | 13:30 | 95        | 1 | 2  | 5  | 0  | 0 | 0     | 1         | 12  | 0 | 0  | 103 | 74  | 2     | 1  | 12 | 0 | 0  | 89  |
| 1:45    | 3         | 0 | 0  | 5  | 0 | 0 | 8     | 2         | 0  | 0 | 0  | 0 | 2   | 13:45 | 96        | 2 | 2  | 8  | 0  | 0 | 0     | 0         | 8   | 0 | 0  | 108 | 85  | 2     | 0  | 8  | 0 | 0  | 95  |
| 2:00    | 5         | 2 | 2  | 5  | 0 | 0 | 14    | 5         | 0  | 0 | 1  | 0 | 6   | 14:00 | 87        | 0 | 2  | 11 | 0  | 0 | 0     | 0         | 6   | 0 | 0  | 100 | 70  | 1     | 0  | 6  | 0 | 0  | 77  |
| 2:15    | 4         | 0 | 1  | 2  | 0 | 0 | 7     | 3         | 0  | 0 | 2  | 0 | 5   | 14:15 | 51        | 0 | 1  | 15 | 1  | 0 | 0     | 0         | 0   | 0 | 0  | 68  | 89  | 0     | 2  | 9  | 0 | 0  | 100 |
| 2:30    | 5         | 1 | 0  | 1  | 0 | 0 | 7     | 2         | 0  | 0 | 2  | 0 | 4   | 14:30 | 67        | 0 | 0  | 18 | 0  | 0 | 0     | 0         | 85  | 0 | 0  | 85  | 95  | 0     | 0  | 15 | 0 | 0  | 110 |
| 2:45    | 9         | 0 | 0  | 0  | 0 | 0 | 9     | 4         | 0  | 1 | 2  | 0 | 7   | 14:45 | 95        | 1 | 0  | 23 | 0  | 0 | 0     | 0         | 11  | 0 | 0  | 119 | 104 | 0     | 5  | 11 | 0 | 0  | 120 |
| 3:00    | 9         | 0 | 0  | 2  | 0 | 0 | 11    | 5         | 1  | 0 | 2  | 0 | 8   | 15:00 | 105       | 2 | 3  | 20 | 0  | 0 | 0     | 0         | 130 | 0 | 0  | 130 | 95  | 2     | 8  | 15 | 0 | 0  | 120 |
| 3:15    | 9         | 0 | 0  | 3  | 0 | 0 | 12    | 5         | 0  | 0 | 4  | 0 | 9   | 15:15 | 115       | 3 | 5  | 23 | 1  | 0 | 0     | 0         | 147 | 0 | 0  | 147 | 124 | 5     | 6  | 22 | 0 | 0  | 157 |
| 3:30    | 11        | 2 | 1  | 2  | 0 | 0 | 16    | 10        | 0  | 0 | 5  | 0 | 15  | 15:30 | 126       | 3 | 8  | 16 | 0  | 0 | 0     | 0         | 153 | 0 | 0  | 153 | 135 | 1     | 3  | 18 | 0 | 0  | 157 |
| 3:45    | 15        | 2 | 2  | 0  | 0 | 0 | 19    | 8         | 0  | 1 | 5  | 0 | 14  | 15:45 | 142       | 0 | 3  | 22 | 0  | 0 | 0     | 0         | 167 | 0 | 0  | 167 | 151 | 3     | 9  | 22 | 0 | 0  | 185 |
| 4:00    | 11        | 0 | 0  | 3  | 0 | 0 | 14    | 8         | 0  | 3 | 6  | 0 | 17  | 16:00 | 183       | 7 | 6  | 18 | 0  | 0 | 0     | 0         | 214 | 0 | 0  | 214 | 173 | 1     | 6  | 15 | 0 | 0  | 195 |
| 4:15    | 18        | 0 | 2  | 4  | 0 | 0 | 24    | 11        | 0  | 2 | 5  | 0 | 18  | 16:15 | 213       | 2 | 7  | 28 | 0  | 0 | 0     | 0         | 250 | 0 | 0  | 250 | 138 | 1     | 12 | 18 | 0 | 0  | 169 |
| 4:30    | 26        | 2 | 0  | 5  | 0 | 0 | 33    | 16        | 2  | 2 | 9  | 0 | 29  | 16:30 | 212       | 5 | 15 | 27 | 0  | 0 | 0     | 0         | 259 | 0 | 0  | 259 | 132 | 2     | 9  | 9  | 0 | 0  | 152 |
| 4:45    | 22        | 1 | 0  | 5  | 0 | 0 | 28    | 20        | 2  | 0 | 2  | 0 | 24  | 16:45 | 186       | 3 | 12 | 15 | 0  | 0 | 0     | 0         | 216 | 0 | 0  | 216 | 145 | 2     | 7  | 9  | 0 | 0  | 163 |
| 5:00    | 51        | 0 | 2  | 11 | 0 | 0 | 64    | 32        | 1  | 1 | 9  | 0 | 43  | 17:00 | 123       | 4 | 4  | 19 | 0  | 0 | 0     | 0         | 150 | 0 | 0  | 150 | 162 | 2     | 9  | 13 | 1 | 0  | 187 |
| 5:15    | 48        | 0 | 2  | 6  | 0 | 0 | 56    | 44        | 0  | 0 | 11 | 0 | 55  | 17:15 | 133       | 4 | 7  | 21 | 0  | 0 | 0     | 0         | 165 | 0 | 0  | 165 | 131 | 1     | 5  | 12 | 0 | 0  | 149 |
| 5:30    | 33        | 0 | 2  | 8  | 0 | 0 | 43    | 50        | 0  | 2 | 16 | 0 | 68  | 17:30 | 123       | 1 | 2  | 12 | 0  | 0 | 0     | 0         | 138 | 0 | 0  | 138 | 124 | 1     | 3  | 11 | 0 | 0  | 139 |
| 5:45    | 34        | 2 | 5  | 5  | 0 | 0 | 46    | 64        | 0  | 0 | 20 | 0 | 84  | 17:45 | 128       | 2 | 0  | 20 | 0  | 0 | 0     | 0         | 150 | 0 | 0  | 150 | 97  | 3     | 4  | 16 | 0 | 0  | 120 |
| 6:00    | 59        | 4 | 5  | 8  | 0 | 0 | 76    | 60        | 1  | 5 | 11 | 0 | 77  | 18:00 | 135       | 3 | 6  | 15 | 0  | 0 | 0     | 0         | 159 | 0 | 0  | 159 | 115 | 0     | 5  | 10 | 0 | 0  | 130 |
| 6:15    | 66        | 2 | 4  | 7  | 0 | 0 | 79    | 95        | 2  | 8 | 15 | 0 | 120 | 18:15 | 108       | 5 | 8  | 21 | 0  | 0 | 0     | 0         | 142 | 0 | 0  | 142 | 106 | 0     | 4  | 14 | 0 | 0  | 124 |
| 6:30    | 80        | 2 | 5  | 8  | 0 | 0 | 95    | 88        | 1  | 7 | 23 | 0 | 119 | 18:30 | 95        | 2 | 5  | 16 | 0  | 0 | 0     | 0         | 118 | 0 | 0  | 118 | 80  | 1     | 2  | 12 | 1 | 0  | 96  |
| 6:45    | 90        | 4 | 5  | 9  | 0 | 0 | 108   | 81        | 3  | 4 | 16 | 0 | 104 | 18:45 | 84        | 2 | 5  | 11 | 0  | 0 | 0     | 0         | 102 | 0 | 0  | 102 | 84  | 2     | 2  | 8  | 0 | 0  | 96  |
| 7:00    | 106       | 8 | 3  | 14 | 0 | 0 | 131   | 109       | 5  | 6 | 9  | 0 | 129 | 19:00 | 88        | 2 | 2  | 15 | 0  | 0 | 0     | 0         | 107 | 0 | 0  | 107 | 62  | 2     | 1  | 8  | 0 | 0  | 73  |
| 7:15    | 128       | 4 | 1  | 12 | 1 | 0 | 146   | 120       | 5  | 2 | 11 | 0 | 138 | 19:15 | 64        | 1 | 1  | 9  | 1  | 0 | 0     | 0         | 76  | 0 | 0  | 76  | 51  | 0     | 3  | 5  | 2 | 0  | 61  |
| 7:30    | 120       | 1 | 3  | 14 | 0 | 0 | 138   | 108       | 2  | 2 | 16 | 0 | 128 | 19:30 | 60        | 0 | 2  | 9  | 0  | 0 | 0     | 0         | 71  | 0 | 0  | 71  | 40  | 0     | 0  | 6  | 0 | 0  | 46  |
| 7:45    | 112       | 2 | 4  | 12 | 0 | 0 | 130   | 117       | 2  | 2 | 24 | 0 | 145 | 19:45 | 40        | 0 | 6  | 5  | 0  | 0 | 0     | 51        | 0   | 0 | 51 | 33  | 1   | 3     | 8  | 0  | 0 | 45 |     |
| 8:00    | 92        | 5 | 7  | 12 | 0 | 0 | 116   | 87        | 3  | 0 | 23 | 0 | 113 | 20:00 | 31        | 1 | 2  | 8  | 0  | 0 | 0     | 0         | 42  | 0 | 0  | 42  | 18  | 0     | 5  | 7  | 0 | 0  | 30  |
| 8:15    | 104       | 8 | 4  | 12 | 1 | 0 | 129   | 90        | 3  | 2 | 27 | 0 | 122 | 20:15 | 26        | 0 | 1  | 5  | 0  | 0 | 0     | 0         | 32  | 0 | 0  | 32  | 19  | 0     | 2  | 32 | 0 | 0  | 28  |
| 8:30    | 96        | 3 | 6  | 20 | 0 | 0 | 125   | 91        | 4  | 2 | 20 | 0 | 117 | 20:30 | 22        | 2 | 0  | 12 | 0  | 0 | 0     | 0         | 36  | 0 | 0  | 36  | 11  | 0     | 0  | 6  | 0 | 0  | 17  |
| 8:45    | 58        | 8 | 6  | 21 | 0 | 0 | 93    | 98        | 8  | 2 | 23 | 0 | 131 | 20:45 | 34        | 0 | 0  | 10 | 0  | 0 | 0     | 0         | 44  | 0 | 0  | 44  | 6   | 1     | 0  | 2  | 0 | 0  | 9   |
| 9:00    | 66        | 6 | 13 | 36 | 0 | 0 | 121   | 67        | 4  | 4 | 24 | 0 | 99  | 21:00 | 18        | 0 | 1  | 5  | 0  | 0 | 0     | 0         | 24  | 0 | 0  | 24  | 8   | 0     | 1  | 3  | 0 | 0  | 12  |
| 9:15    | 77        | 2 | 8  | 21 | 0 | 0 | 108   | 84        | 10 | 3 | 14 | 0 | 111 | 21:15 | 11        | 1 | 2  | 8  | 0  | 0 | 0     | 0         | 22  | 0 | 0  | 22  | 5   | 0     | 0  | 0  | 0 | 0  | 5   |
| 9:30    | 84        | 6 | 8  | 26 | 0 | 0 | 124   | 60        | 5  | 6 | 16 | 0 | 87  | 21:30 | 10        | 0 | 0  | 6  | 0  | 0 | 0     | 0         | 16  | 0 | 0  | 16  | 5   | 0     | 0  | 6  | 0 | 0  | 11  |
| 9:45    | 80        | 5 | 5  | 33 | 0 | 0 | 123   | 51        | 2  | 6 | 10 | 0 | 69  | 21:45 | 9         | 0 | 2  | 8  | 0  | 0 | 0     | 0         | 19  | 0 | 0  | 19  | 5   | 0     | 0  | 1  | 0 | 0  | 6   |
| 10:00   | 65        | 4 | 9  | 16 | 0 | 0 | 94    | 45        | 2  | 5 | 15 | 0 | 67  | 22:00 | 5         | 2 | 2  | 7  | 1  | 0 | 0     | 0         | 17  | 0 | 0  | 17  | 6   | 0     | 1  | 2  | 0 | 0  | 9   |
| 10:15   | 51        | 2 | 9  | 28 | 0 | 0 | 90    | 55        | 2  | 2 | 9  | 0 | 68  | 22:15 | 5         | 2 | 3  | 6  | 0  | 0 | 0     | 0         | 16  | 0 | 0  | 16  | 8   | 0     | 0  | 5  | 1 | 0  | 14  |
| 10:30   | 55        | 2 | 9  | 20 | 1 | 0 | 87    | 56        | 1  | 0 | 9  | 0 | 66  | 22:30 | 6         | 2 | 2  | 7  | 0  | 0 | 0     | 0         | 17  | 0 | 0  | 17  | 5   | 0     | 0  | 6  | 0 | 0  | 11  |
| 10:45   | 65        | 2 | 5  | 15 | 0 | 0 | 87    | 48        | 5  | 4 | 12 | 0 | 69  | 22:45 | 5         | 0 | 0  | 8  | 0  | 0 | 0     | 0         | 13  | 0 | 0  | 13  | 5   | 1     | 0  | 2  | 0 | 0  | 8   |
| 11:00   | 48        | 3 | 5  | 11 | 0 | 0 | 67    | 49        | 2  | 0 | 15 | 0 | 66  | 23:00 | 0         | 1 | 0  | 8  | 0  | 0 | 0     | 0         | 9   | 0 | 0  | 9   | 5   | 0     | 0  | 0  | 0 | 0  | 5   |
| 11:15   | 40        | 6 | 3  | 26 | 0 | 0 |       |           |    |   |    |   |     |       |           |   |    |    |    |   |       |           |     |   |    |     |     |       |    |    |   |    |     |



## PREPARED BY PACIFIC TRAFFIC DATA SERVICES

**CITY:** FONTANA  
**LOCATION:** MULBERRY S/O SLOVER

[illegible]

| CLASS 1 | PASSENGER VEHICLES | CLASS 4 | 4 OR MORE AXLE TRUCKS |
|---------|--------------------|---------|-----------------------|
| CLASS 2 | 2-AXLE TRUCKS      | CLASS 5 | RECREATION VEHICLES   |
| CLASS 3 | 3-AXLE TRUCKS      | CLASS 6 | RIGS                  |

# 24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

PREPARED BY PACIFIC TRAFFIC DATA SERVICES

DATE: 02/19/09 THURSDAY  
 JOB #: CA09-0220-1-015

CITY: FONTANA  
 LOCATION: MULBERRY S/O JURUPA

| AM TIME | NORTHBOUND |    |    |     |   |   | SOUTHBOUND |       |    |    |     |   | PM Time | NORTHBOUND |       |       |    |    |     | SOUTHBOUND |   |       |       |    |    |     |   |   |       |             |
|---------|------------|----|----|-----|---|---|------------|-------|----|----|-----|---|---------|------------|-------|-------|----|----|-----|------------|---|-------|-------|----|----|-----|---|---|-------|-------------|
|         | 1          | 2  | 3  | 4   | 5 | 6 | TOTAL      | 1     | 2  | 3  | 4   | 5 |         | 6          | TOTAL | 1     | 2  | 3  | 4   | 5          | 6 | TOTAL | 1     | 2  | 3  | 4   | 5 | 6 | TOTAL |             |
| 0:00    | 1          | 0  | 0  | 0   | 0 | 0 | 1          | 2     | 0  | 0  | 0   | 0 | 0       | 2          | 12:00 | 60    | 0  | 0  | 6   | 0          | 0 | 66    | 51    | 0  | 0  | 6   | 0 | 0 | 57    |             |
| 0:15    | 2          | 0  | 0  | 0   | 0 | 0 | 2          | 1     | 0  | 0  | 0   | 0 | 0       | 1          | 12:15 | 54    | 0  | 1  | 5   | 0          | 0 | 60    | 66    | 0  | 0  | 6   | 0 | 0 | 72    |             |
| 0:30    | 5          | 0  | 0  | 2   | 0 | 0 | 7          | 2     | 0  | 1  | 1   | 0 | 0       | 4          | 12:30 | 45    | 0  | 2  | 5   | 0          | 0 | 52    | 59    | 1  | 1  | 5   | 0 | 0 | 66    |             |
| 0:45    | 9          | 0  | 0  | 2   | 0 | 0 | 11         | 8     | 0  | 0  | 2   | 0 | 0       | 10         | 12:45 | 63    | 0  | 2  | 8   | 0          | 0 | 73    | 62    | 2  | 1  | 4   | 0 | 0 | 69    |             |
| 1:00    | 8          | 0  | 1  | 0   | 0 | 0 | 9          | 6     | 0  | 0  | 1   | 0 | 0       | 7          | 13:00 | 54    | 0  | 3  | 6   | 0          | 0 | 63    | 55    | 2  | 2  | 8   | 0 | 0 | 67    |             |
| 1:15    | 8          | 0  | 0  | 0   | 0 | 0 | 8          | 5     | 1  | 0  | 2   | 0 | 0       | 8          | 13:15 | 66    | 0  | 2  | 11  | 0          | 0 | 79    | 50    | 1  | 2  | 5   | 0 | 0 | 58    |             |
| 1:30    | 5          | 0  | 0  | 1   | 0 | 0 | 6          | 10    | 0  | 0  | 2   | 0 | 0       | 12         | 13:30 | 72    | 1  | 2  | 5   | 0          | 0 | 80    | 77    | 0  | 2  | 4   | 0 | 0 | 83    |             |
| 1:45    | 10         | 0  | 0  | 2   | 0 | 0 | 12         | 8     | 2  | 0  | 0   | 0 | 0       | 10         | 13:45 | 84    | 0  | 2  | 8   | 0          | 0 | 94    | 67    | 0  | 1  | 8   | 0 | 0 | 76    |             |
| 2:00    | 9          | 0  | 0  | 0   | 0 | 0 | 9          | 7     | 2  | 0  | 2   | 0 | 0       | 11         | 14:00 | 68    | 2  | 0  | 10  | 0          | 0 | 80    | 70    | 2  | 1  | 9   | 0 | 0 | 82    |             |
| 2:15    | 9          | 0  | 0  | 0   | 0 | 0 | 9          | 5     | 1  | 0  | 3   | 0 | 0       | 9          | 14:15 | 77    | 0  | 3  | 2   | 0          | 0 | 82    | 88    | 2  | 1  | 8   | 0 | 0 | 99    |             |
| 2:30    | 8          | 0  | 0  | 0   | 0 | 0 | 8          | 6     | 0  | 0  | 1   | 0 | 0       | 7          | 14:30 | 102   | 2  | 0  | 5   | 0          | 0 | 109   | 90    | 0  | 2  | 8   | 0 | 0 | 100   |             |
| 2:45    | 5          | 0  | 0  | 1   | 0 | 0 | 6          | 5     | 1  | 1  | 2   | 0 | 0       | 9          | 14:45 | 95    | 3  | 1  | 6   | 0          | 0 | 105   | 96    | 0  | 3  | 7   | 0 | 0 | 106   |             |
| 3:00    | 10         | 0  | 0  | 2   | 0 | 0 | 12         | 5     | 2  | 1  | 0   | 0 | 0       | 8          | 15:00 | 87    | 2  | 1  | 7   | 0          | 0 | 97    | 117   | 1  | 3  | 10  | 0 | 0 | 131   |             |
| 3:15    | 15         | 0  | 0  | 3   | 0 | 0 | 18         | 10    | 1  | 2  | 0   | 0 | 0       | 13         | 15:15 | 88    | 0  | 1  | 12  | 0          | 0 | 101   | 108   | 1  | 1  | 15  | 0 | 0 | 125   |             |
| 3:30    | 26         | 0  | 0  | 3   | 0 | 0 | 29         | 5     | 0  | 0  | 2   | 0 | 0       | 7          | 15:30 | 98    | 2  | 2  | 8   | 0          | 0 | 110   | 126   | 2  | 4  | 8   | 0 | 0 | 140   |             |
| 3:45    | 18         | 1  | 0  | 0   | 0 | 0 | 19         | 20    | 0  | 0  | 3   | 4 | 0       | 27         | 15:45 | 88    | 2  | 0  | 7   | 0          | 0 | 97    | 115   | 1  | 4  | 12  | 0 | 0 | 132   |             |
| 4:00    | 33         | 2  | 0  | 0   | 0 | 0 | 35         | 15    | 0  | 2  | 4   | 0 | 0       | 21         | 16:00 | 92    | 4  | 0  | 7   | 0          | 0 | 103   | 135   | 2  | 5  | 1   | 0 | 0 | 143   |             |
| 4:15    | 32         | 2  | 0  | 1   | 0 | 0 | 35         | 33    | 1  | 2  | 0   | 0 | 0       | 36         | 16:15 | 70    | 4  | 2  | 8   | 0          | 0 | 84    | 114   | 0  | 0  | 5   | 1 | 0 | 120   |             |
| 4:30    | 66         | 2  | 1  | 2   | 0 | 0 | 71         | 28    | 2  | 0  | 5   | 0 | 0       | 35         | 16:30 | 107   | 2  | 4  | 9   | 0          | 0 | 122   | 136   | 0  | 6  | 6   | 0 | 0 | 148   |             |
| 4:45    | 50         | 0  | 0  | 3   | 0 | 0 | 53         | 16    | 3  | 0  | 5   | 0 | 0       | 24         | 16:45 | 82    | 1  | 0  | 10  | 0          | 0 | 93    | 117   | 0  | 2  | 10  | 0 | 0 | 129   |             |
| 5:00    | 66         | 0  | 0  | 0   | 0 | 0 | 66         | 22    | 2  | 3  | 1   | 0 | 0       | 28         | 17:00 | 86    | 0  | 2  | 5   | 0          | 0 | 93    | 173   | 1  | 1  | 15  | 0 | 0 | 190   |             |
| 5:15    | 70         | 1  | 1  | 3   | 0 | 0 | 75         | 32    | 2  | 2  | 6   | 0 | 0       | 42         | 17:15 | 106   | 4  | 2  | 8   | 1          | 0 | 121   | 148   | 1  | 2  | 11  | 1 | 0 | 163   |             |
| 5:30    | 87         | 2  | 3  | 4   | 0 | 0 | 96         | 40    | 1  | 1  | 5   | 0 | 0       | 47         | 17:30 | 82    | 5  | 3  | 12  | 0          | 0 | 102   | 125   | 0  | 2  | 5   | 0 | 0 | 132   |             |
| 5:45    | 104        | 3  | 3  | 5   | 0 | 0 | 115        | 55    | 1  | 0  | 5   | 0 | 0       | 61         | 17:45 | 70    | 5  | 2  | 15  | 0          | 0 | 92    | 113   | 1  | 3  | 6   | 0 | 0 | 123   |             |
| 6:00    | 99         | 3  | 2  | 6   | 0 | 0 | 110        | 65    | 0  | 0  | 8   | 0 | 0       | 73         | 18:00 | 77    | 0  | 0  | 10  | 0          | 0 | 87    | 104   | 2  | 1  | 8   | 0 | 0 | 115   |             |
| 6:15    | 90         | 2  | 0  | 8   | 0 | 0 | 100        | 70    | 0  | 2  | 5   | 1 | 0       | 78         | 18:15 | 84    | 2  | 0  | 8   | 0          | 0 | 94    | 115   | 2  | 0  | 7   | 0 | 0 | 124   |             |
| 6:30    | 115        | 5  | 0  | 2   | 0 | 0 | 122        | 51    | 1  | 3  | 5   | 0 | 0       | 60         | 18:30 | 80    | 2  | 0  | 7   | 0          | 0 | 89    | 89    | 1  | 1  | 2   | 0 | 0 | 93    |             |
| 6:45    | 108        | 3  | 0  | 8   | 0 | 0 | 119        | 66    | 2  | 2  | 6   | 0 | 0       | 76         | 18:45 | 55    | 1  | 1  | 10  | 0          | 0 | 67    | 90    | 0  | 2  | 5   | 0 | 0 | 97    |             |
| 7:00    | 120        | 4  | 2  | 9   | 0 | 0 | 135        | 72    | 2  | 1  | 10  | 0 | 0       | 85         | 19:00 | 51    | 2  | 2  | 5   | 0          | 0 | 60    | 63    | 0  | 2  | 1   | 0 | 0 | 66    |             |
| 7:15    | 118        | 2  | 2  | 10  | 0 | 0 | 132        | 61    | 2  | 1  | 5   | 0 | 0       | 69         | 19:15 | 65    | 3  | 0  | 6   | 0          | 0 | 74    | 77    | 1  | 0  | 2   | 0 | 0 | 80    |             |
| 7:30    | 102        | 1  | 1  | 15  | 0 | 0 | 119        | 53    | 1  | 1  | 5   | 0 | 0       | 60         | 19:30 | 54    | 0  | 0  | 5   | 0          | 0 | 59    | 58    | 0  | 0  | 0   | 0 | 0 | 58    |             |
| 7:45    | 88         | 2  | 1  | 11  | 0 | 0 | 102        | 60    | 2  | 2  | 8   | 0 | 0       | 72         | 19:45 | 55    | 2  | 1  | 1   | 0          | 0 | 59    | 66    | 0  | 2  | 0   | 0 | 0 | 68    |             |
| 8:00    | 72         | 3  | 0  | 6   | 0 | 0 | 81         | 61    | 2  | 3  | 12  | 0 | 0       | 78         | 20:00 | 40    | 4  | 2  | 2   | 0          | 0 | 48    | 63    | 0  | 1  | 1   | 0 | 0 | 65    |             |
| 8:15    | 74         | 3  | 0  | 8   | 0 | 0 | 85         | 60    | 0  | 3  | 11  | 0 | 0       | 74         | 20:15 | 35    | 0  | 1  | 1   | 0          | 0 | 37    | 50    | 0  | 0  | 2   | 0 | 0 | 52    |             |
| 8:30    | 82         | 4  | 0  | 5   | 0 | 0 | 91         | 52    | 0  | 2  | 15  | 0 | 0       | 69         | 20:30 | 28    | 4  | 0  | 2   | 0          | 0 | 34    | 44    | 0  | 0  | 0   | 0 | 0 | 44    |             |
| 8:45    | 80         | 0  | 1  | 5   | 0 | 0 | 86         | 60    | 2  | 0  | 5   | 0 | 0       | 67         | 20:45 | 18    | 0  | 0  | 3   | 0          | 0 | 21    | 28    | 1  | 1  | 0   | 0 | 0 | 30    |             |
| 9:00    | 84         | 2  | 2  | 4   | 0 | 0 | 92         | 48    | 0  | 2  | 8   | 0 | 0       | 58         | 21:00 | 22    | 2  | 0  | 2   | 0          | 0 | 26    | 16    | 0  | 1  | 0   | 0 | 0 | 17    |             |
| 9:15    | 76         | 2  | 2  | 8   | 0 | 0 | 88         | 55    | 1  | 1  | 4   | 0 | 0       | 61         | 21:15 | 26    | 2  | 0  | 1   | 0          | 0 | 29    | 22    | 0  | 0  | 0   | 0 | 0 | 22    |             |
| 9:30    | 59         | 0  | 4  | 4   | 0 | 0 | 67         | 56    | 1  | 1  | 5   | 0 | 0       | 63         | 21:30 | 18    | 0  | 0  | 1   | 0          | 0 | 19    | 16    | 0  | 0  | 0   | 0 | 0 | 16    |             |
| 9:45    | 66         | 0  | 3  | 9   | 0 | 0 | 78         | 49    | 2  | 0  | 6   | 0 | 0       | 57         | 21:45 | 22    | 0  | 0  | 0   | 0          | 0 | 22    | 11    | 0  | 0  | 0   | 0 | 0 | 11    |             |
| 10:00   | 70         | 0  | 0  | 0   | 0 | 0 | 80         | 47    | 0  | 0  | 5   | 0 | 0       | 52         | 22:00 | 10    | 0  | 0  | 0   | 0          | 0 | 10    | 15    | 0  | 0  | 0   | 0 | 0 | 15    |             |
| 10:15   | 84         | 0  | 2  | 5   | 0 | 0 | 91         | 52    | 0  | 0  | 5   | 0 | 0       | 57         | 22:15 | 8     | 0  | 0  | 0   | 1          | 0 | 9     | 8     | 0  | 0  | 0   | 0 | 0 | 8     |             |
| 10:30   | 80         | 1  | 2  | 5   | 0 | 0 | 88         | 44    | 0  | 2  | 8   | 0 | 0       | 54         | 22:30 | 9     | 0  | 0  | 0   | 0          | 0 | 9     | 9     | 0  | 0  | 0   | 0 | 0 | 9     |             |
| 10:45   | 55         | 1  | 2  | 8   | 0 | 0 | 66         | 59    | 3  | 2  | 10  | 0 | 0       | 74         | 22:45 | 5     | 0  | 0  | 0   | 0          | 0 | 5     | 9     | 0  | 0  | 0   | 0 | 0 | 9     |             |
| 11:00   | 68         | 2  | 2  | 9   | 0 | 0 | 81         | 58    | 2  | 2  | 5   | 0 | 0       | 67         | 23:00 | 8     | 0  | 0  | 0   | 0          | 0 | 8     | 5     | 0  | 0  | 0   | 0 | 0 | 5     |             |
| 11:15   | 77         | 2  | 1  | 5   | 0 | 0 | 85         | 62    | 2  | 3  | 5   | 0 | 0       | 72         | 23:15 | 8     | 0  | 0  | 0   | 0          | 0 | 8     | 5     | 0  | 0  | 0   | 0 | 0 | 5     |             |
| 11:30   | 84         | 0  | 1  | 1   | 0 | 0 | 86         | 41    | 0  | 2  | 6   | 0 | 0       | 49         | 23:30 | 7     | 0  | 0  | 0   | 1          | 0 | 8     | 5     | 0  | 0  | 0   | 0 | 0 | 6     |             |
| 11:45   | 67         | 0  | 0  | 3   | 0 | 0 | 70         | 55    | 0  | 0  | 5   | 0 | 0       | 60         | 23:45 | 2     | 0  | 0  | 0   | 0          | 0 | 2     | 3     | 0  | 0  | 0   | 0 | 0 | 3     |             |
| TOTAL   | 2,674      | 55 | 39 | 198 | 0 | 0 | 2,966      | 1,703 | 47 | 53 | 220 | 1 | 0       | 2,024      | TOTAL | 2,683 | 63 | 44 | 250 | 2          | 0 | 3,042 | 3,329 | 27 | 61 | 210 | 2 | 0 | 3,629 | 4:30 PM 630 |
|         |            |    |    |     |   |   | 508        |       |    |    |     |   |         | 299        |       |       |    |    |     |            |   | 429   |       |    |    |     |   |   |       |             |
|         |            |    |    |     |   |   |            |       |    |    |     |   |         |            |       |       |    |    |     |            |   |       |       |    |    |     |   |   |       |             |
|         |            |    |    |     |   |   |            |       |    |    |     |   |         |            |       |       |    |    |     |            |   |       |       |    |    |     |   |   |       |             |
|         |            |    |    |     |   |   |            |       |    |    |     |   |         |            |       |       |    |    |     |            |   |       |       |    | </ |     |   |   |       |             |

|         | CLASS 1       | PASSENGER VEHICLES | CLASS 4             | 4 OR MORE AXLE TRUCKS |
|---------|---------------|--------------------|---------------------|-----------------------|
| CLASS 2 | 2-AXLE TRUCKS | CLASS 5            | RECREATION VEHICLES |                       |
|         |               | DAILY TOTAL        | 10,970              | 79                    |
|         |               | % OF TOTAL         | 92.1%               | 0.7%                  |
|         |               |                    | 6.3%                | 0.1%                  |
|         |               |                    | 0.0%                | 0.0%                  |
|         |               |                    | 100.0%              | 100.0%                |
|         |               |                    | 11,544              | 102                   |
|         |               |                    | 91.8%               | 0.8%                  |
|         |               |                    | 1.0%                | 6.3%                  |
|         |               |                    | 0.0%                | 0.0%                  |
|         |               |                    | 100.0%              | 100.0%                |
|         |               |                    | 12,571              | 4                     |

# 24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

PREPARED BY PACIFIC TRAFFIC DATA SERVICES

DATE: 02/19/09  
JOB #: CA09-0220-1-017

CITY: FONTANA  
LOCATION: SLOVER E/O MULBERRY

THURSDAY

| AM<br>TIME | EASTBOUND |    |    |     |   |   | WESTBOUND |       |     |    |     |    | EASTBOUND |       |       |    |    |     | WESTBOUND |    |       |       |    |    | TOTAL |   |     |       |
|------------|-----------|----|----|-----|---|---|-----------|-------|-----|----|-----|----|-----------|-------|-------|----|----|-----|-----------|----|-------|-------|----|----|-------|---|-----|-------|
|            | 1         | 2  | 3  | 4   | 5 | 6 | TOTAL     | 1     | 2   | 3  | 4   | 5  | 6         | TOTAL | 1     | 2  | 3  | 4   | 5         | 6  | TOTAL | 1     | 2  | 3  | 4     | 5 | 6   | TOTAL |
| 0:00       | 5         | 0  | 0  | 0   | 0 | 0 | 5         | 5     | 0   | 0  | 0   | 0  | 0         | 5     | 44    | 0  | 0  | 0   | 7         | 0  | 0     | 51    | 42 | 0  | 0     | 4 | 0   | 46    |
| 0:15       | 6         | 0  | 0  | 0   | 0 | 0 | 6         | 6     | 0   | 0  | 0   | 0  | 0         | 6     | 42    | 0  | 0  | 8   | 0         | 0  | 51    | 33    | 0  | 0  | 4     | 0 | 37  |       |
| 0:30       | 5         | 0  | 0  | 0   | 0 | 0 | 5         | 5     | 2   | 0  | 0   | 0  | 0         | 7     | 62    | 2  | 1  | 5   | 0         | 1  | 71    | 62    | 1  | 1  | 5     | 0 | 70  |       |
| 0:45       | 2         | 0  | 0  | 0   | 0 | 0 | 2         | 2     | 1   | 0  | 0   | 0  | 0         | 1     | 51    | 3  | 2  | 9   | 0         | 0  | 65    | 51    | 2  | 2  | 6     | 0 | 61  |       |
| 1:00       | 4         | 0  | 0  | 0   | 0 | 0 | 4         | 12    | 0   | 0  | 0   | 0  | 0         | 12    | 44    | 4  | 3  | 5   | 0         | 0  | 56    | 44    | 0  | 0  | 8     | 0 | 52  |       |
| 1:15       | 4         | 0  | 0  | 0   | 0 | 0 | 4         | 5     | 0   | 0  | 0   | 0  | 0         | 5     | 35    | 2  | 0  | 5   | 0         | 0  | 42    | 68    | 0  | 0  | 5     | 0 | 73  |       |
| 1:30       | 2         | 0  | 0  | 0   | 0 | 0 | 2         | 3     | 6   | 0  | 0   | 0  | 0         | 6     | 41    | 0  | 0  | 4   | 0         | 1  | 46    | 48    | 0  | 2  | 8     | 0 | 59  |       |
| 1:45       | 5         | 0  | 0  | 0   | 0 | 0 | 5         | 6     | 0   | 0  | 0   | 0  | 0         | 6     | 50    | 0  | 1  | 5   | 0         | 0  | 56    | 55    | 3  | 1  | 6     | 0 | 65  |       |
| 2:00       | 6         | 0  | 0  | 0   | 0 | 0 | 6         | 8     | 0   | 0  | 0   | 0  | 0         | 8     | 52    | 0  | 2  | 18  | 0         | 0  | 72    | 41    | 2  | 1  | 8     | 0 | 52  |       |
| 2:15       | 5         | 0  | 0  | 0   | 0 | 0 | 5         | 7     | 8   | 0  | 0   | 0  | 0         | 9     | 44    | 1  | 3  | 10  | 0         | 0  | 58    | 70    | 0  | 0  | 8     | 0 | 79  |       |
| 2:30       | 5         | 0  | 0  | 0   | 0 | 0 | 5         | 6     | 10  | 0  | 0   | 0  | 0         | 11    | 68    | 2  | 4  | 8   | 0         | 0  | 83    | 98    | 0  | 2  | 12    | 0 | 113 |       |
| 2:45       | 12        | 0  | 0  | 0   | 0 | 0 | 12        | 13    | 9   | 0  | 0   | 0  | 0         | 10    | 48    | 3  | 3  | 5   | 0         | 0  | 59    | 88    | 2  | 0  | 10    | 0 | 100 |       |
| 3:00       | 10        | 0  | 0  | 0   | 0 | 0 | 10        | 9     | 0   | 0  | 0   | 0  | 0         | 9     | 55    | 2  | 0  | 4   | 0         | 0  | 61    | 74    | 1  | 2  | 5     | 0 | 82  |       |
| 3:15       | 8         | 0  | 0  | 0   | 0 | 0 | 8         | 6     | 0   | 0  | 0   | 0  | 0         | 6     | 51    | 2  | 2  | 6   | 0         | 0  | 61    | 95    | 0  | 0  | 9     | 0 | 105 |       |
| 3:30       | 8         | 2  | 0  | 0   | 0 | 0 | 10        | 11    | 8   | 0  | 0   | 0  | 0         | 8     | 15:15 | 51 | 2  | 2   | 6         | 0  | 1     | 88    | 88 | 2  | 0     | 9 | 1   | 100   |
| 3:45       | 11        | 0  | 0  | 0   | 0 | 0 | 11        | 22    | 0   | 0  | 0   | 0  | 0         | 24    | 66    | 2  | 0  | 8   | 0         | 0  | 76    | 115   | 0  | 1  | 5     | 0 | 121 |       |
| 4:00       | 16        | 0  | 0  | 0   | 0 | 0 | 16        | 16    | 0   | 1  | 3   | 0  | 0         | 20    | 62    | 2  | 0  | 5   | 0         | 0  | 69    | 106   | 0  | 0  | 5     | 0 | 112 |       |
| 4:15       | 22        | 0  | 0  | 0   | 0 | 0 | 22        | 23    | 20  | 0  | 2   | 0  | 0         | 24    | 65    | 0  | 2  | 12  | 0         | 2  | 81    | 90    | 3  | 0  | 7     | 1 | 101 |       |
| 4:30       | 28        | 0  | 0  | 0   | 0 | 0 | 28        | 30    | 28  | 0  | 0   | 1  | 0         | 29    | 83    | 2  | 4  | 5   | 0         | 0  | 94    | 91    | 2  | 2  | 10    | 0 | 105 |       |
| 4:45       | 32        | 1  | 0  | 0   | 0 | 0 | 34        | 34    | 32  | 2  | 0   | 0  | 0         | 34    | 89    | 0  | 2  | 7   | 0         | 1  | 69    | 87    | 0  | 0  | 15    | 0 | 102 |       |
| 5:00       | 41        | 2  | 0  | 0   | 0 | 0 | 43        | 46    | 44  | 2  | 2   | 0  | 0         | 48    | 53    | 3  | 4  | 15  | 0         | 0  | 75    | 127   | 1  | 0  | 15    | 1 | 144 |       |
| 5:15       | 31        | 1  | 2  | 4   | 0 | 0 | 38        | 38    | 50  | 1  | 2   | 1  | 0         | 54    | 68    | 2  | 1  | 10  | 0         | 1  | 82    | 111   | 0  | 2  | 10    | 0 | 123 |       |
| 5:30       | 50        | 0  | 3  | 4   | 0 | 0 | 57        | 57    | 77  | 0  | 2   | 0  | 0         | 79    | 88    | 3  | 2  | 5   | 0         | 0  | 98    | 86    | 2  | 4  | 5     | 0 | 108 |       |
| 5:45       | 44        | 0  | 0  | 0   | 0 | 0 | 44        | 49    | 80  | 0  | 1   | 0  | 0         | 82    | 47    | 5  | 3  | 10  | 0         | 0  | 65    | 80    | 0  | 1  | 6     | 0 | 87  |       |
| 6:00       | 33        | 1  | 3  | 6   | 0 | 0 | 43        | 44    | 68  | 2  | 0   | 5  | 0         | 75    | 55    | 0  | 3  | 5   | 1         | 0  | 64    | 88    | 0  | 0  | 11    | 0 | 99  |       |
| 6:15       | 35        | 0  | 0  | 0   | 0 | 0 | 35        | 41    | 70  | 2  | 0   | 8  | 0         | 80    | 51    | 0  | 2  | 6   | 0         | 0  | 59    | 94    | 2  | 0  | 6     | 0 | 102 |       |
| 6:30       | 48        | 2  | 2  | 8   | 0 | 0 | 60        | 61    | 55  | 4  | 2   | 4  | 0         | 65    | 62    | 1  | 2  | 2   | 0         | 0  | 67    | 90    | 3  | 2  | 6     | 0 | 102 |       |
| 6:45       | 44        | 0  | 1  | 5   | 0 | 0 | 50        | 50    | 60  | 3  | 3   | 5  | 0         | 72    | 43    | 2  | 1  | 2   | 0         | 1  | 49    | 88    | 2  | 1  | 5     | 0 | 96  |       |
| 7:00       | 57        | 0  | 0  | 5   | 0 | 0 | 62        | 62    | 67  | 2  | 2   | 6  | 0         | 77    | 33    | 3  | 2  | 5   | 0         | 0  | 43    | 81    | 0  | 2  | 5     | 0 | 88  |       |
| 7:15       | 43        | 1  | 0  | 4   | 0 | 0 | 48        | 49    | 82  | 2  | 2   | 6  | 1         | 93    | 38    | 5  | 2  | 4   | 0         | 0  | 59    | 70    | 0  | 2  | 2     | 0 | 72  |       |
| 7:30       | 68        | 2  | 0  | 5   | 0 | 0 | 75        | 75    | 118 | 4  | 0   | 5  | 0         | 127   | 31    | 1  | 3  | 1   | 0         | 0  | 36    | 68    | 2  | 2  | 2     | 0 | 74  |       |
| 7:45       | 73        | 4  | 3  | 8   | 0 | 0 | 88        | 88    | 109 | 1  | 0   | 11 | 0         | 121   | 28    | 1  | 2  | 1   | 0         | 0  | 32    | 55    | 2  | 1  | 3     | 0 | 61  |       |
| 8:00       | 55        | 3  | 2  | 10  | 0 | 0 | 70        | 70    | 86  | 2  | 0   | 10 | 0         | 99    | 29    | 0  | 0  | 2   | 0         | 0  | 31    | 32    | 1  | 0  | 0     | 0 | 33  |       |
| 8:15       | 50        | 3  | 1  | 12  | 0 | 0 | 66        | 67    | 62  | 2  | 2   | 8  | 0         | 75    | 16    | 0  | 0  | 0   | 0         | 0  | 16    | 41    | 0  | 0  | 1     | 0 | 42  |       |
| 8:30       | 54        | 2  | 2  | 7   | 0 | 0 | 65        | 65    | 74  | 3  | 3   | 6  | 0         | 86    | 11    | 1  | 0  | 0   | 0         | 0  | 12    | 28    | 0  | 0  | 2     | 0 | 30  |       |
| 8:45       | 40        | 2  | 2  | 5   | 0 | 0 | 49        | 49    | 59  | 0  | 0   | 5  | 0         | 65    | 10    | 2  | 1  | 1   | 0         | 0  | 14    | 33    | 0  | 0  | 0     | 0 | 33  |       |
| 9:00       | 55        | 3  | 2  | 8   | 0 | 0 | 68        | 68    | 66  | 0  | 0   | 5  | 0         | 71    | 8     | 0  | 0  | 2   | 0         | 0  | 10    | 21    | 0  | 0  | 1     | 0 | 22  |       |
| 9:15       | 54        | 4  | 1  | 10  | 0 | 0 | 69        | 69    | 50  | 1  | 1   | 4  | 0         | 58    | 8     | 0  | 0  | 2   | 0         | 0  | 10    | 15    | 0  | 0  | 1     | 0 | 16  |       |
| 9:30       | 62        | 2  | 0  | 5   | 1 | 1 | 71        | 71    | 44  | 2  | 0   | 6  | 0         | 53    | 9     | 0  | 1  | 0   | 0         | 0  | 10    | 8     | 0  | 0  | 0     | 0 | 8   |       |
| 9:45       | 32        | 2  | 1  | 6   | 0 | 0 | 41        | 41    | 51  | 2  | 0   | 6  | 0         | 59    | 5     | 0  | 0  | 0   | 0         | 0  | 5     | 9     | 0  | 0  | 0     | 0 | 9   |       |
| 10:00      | 33        | 1  | 1  | 6   | 0 | 0 | 41        | 42    | 48  | 3  | 2   | 5  | 0         | 58    | 12    | 0  | 0  | 0   | 0         | 0  | 12    | 5     | 0  | 0  | 0     | 0 | 5   |       |
| 10:15      | 28        | 2  | 2  | 5   | 0 | 0 | 37        | 37    | 55  | 2  | 3   | 4  | 0         | 65    | 15    | 0  | 0  | 1   | 0         | 0  | 16    | 10    | 1  | 0  | 0     | 0 | 11  |       |
| 10:30      | 20        | 0  | 3  | 8   | 0 | 0 | 31        | 31    | 62  | 1  | 0   | 3  | 0         | 66    | 2     | 0  | 0  | 0   | 0         | 0  | 2     | 5     | 0  | 0  | 0     | 0 | 5   |       |
| 10:45      | 42        | 0  | 2  | 7   | 0 | 0 | 51        | 51    | 68  | 0  | 1   | 2  | 0         | 71    | 8     | 0  | 0  | 0   | 0         | 0  | 8     | 5     | 0  | 0  | 0     | 0 | 5   |       |
| 11:00      | 44        | 1  | 2  | 5   | 0 | 0 | 52        | 52    | 70  | 0  | 0   | 2  | 0         | 72    | 8     | 0  | 0  | 0   | 0         | 0  | 8     | 6     | 0  | 0  | 0     | 0 | 6   |       |
| 11:15      | 41        | 2  | 1  | 5   | 0 | 0 | 49        | 49    | 55  | 1  | 0   | 1  | 0         | 57    | 4     | 0  | 0  | 0   | 0         | 0  | 4     | 5     | 0  | 0  | 0     | 0 | 5   |       |
| 11:30      | 35        | 0  | 0  | 6   | 0 | 0 | 41        | 42    | 48  | 2  | 0   | 2  | 0         | 53    | 5     | 0  | 0  | 1   | 0         | 0  | 6     | 4     | 5  | 0  | 2     | 0 | 7   |       |
| 11:45      | 28        | 0  | 2  | 4   | 0 | 0 | 34        | 38    | 50  | 2  | 1   | 4  | 0         | 57    | 3     | 0  | 0  | 0   | 0         | 0  | 3     | 4     | 4  | 0  | 0     | 0 | 4   |       |
| TOTAL      | 1,436     | 43 | 44 | 185 | 1 | 8 | 1,717     | 2,046 | 48  | 32 | 135 | 1  | 10        | 2,272 | 1,812 | 60 | 61 | 221 | 1         | 10 | 2,165 | 2,716 | 34 | 29 | 232   | 3 | 8   | 3,022 |

|  |  | CLASS 4 4 OR MORE AXLE TRUCKS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|-------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|  |  | CLASS 5 RECREATION VEHICLES   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | CLASS 2 2-AXLE TRUCKS         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | CLASS 1 PASSENGER VEHICLES    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |                               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|  |  |                               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |                               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |                               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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PREPARED BY PACIFIC TRAFFIC DATA SERVICES

DATE: 02/19/09 THURSDAY

THURSDAY

DATE: 02/19/09  
JOB #: CA09-0220-1-018

CITY: FONTANA

**LOCATION:** TURUPA F/O MIN BERRY

| AM<br>TIME | EASTBOUND |    |    |     |   |   | TOTAL | WESTBOUND |    |    |     |   |   | TOTAL | PM<br>Time | EASTBOUND |    |    |     |   |   | TOTAL | WESTBOUND |     |     |     |   |    | TOTAL |         |     |     |    |
|------------|-----------|----|----|-----|---|---|-------|-----------|----|----|-----|---|---|-------|------------|-----------|----|----|-----|---|---|-------|-----------|-----|-----|-----|---|----|-------|---------|-----|-----|----|
|            | 1         | 2  | 3  | 4   | 5 | 6 |       | 1         | 2  | 3  | 4   | 5 | 6 |       |            | 1         | 2  | 3  | 4   | 5 | 6 |       | 1         | 2   | 3   | 4   | 5 | 6  |       |         |     |     |    |
|            |           |    |    |     |   |   |       |           |    |    |     |   |   |       |            |           |    |    |     |   |   |       |           |     |     |     |   |    |       |         |     |     |    |
| 0:00       | 2         | 0  | 0  | 0   | 0 | 0 | 2     | 5         | 0  | 0  | 0   | 0 | 0 | 5     | 12:00      | 80        | 0  | 0  | 2   | 0 | 0 | 0     | 0         | 0   | 82  | 45  | 2 | 0  | 2     | 0       | 0   | 0   | 49 |
| 0:15       | 5         | 0  | 0  | 0   | 0 | 0 | 5     | 5         | 0  | 0  | 0   | 0 | 0 | 5     | 12:15      | 77        | 2  | 0  | 2   | 0 | 2 | 0     | 0         | 0   | 81  | 44  | 1 | 1  | 5     | 0       | 0   | 0   | 51 |
| 0:30       | 2         | 0  | 0  | 2   | 0 | 0 | 4     | 6         | 0  | 0  | 1   | 0 | 0 | 7     | 12:30      | 70        | 2  | 1  | 2   | 0 | 0 | 0     | 0         | 75  | 51  | 0   | 0 | 4  | 0     | 0       | 1   | 56  |    |
| 0:45       | 2         | 0  | 0  | 2   | 0 | 0 | 4     | 8         | 0  | 0  | 0   | 0 | 0 | 8     | 12:45      | 60        | 4  | 0  | 3   | 0 | 0 | 0     | 0         | 67  | 35  | 2   | 1 | 7  | 0     | 0       | 0   | 45  |    |
| 1:00       | 4         | 0  | 0  | 0   | 0 | 0 | 4     | 8         | 0  | 0  | 0   | 0 | 0 | 8     | 13:00      | 88        | 2  | 2  | 5   | 0 | 0 | 0     | 0         | 97  | 44  | 3   | 0 | 7  | 0     | 0       | 0   | 54  |    |
| 1:15       | 12        | 0  | 0  | 0   | 0 | 0 | 12    | 6         | 0  | 0  | 0   | 0 | 0 | 6     | 13:15      | 84        | 2  | 0  | 5   | 0 | 0 | 0     | 0         | 91  | 45  | 0   | 0 | 5  | 0     | 0       | 0   | 50  |    |
| 1:30       | 15        | 0  | 0  | 1   | 0 | 0 | 16    | 5         | 0  | 0  | 0   | 0 | 0 | 6     | 13:30      | 84        | 1  | 0  | 4   | 0 | 0 | 0     | 0         | 89  | 88  | 0   | 1 | 8  | 0     | 0       | 0   | 97  |    |
| 1:45       | 8         | 0  | 0  | 0   | 0 | 0 | 8     | 3         | 0  | 0  | 0   | 0 | 0 | 3     | 13:45      | 95        | 0  | 2  | 5   | 0 | 0 | 0     | 0         | 102 | 90  | 2   | 0 | 8  | 0     | 0       | 1   | 95  |    |
| 2:00       | 8         | 0  | 0  | 0   | 0 | 0 | 8     | 10        | 0  | 0  | 0   | 0 | 0 | 10    | 14:00      | 95        | 0  | 2  | 8   | 1 | 0 | 0     | 0         | 106 | 84  | 1   | 0 | 7  | 0     | 0       | 0   | 98  |    |
| 2:15       | 12        | 0  | 0  | 2   | 0 | 0 | 14    | 8         | 0  | 0  | 1   | 0 | 0 | 9     | 14:15      | 88        | 4  | 0  | 7   | 0 | 0 | 2     | 0         | 101 | 88  | 3   | 2 | 5  | 0     | 0       | 0   | 98  |    |
| 2:30       | 12        | 0  | 1  | 0   | 0 | 0 | 13    | 10        | 0  | 0  | 2   | 0 | 0 | 12    | 14:30      | 95        | 2  | 0  | 5   | 0 | 0 | 0     | 0         | 102 | 88  | 4   | 2 | 6  | 0     | 0       | 1   | 101 |    |
| 2:45       | 10        | 0  | 0  | 0   | 0 | 0 | 10    | 15        | 0  | 0  | 0   | 0 | 0 | 15    | 14:45      | 97        | 2  | 0  | 10  | 0 | 0 | 0     | 0         | 109 | 78  | 1   | 0 | 4  | 0     | 0       | 0   | 83  |    |
| 3:00       | 12        | 0  | 0  | 3   | 0 | 0 | 15    | 8         | 0  | 0  | 0   | 0 | 0 | 8     | 15:00      | 105       | 4  | 2  | 5   | 0 | 0 | 1     | 0         | 117 | 79  | 2   | 1 | 10 | 0     | 0       | 0   | 92  |    |
| 3:15       | 22        | 0  | 0  | 0   | 0 | 0 | 24    | 8         | 0  | 0  | 2   | 0 | 0 | 10    | 15:15      | 115       | 2  | 1  | 12  | 0 | 0 | 0     | 0         | 130 | 76  | 0   | 0 | 5  | 0     | 0       | 0   | 81  |    |
| 3:30       | 30        | 0  | 1  | 0   | 0 | 0 | 31    | 6         | 0  | 0  | 3   | 0 | 0 | 9     | 15:30      | 126       | 2  | 2  | 6   | 0 | 0 | 0     | 0         | 136 | 102 | 0   | 0 | 5  | 0     | 0       | 0   | 107 |    |
| 3:45       | 30        | 0  | 0  | 0   | 1 | 0 | 31    | 10        | 0  | 0  | 0   | 0 | 0 | 10    | 15:45      | 144       | 3  | 2  | 5   | 0 | 0 | 1     | 0         | 155 | 115 | 0   | 1 | 8  | 0     | 1       | 0   | 125 |    |
| 4:00       | 33        | 0  | 0  | 3   | 0 | 0 | 36    | 15        | 0  | 1  | 0   | 0 | 0 | 16    | 16:00      | 124       | 0  | 1  | 8   | 0 | 0 | 0     | 0         | 133 | 126 | 6   | 0 | 8  | 0     | 0       | 0   | 140 |    |
| 4:15       | 40        | 0  | 0  | 0   | 0 | 0 | 40    | 20        | 0  | 0  | 2   | 0 | 0 | 22    | 16:15      | 162       | 0  | 0  | 5   | 0 | 0 | 0     | 0         | 167 | 135 | 4   | 0 | 12 | 0     | 0       | 0   | 151 |    |
| 4:30       | 44        | 1  | 0  | 0   | 0 | 0 | 45    | 22        | 0  | 4  | 0   | 0 | 0 | 26    | 16:30      | 177       | 2  | 0  | 5   | 0 | 0 | 1     | 0         | 185 | 120 | 2   | 2 | 8  | 0     | 0       | 1   | 133 |    |
| 4:45       | 41        | 0  | 0  | 1   | 0 | 0 | 42    | 26        | 2  | 0  | 2   | 0 | 0 | 30    | 16:45      | 180       | 4  | 2  | 11  | 0 | 0 | 0     | 0         | 197 | 115 | 4   | 0 | 7  | 0     | 0       | 0   | 126 |    |
| 5:00       | 35        | 0  | 1  | 2   | 0 | 0 | 38    | 32        | 0  | 0  | 0   | 0 | 0 | 32    | 17:00      | 195       | 2  | 0  | 8   | 0 | 0 | 0     | 0         | 205 | 108 | 2   | 0 | 10 | 0     | 0       | 0   | 120 |    |
| 5:15       | 45        | 0  | 0  | 48  | 3 | 0 | 48    | 33        | 0  | 0  | 2   | 0 | 0 | 35    | 17:15      | 168       | 2  | 0  | 8   | 0 | 0 | 0     | 0         | 178 | 115 | 2   | 0 | 12 | 0     | 0       | 0   | 129 |    |
| 5:30       | 51        | 0  | 2  | 3   | 0 | 0 | 56    | 45        | 2  | 0  | 5   | 0 | 0 | 52    | 17:30      | 148       | 0  | 1  | 9   | 0 | 0 | 1     | 0         | 199 | 126 | 0   | 1 | 5  | 0     | 0       | 0   | 132 |    |
| 5:45       | 55        | 1  | 0  | 0   | 0 | 0 | 56    | 51        | 0  | 0  | 5   | 1 | 0 | 57    | 17:45      | 151       | 4  | 0  | 8   | 0 | 0 | 2     | 0         | 165 | 101 | 2   | 0 | 8  | 0     | 0       | 0   | 111 |    |
| 6:00       | 68        | 0  | 4  | 0   | 0 | 0 | 72    | 68        | 3  | 0  | 6   | 0 | 0 | 77    | 18:00      | 135       | 4  | 0  | 5   | 0 | 0 | 0     | 0         | 144 | 127 | 0   | 0 | 4  | 0     | 1       | 0   | 132 |    |
| 6:15       | 88        | 0  | 2  | 2   | 0 | 0 | 92    | 77        | 2  | 1  | 8   | 0 | 0 | 88    | 18:15      | 141       | 2  | 0  | 5   | 0 | 0 | 0     | 0         | 148 | 101 | 1   | 1 | 5  | 0     | 0       | 0   | 108 |    |
| 6:30       | 95        | 1  | 0  | 4   | 0 | 0 | 100   | 80        | 2  | 2  | 10  | 1 | 0 | 95    | 18:30      | 126       | 2  | 0  | 6   | 0 | 0 | 1     | 0         | 135 | 88  | 0   | 2 | 2  | 0     | 0       | 0   | 92  |    |
| 6:45       | 91        | 0  | 0  | 0   | 0 | 0 | 94    | 105       | 3  | 3  | 5   | 0 | 0 | 116   | 18:45      | 118       | 2  | 0  | 2   | 0 | 0 | 0     | 0         | 122 | 95  | 0   | 0 | 2  | 0     | 0       | 0   | 97  |    |
| 7:00       | 105       | 0  | 4  | 5   | 0 | 0 | 114   | 115       | 0  | 0  | 8   | 0 | 0 | 123   | 19:00      | 108       | 3  | 1  | 0   | 0 | 0 | 0     | 0         | 112 | 77  | 5   | 0 | 2  | 0     | 0       | 0   | 84  |    |
| 7:15       | 123       | 1  | 2  | 4   | 0 | 0 | 130   | 135       | 1  | 0  | 7   | 0 | 0 | 143   | 19:15      | 126       | 2  | 0  | 0   | 0 | 0 | 0     | 0         | 128 | 86  | 2   | 0 | 1  | 0     | 0       | 1   | 90  |    |
| 7:30       | 115       | 2  | 2  | 0   | 0 | 0 | 129   | 144       | 2  | 3  | 10  | 1 | 0 | 160   | 19:30      | 135       | 0  | 0  | 1   | 0 | 0 | 0     | 0         | 136 | 95  | 2   | 3 | 2  | 0     | 0       | 0   | 102 |    |
| 7:45       | 101       | 2  | 1  | 8   | 1 | 0 | 113   | 115       | 0  | 2  | 5   | 0 | 0 | 122   | 19:45      | 141       | 0  | 0  | 0   | 0 | 1 | 0     | 0         | 142 | 65  | 0   | 0 | 0  | 0     | 0       | 0   | 65  |    |
| 8:00       | 118       | 2  | 0  | 8   | 0 | 0 | 128   | 126       | 4  | 1  | 16  | 0 | 0 | 147   | 20:00      | 126       | 2  | 0  | 1   | 0 | 0 | 0     | 0         | 129 | 66  | 0   | 0 | 0  | 0     | 0       | 0   | 66  |    |
| 8:15       | 84        | 3  | 0  | 6   | 0 | 0 | 93    | 118       | 4  | 2  | 7   | 0 | 0 | 131   | 20:15      | 115       | 4  | 0  | 2   | 0 | 0 | 0     | 0         | 121 | 70  | 0   | 0 | 1  | 0     | 0       | 0   | 71  |    |
| 8:30       | 88        | 3  | 1  | 10  | 0 | 0 | 102   | 88        | 0  | 0  | 10  | 0 | 0 | 98    | 20:30      | 80        | 0  | 2  | 0   | 0 | 0 | 0     | 0         | 82  | 62  | 1   | 1 | 0  | 0     | 0       | 0   | 64  |    |
| 8:45       | 95        | 4  | 0  | 5   | 0 | 0 | 104   | 105       | 6  | 0  | 5   | 1 | 0 | 117   | 20:45      | 95        | 0  | 0  | 0   | 0 | 0 | 0     | 0         | 96  | 75  | 0   | 0 | 0  | 0     | 0       | 0   | 75  |    |
| 9:00       | 106       | 4  | 0  | 5   | 0 | 0 | 115   | 90        | 0  | 1  | 6   | 0 | 0 | 97    | 21:00      | 77        | 0  | 0  | 0   | 0 | 1 | 0     | 0         | 78  | 54  | 0   | 0 | 1  | 0     | 0       | 0   | 55  |    |
| 9:15       | 88        | 5  | 2  | 6   | 1 | 0 | 102   | 62        | 5  | 2  | 5   | 0 | 0 | 74    | 21:15      | 44        | 1  | 0  | 0   | 0 | 0 | 0     | 0         | 45  | 44  | 0   | 0 | 2  | 0     | 0       | 0   | 46  |    |
| 9:30       | 95        | 5  | 3  | 8   | 1 | 0 | 112   | 66        | 1  | 3  | 8   | 1 | 0 | 79    | 21:30      | 35        | 0  | 1  | 0   | 0 | 0 | 0     | 0         | 36  | 35  | 0   | 0 | 0  | 0     | 0       | 0   | 35  |    |
| 9:45       | 80        | 6  | 0  | 0   | 0 | 0 | 94    | 50        | 2  | 2  | 7   | 0 | 0 | 61    | 21:45      | 15        | 0  | 0  | 1   | 0 | 0 | 0     | 0         | 16  | 33  | 0   | 0 | 2  | 0     | 0       | 0   | 35  |    |
| 10:00      | 77        | 2  | 2  | 7   | 0 | 0 | 88    | 48        | 5  | 0  | 1   | 0 | 0 | 54    | 22:00      | 22        | 1  | 0  | 0   | 0 | 0 | 0     | 0         | 23  | 28  | 0   | 0 | 0  | 0     | 0       | 0   | 28  |    |
| 10:15      | 65        | 2  | 5  | 4   | 0 | 0 | 76    | 44        | 3  | 2  | 8   | 0 | 0 | 57    | 22:15      | 30        | 0  | 0  | 0   | 1 | 0 | 0     | 0         | 20  | 31  | 0   | 0 | 0  | 0     | 0       | 0   | 20  |    |
| 10:30      | 70        | 4  | 1  | 5   | 0 | 0 | 80    | 51        | 2  | 2  | 5   | 0 | 0 | 60    | 22:30      | 20        | 0  | 1  | 1   | 0 | 0 | 0     | 0         | 22  | 16  | 0   | 0 | 0  | 0     | 0       | 0   | 16  |    |
| 10:45      | 84        | 2  | 0  | 6   | 0 | 0 | 92    | 70        | 1  | 1  | 6   | 1 | 0 | 79    | 22:45      | 35        | 0  | 0  | 0   | 0 | 0 | 0     | 0         | 35  | 11  | 0   | 0 | 0  | 0     | 0       | 0   | 11  |    |
| 11:00      | 88        | 2  | 0  | 8   | 1 | 0 | 99    | 68        | 1  | 2  | 8   | 0 | 0 | 79    | 23:00      | 15        | 0  | 0  | 0   | 0 | 0 | 0     | 0         | 15  | 15  | 0   | 0 | 0  | 0     | 0       | 0   | 15  |    |
| 11:15      | 90        | 1  | 0  | 10  | 0 | 0 | 101   | 77        | 1  | 1  | 5   | 0 | 0 | 84    | 23:15      | 8         | 0  | 0  | 0   | 0 | 0 | 0     | 0         | 8   | 11  | 0   | 0 | 0  | 2     | 0       | 0   | 13  |    |
| 11:30      | 62        | 5  | 0  | 16  | 0 | 0 | 83    | 51        | 2  | 0  | 5   | 0 | 0 | 58    | 23:30      | 9         | 0  | 0  | 0   | 1 | 0 | 0     | 0         | 10  | 9   | 0   | 0 | 0  | 1     | 0       | 0   | 10  |    |
| 11:45      | 55        | 2  | 1  | 5   | 0 | 0 | 63    | 66        | 0  | 1  | 4   | 0 | 0 | 71    | 23:45      | 5         | 0  | 0  | 0   | 1 | 0 | 0     | 0         | 6   | 5   | 0   | 0 | 0  | 1     | 0       | 0   | 6   |    |
| TOTAL      | 2,661     | 60 | 35 | 178 | 4 | 0 | 2,938 | 2,384     | 54 | 32 | 195 | 6 | 0 | 2,671 | TOTAL      | 4,569     | 69 | 23 | 175 | 4 | 9 | 4,849 | 3,386     | 54  | 19  | 194 | 0 | 7  | 3,660 | 4:00 PM | 550 |     |    |
|            |           |    |    |     |   |   |       |           |    |    |     |   |   |       |            |           |    |    |     |   |   |       |           |     |     |     |   |    |       |         |     |     |    |

[illegible]

# 24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

PREPARED BY PACIFIC TRAFFIC DATA SERVICES

DATE: 02/19/09 THURSDAY  
JOB #: CA09-0220-1-019

CITY: FONTANA  
LOCATION: CHERRY S/O SAN BERNADINO

| AM TIME | NORTHBOUND |    |    |     |   |   | SOUTHBOUND |       |    |    |     |   | NORTHBOUND |       |       |    |    |     | SOUTHBOUND |   |   |   |   |   | TOTAL |       |
|---------|------------|----|----|-----|---|---|------------|-------|----|----|-----|---|------------|-------|-------|----|----|-----|------------|---|---|---|---|---|-------|-------|
|         | 1          | 2  | 3  | 4   | 5 | 6 | 1          | 2     | 3  | 4  | 5   | 6 | 1          | 2     | 3     | 4  | 5  | 6   | 1          | 2 | 3 | 4 | 5 | 6 |       |       |
| 0:00    | 0          | 0  | 0  | 2   | 2 | 0 | 4          | 1     | 0  | 0  | 0   | 0 | 2          | 12:00 | 73    | 0  | 0  | 8   | 0          | 0 | 0 | 0 | 0 | 0 | 81    |       |
| 0:15    | 2          | 0  | 0  | 1   | 0 | 0 | 3          | 1     | 0  | 0  | 0   | 0 | 1          | 12:15 | 75    | 0  | 0  | 5   | 0          | 0 | 0 | 0 | 0 | 0 | 80    |       |
| 0:30    | 5          | 0  | 1  | 2   | 0 | 0 | 8          | 8     | 0  | 0  | 0   | 0 | 12:30      | 70    | 3     | 0  | 6  | 0   | 0          | 0 | 0 | 0 | 0 | 0 | 79    |       |
| 0:45    | 2          | 0  | 0  | 0   | 0 | 0 | 2          | 8     | 0  | 0  | 2   | 0 | 10:12:45   | 88    | 3     | 1  | 5  | 0   | 0          | 0 | 0 | 0 | 0 | 0 | 97    |       |
| 1:00    | 12         | 0  | 0  | 0   | 0 | 0 | 12         | 10    | 0  | 0  | 1   | 0 | 11:13:00   | 65    | 0     | 2  | 5  | 0   | 0          | 0 | 0 | 0 | 0 | 0 | 72    |       |
| 1:15    | 9          | 0  | 0  | 0   | 0 | 0 | 9          | 6     | 0  | 0  | 0   | 0 | 9:13:15    | 99    | 0     | 2  | 5  | 0   | 0          | 0 | 0 | 0 | 0 | 0 | 106   |       |
| 1:30    | 9          | 1  | 0  | 1   | 0 | 0 | 11         | 8     | 0  | 0  | 0   | 0 | 9:13:30    | 89    | 0     | 0  | 8  | 0   | 0          | 0 | 0 | 0 | 0 | 0 | 97    |       |
| 1:45    | 8          | 0  | 0  | 0   | 0 | 0 | 8          | 12    | 0  | 0  | 0   | 0 | 12:13:45   | 84    | 1     | 0  | 5  | 0   | 0          | 0 | 0 | 0 | 0 | 0 | 90    |       |
| 2:00    | 5          | 0  | 0  | 0   | 0 | 0 | 5          | 8     | 0  | 0  | 0   | 0 | 8:14:00    | 81    | 0     | 2  | 6  | 0   | 0          | 0 | 0 | 0 | 0 | 0 | 89    |       |
| 2:15    | 3          | 1  | 0  | 0   | 0 | 0 | 4          | 5     | 0  | 0  | 0   | 0 | 8:14:15    | 88    | 2     | 3  | 9  | 0   | 0          | 0 | 0 | 0 | 0 | 0 | 102   |       |
| 2:30    | 5          | 1  | 0  | 0   | 0 | 0 | 6          | 3     | 0  | 0  | 0   | 0 | 14:30      | 111   | 3     | 0  | 5  | 0   | 0          | 0 | 0 | 0 | 0 | 0 | 110   |       |
| 2:45    | 6          | 0  | 0  | 1   | 0 | 0 | 7          | 2     | 0  | 0  | 0   | 0 | 14:45      | 115   | 0     | 0  | 5  | 0   | 0          | 0 | 0 | 0 | 0 | 0 | 120   |       |
| 3:00    | 5          | 0  | 0  | 0   | 1 | 0 | 6          | 2     | 0  | 0  | 0   | 0 | 2:15:00    | 105   | 0     | 2  | 4  | 0   | 0          | 0 | 0 | 0 | 0 | 0 | 111   |       |
| 3:15    | 10         | 0  | 0  | 2   | 0 | 0 | 12         | 5     | 1  | 0  | 0   | 0 | 7:15:15    | 132   | 0     | 0  | 5  | 0   | 0          | 0 | 0 | 0 | 0 | 0 | 142   |       |
| 3:30    | 8          | 1  | 0  | 2   | 0 | 0 | 11         | 11    | 0  | 0  | 2   | 0 | 13:15:30   | 165   | 0     | 0  | 2  | 0   | 0          | 0 | 0 | 0 | 0 | 0 | 130   |       |
| 3:45    | 18         | 0  | 0  | 0   | 0 | 0 | 18         | 16    | 0  | 0  | 2   | 0 | 18:15:45   | 151   | 2     | 1  | 2  | 0   | 0          | 0 | 0 | 0 | 0 | 0 | 156   |       |
| 4:00    | 11         | 0  | 1  | 0   | 0 | 0 | 12         | 21    | 2  | 2  | 3   | 0 | 28:16:00   | 186   | 3     | 0  | 5  | 1   | 0          | 0 | 0 | 0 | 0 | 0 | 195   |       |
| 4:15    | 15         | 0  | 0  | 2   | 0 | 0 | 17         | 15    | 0  | 0  | 1   | 0 | 16:16:15   | 203   | 0     | 0  | 2  | 1   | 0          | 0 | 0 | 0 | 0 | 0 | 213   |       |
| 4:30    | 33         | 0  | 0  | 1   | 0 | 0 | 34         | 35    | 0  | 1  | 2   | 1 | 39:16:30   | 200   | 0     | 0  | 2  | 0   | 0          | 0 | 0 | 0 | 0 | 0 | 169   |       |
| 4:45    | 32         | 0  | 2  | 3   | 0 | 0 | 37         | 66    | 1  | 0  | 2   | 0 | 69:16:45   | 201   | 1     | 1  | 6  | 0   | 0          | 0 | 0 | 0 | 0 | 0 | 202   |       |
| 5:00    | 68         | 0  | 1  | 3   | 1 | 0 | 73         | 61    | 0  | 0  | 4   | 0 | 65:17:00   | 159   | 2     | 0  | 8  | 0   | 0          | 0 | 0 | 0 | 0 | 0 | 169   |       |
| 5:15    | 51         | 1  | 1  | 3   | 0 | 0 | 56         | 80    | 0  | 0  | 2   | 0 | 82:17:15   | 184   | 2     | 0  | 8  | 0   | 0          | 0 | 0 | 0 | 0 | 0 | 194   |       |
| 5:30    | 84         | 0  | 0  | 5   | 0 | 0 | 89         | 88    | 0  | 1  | 2   | 0 | 91:17:30   | 151   | 3     | 2  | 2  | 0   | 0          | 0 | 0 | 0 | 0 | 0 | 158   |       |
| 5:45    | 88         | 0  | 1  | 6   | 0 | 0 | 95         | 81    | 2  | 2  | 2   | 0 | 87:17:45   | 135   | 2     | 0  | 1  | 0   | 0          | 0 | 0 | 0 | 0 | 0 | 138   |       |
| 6:00    | 121        | 0  | 2  | 2   | 0 | 0 | 125        | 114   | 0  | 0  | 4   | 0 | 118:18:00  | 105   | 0     | 0  | 2  | 0   | 0          | 0 | 0 | 0 | 0 | 0 | 107   |       |
| 6:15    | 105        | 1  | 2  | 8   | 1 | 0 | 117        | 108   | 3  | 0  | 2   | 0 | 113:18:15  | 119   | 0     | 1  | 1  | 0   | 0          | 0 | 0 | 0 | 0 | 0 | 121   |       |
| 6:30    | 115        | 2  | 2  | 5   | 0 | 0 | 124        | 151   | 0  | 0  | 5   | 0 | 156:18:30  | 117   | 2     | 0  | 0  | 0   | 0          | 0 | 0 | 0 | 0 | 0 | 119   |       |
| 6:45    | 126        | 0  | 1  | 5   | 0 | 0 | 132        | 181   | 3  | 1  | 5   | 0 | 190:18:45  | 126   | 3     | 0  | 1  | 0   | 0          | 0 | 0 | 0 | 0 | 0 | 130   |       |
| 7:00    | 132        | 0  | 3  | 5   | 0 | 0 | 140        | 219   | 2  | 0  | 5   | 0 | 226:19:00  | 88    | 0     | 0  | 0  | 0   | 0          | 0 | 0 | 0 | 0 | 0 | 88    |       |
| 7:15    | 154        | 2  | 3  | 6   | 0 | 0 | 165        | 209   | 0  | 2  | 2   | 0 | 213:19:15  | 81    | 0     | 1  | 0  | 0   | 0          | 0 | 0 | 0 | 0 | 0 | 82    |       |
| 7:30    | 148        | 3  | 2  | 8   | 0 | 0 | 161        | 188   | 0  | 0  | 3   | 0 | 191:19:30  | 95    | 0     | 0  | 1  | 0   | 0          | 0 | 0 | 0 | 0 | 0 | 96    |       |
| 7:45    | 139        | 3  | 1  | 6   | 0 | 0 | 149        | 201   | 1  | 3  | 6   | 0 | 211:19:45  | 90    | 1     | 0  | 2  | 0   | 0          | 0 | 0 | 0 | 0 | 0 | 93    |       |
| 8:00    | 244        | 3  | 2  | 12  | 1 | 0 | 262        | 184   | 2  | 0  | 6   | 0 | 192:20:00  | 66    | 0     | 2  | 3  | 0   | 0          | 0 | 0 | 0 | 0 | 0 | 71    |       |
| 8:15    | 130        | 0  | 2  | 6   | 0 | 1 | 139        | 177   | 0  | 3  | 5   | 0 | 185:20:15  | 75    | 0     | 0  | 0  | 0   | 0          | 0 | 0 | 0 | 0 | 0 | 75    |       |
| 8:30    | 127        | 0  | 3  | 12  | 0 | 0 | 142        | 167   | 0  | 2  | 2   | 0 | 171:20:30  | 35    | 0     | 0  | 0  | 0   | 0          | 0 | 0 | 0 | 0 | 0 | 35    |       |
| 8:45    | 121        | 1  | 3  | 8   | 0 | 0 | 133        | 152   | 2  | 1  | 2   | 0 | 157:20:45  | 44    | 0     | 0  | 0  | 0   | 0          | 0 | 0 | 0 | 0 | 0 | 44    |       |
| 9:00    | 131        | 1  | 2  | 8   | 0 | 0 | 142        | 150   | 0  | 0  | 4   | 0 | 154:21:00  | 41    | 0     | 0  | 1  | 0   | 0          | 0 | 0 | 0 | 0 | 0 | 42    |       |
| 9:15    | 115        | 0  | 0  | 2   | 1 | 0 | 118        | 166   | 1  | 2  | 3   | 0 | 172:21:15  | 28    | 0     | 0  | 0  | 0   | 0          | 0 | 0 | 0 | 0 | 0 | 28    |       |
| 9:30    | 126        | 1  | 1  | 6   | 0 | 0 | 134        | 118   | 0  | 2  | 0   | 0 | 120:21:30  | 16    | 0     | 0  | 0  | 0   | 0          | 0 | 0 | 0 | 0 | 0 | 16    |       |
| 9:45    | 101        | 0  | 0  | 8   | 0 | 0 | 109        | 126   | 0  | 5  | 0   | 0 | 131:21:45  | 11    | 0     | 0  | 0  | 0   | 0          | 0 | 0 | 0 | 0 | 0 | 11    |       |
| 10:00   | 114        | 0  | 0  | 8   | 0 | 0 | 122        | 131   | 0  | 2  | 5   | 1 | 140:22:00  | 3     | 0     | 0  | 0  | 0   | 0          | 0 | 0 | 0 | 0 | 0 | 3     |       |
| 10:15   | 84         | 0  | 0  | 6   | 0 | 0 | 90         | 107   | 0  | 2  | 8   | 0 | 117:22:15  | 4     | 0     | 0  | 0  | 0   | 0          | 0 | 0 | 0 | 0 | 0 | 4     |       |
| 10:30   | 83         | 0  | 2  | 8   | 1 | 0 | 94         | 88    | 0  | 3  | 2   | 0 | 93:22:30   | 16    | 0     | 0  | 0  | 0   | 0          | 0 | 0 | 0 | 0 | 0 | 16    |       |
| 10:45   | 55         | 0  | 1  | 5   | 0 | 0 | 61         | 94    | 0  | 2  | 2   | 0 | 98:22:45   | 5     | 0     | 0  | 0  | 0   | 0          | 0 | 0 | 0 | 0 | 0 | 5     |       |
| 11:00   | 68         | 1  | 0  | 6   | 0 | 0 | 75         | 90    | 1  | 2  | 2   | 0 | 95:23:00   | 8     | 0     | 0  | 0  | 0   | 0          | 0 | 0 | 0 | 0 | 0 | 8     |       |
| 11:15   | 78         | 0  | 0  | 2   | 0 | 0 | 80         | 91    | 0  | 1  | 3   | 0 | 95:23:15   | 8     | 0     | 0  | 0  | 0   | 0          | 0 | 0 | 0 | 0 | 0 | 8     |       |
| 11:30   | 77         | 0  | 2  | 6   | 0 | 0 | 85         | 84    | 0  | 0  | 3   | 0 | 87:23:30   | 15    | 0     | 1  | 0  | 0   | 0          | 0 | 0 | 0 | 0 | 0 | 16    |       |
| 11:45   | 70         | 1  | 1  | 6   | 0 | 1 | 79         | 88    | 1  | 0  | 1   | 0 | 90:23:45   | 2     | 0     | 0  | 0  | 0   | 0          | 0 | 0 | 0 | 0 | 0 | 2     |       |
| TOTAL   | 3,253      | 24 | 44 | 188 | 6 | 2 | 3,517      | 3,937 | 22 | 43 | 109 | 2 | 4,114      | TOTAL | 4,218 | 33 | 21 | 130 | 2          | 0 | 0 | 0 | 0 | 0 | 0     | 4,404 |
|         |            |    |    |     |   |   |            |       |    |    |     |   |            |       |       |    |    |     |            |   |   |   |   |   | 822   |       |
|         |            |    |    |     |   |   |            |       |    |    |     |   |            |       |       |    |    |     |            |   |   |   |   |   | 781   |       |

| CLASS 1     | PASSENGER VEHICLES | CLASS 4 | 4 OR MORE AXLE TRUCKS |      |      |      |        |       |      |      |      |      |        |       |
|-------------|--------------------|---------|-----------------------|------|------|------|--------|-------|------|------|------|------|--------|-------|
| CLASS 2     | 2-AXLE TRUCKS      | CLASS 5 | RECREATION VEHICLES   |      |      |      |        |       |      |      |      |      |        |       |
| CLASS 3     | 3-AXLE TRUCKS      | CLASS 6 | BUSES                 |      |      |      |        |       |      |      |      |      |        |       |
| DAILY TOTAL | 7,471              | 57      | 65                    | 318  | 8    | 2    | 7,921  | 7,971 | 43   | 63   | 257  | 2    | 1      | 8,337 |
| % OF TOTAL  | 94.3%              | 0.7%    | 0.8%                  | 4.0% | 0.1% | 0.0% | 100.0% | 95.6% | 0.5% | 0.8% | 3.1% | 0.0% | 100.0% |       |

| PM PEAK HOUR   | 3:45 PM |
|----------------|---------|
| PM PEAK VOLUME | 781     |

PREPARED BY PACIFIC TRAFFIC DATA SERVICES

CITY: FONTANA

**CITY:** MONTANA  
**LOCATION:** CHERRY C/O SLOVER

|                    |       |      |      |      |      |      |        |       |      |      |      |      |        |
|--------------------|-------|------|------|------|------|------|--------|-------|------|------|------|------|--------|
| <b>DAILY TOTAL</b> | 5,385 | 66   | 77   | 330  | 2    | 1    | 5,861  | 85    | 75   | 410  | 5    | 1    | 5,949  |
| <b>% OF TOTAL</b>  | 91.9% | 1.1% | 1.3% | 5.6% | 0.0% | 0.0% | 100.0% | 90.3% | 1.4% | 6.9% | 0.1% | 0.0% | 100.0% |

| CLASS 1 | PASSENGER VEHICLES | CLASS 4 | 4 OR MORE AXLE TRUCKS |
|---------|--------------------|---------|-----------------------|
| CLASS 2 | 2-AXLE TRUCKS      | CLASS 5 | RECREATION VEHICLES   |
| CLASS 3 | 3-AXLE TRUCKS      | CLASS 6 | BUSSES                |

# 24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

PREPARED BY PACIFIC TRAFFIC DATA SERVICES

DATE: 02/19/09  
JOB #: CA09-0220-1-021

CITY: FONTANA  
LOCATION: SAN BERNADINO E/O CHERRY

| AM<br>TIME | EASTBOUND             |    |    |     |   |   | WESTBOUND |                |    |    |     |    | PM    |                      |                |       |    |    | TOTAL | EASTBOUND |     |                |       |    |    | WESTBOUND |                      |     |       |  |  | TOTAL |  |  |  |  |  |  |     |
|------------|-----------------------|----|----|-----|---|---|-----------|----------------|----|----|-----|----|-------|----------------------|----------------|-------|----|----|-------|-----------|-----|----------------|-------|----|----|-----------|----------------------|-----|-------|--|--|-------|--|--|--|--|--|--|-----|
|            | 1                     | 2  | 3  | 4   | 5 | 6 | 1         | 2              | 3  | 4  | 5   | 6  | Time  | 1                    | 2              | 3     | 4  | 5  |       | 6         | 1   | 2              | 3     | 4  | 5  | 6         |                      |     |       |  |  |       |  |  |  |  |  |  |     |
| 0:00       | 0                     | 0  | 0  | 0   | 0 | 0 | 0         | 0              | 0  | 0  | 0   | 0  | 12:00 | 55                   | 1              | 1     | 2  | 4  | 0     | 1         | 60  | 44             | 4     | 0  | 0  | 2         | 50                   |     |       |  |  |       |  |  |  |  |  |  |     |
| 0:15       | 2                     | 0  | 0  | 1   | 0 | 0 | 3         | 1              | 0  | 0  | 2   | 0  | 3     | 12:15                | 62             | 1     | 2  | 4  | 0     | 1         | 70  | 45             | 0     | 2  | 3  | 0         | 1                    | 51  |       |  |  |       |  |  |  |  |  |  |     |
| 0:30       | 1                     | 1  | 0  | 1   | 0 | 0 | 3         | 0              | 0  | 0  | 1   | 0  | 1     | 12:30                | 50             | 1     | 2  | 3  | 0     | 0         | 56  | 51             | 2     | 1  | 2  | 0         | 0                    | 56  |       |  |  |       |  |  |  |  |  |  |     |
| 0:45       | 2                     | 0  | 1  | 3   | 0 | 0 | 6         | 2              | 1  | 0  | 0   | 0  | 3     | 12:45                | 48             | 2     | 1  | 2  | 0     | 1         | 54  | 35             | 2     | 0  | 0  | 0         | 0                    | 37  |       |  |  |       |  |  |  |  |  |  |     |
| 1:00       | 2                     | 0  | 0  | 2   | 0 | 0 | 4         | 1              | 2  | 0  | 2   | 0  | 5     | 13:00                | 44             | 0     | 1  | 2  | 0     | 1         | 48  | 30             | 3     | 5  | 4  | 0         | 1                    | 43  |       |  |  |       |  |  |  |  |  |  |     |
| 1:15       | 5                     | 0  | 0  | 2   | 0 | 0 | 7         | 6              | 0  | 1  | 0   | 0  | 7     | 13:15                | 41             | 1     | 0  | 7  | 0     | 2         | 51  | 18             | 0     | 1  | 4  | 0         | 1                    | 24  |       |  |  |       |  |  |  |  |  |  |     |
| 1:30       | 2                     | 1  | 0  | 2   | 0 | 0 | 5         | 2              | 0  | 0  | 0   | 0  | 2     | 13:30                | 35             | 1     | 1  | 3  | 0     | 1         | 41  | 22             | 5     | 2  | 2  | 0         | 4                    | 35  |       |  |  |       |  |  |  |  |  |  |     |
| 1:45       | 8                     | 0  | 0  | 0   | 0 | 0 | 8         | 5              | 0  | 0  | 0   | 0  | 5     | 13:45                | 46             | 5     | 0  | 2  | 0     | 1         | 54  | 20             | 3     | 0  | 5  | 0         | 1                    | 29  |       |  |  |       |  |  |  |  |  |  |     |
| 2:00       | 5                     | 0  | 0  | 2   | 1 | 0 | 8         | 5              | 0  | 2  | 5   | 0  | 12    | 14:00                | 44             | 2     | 2  | 4  | 0     | 2         | 54  | 29             | 1     | 0  | 2  | 0         | 1                    | 33  |       |  |  |       |  |  |  |  |  |  |     |
| 2:15       | 3                     | 0  | 0  | 1   | 0 | 0 | 4         | 5              | 2  | 0  | 5   | 0  | 0     | 12                   | 14:15          | 51    | 1  | 2  | 2     | 0         | 1   | 57             | 23    | 2  | 2  | 0         | 1                    | 30  |       |  |  |       |  |  |  |  |  |  |     |
| 2:30       | 1                     | 0  | 0  | 1   | 0 | 0 | 2         | 5              | 3  | 0  | 10  | 0  | 18    | 14:30                | 59             | 1     | 0  | 1  | 0     | 1         | 62  | 25             | 3     | 3  | 0  | 0         | 1                    | 32  |       |  |  |       |  |  |  |  |  |  |     |
| 2:45       | 2                     | 2  | 1  | 2   | 0 | 0 | 7         | 2              | 2  | 1  | 3   | 0  | 8     | 14:45                | 62             | 2     | 0  | 0  | 0     | 0         | 64  | 18             | 2     | 5  | 2  | 0         | 0                    | 27  |       |  |  |       |  |  |  |  |  |  |     |
| 3:00       | 2                     | 2  | 2  | 2   | 0 | 0 | 8         | 6              | 2  | 0  | 7   | 0  | 15    | 15:00                | 88             | 3     | 1  | 4  | 0     | 2         | 98  | 33             | 0     | 6  | 5  | 0         | 1                    | 45  |       |  |  |       |  |  |  |  |  |  |     |
| 3:15       | 2                     | 1  | 0  | 3   | 0 | 0 | 6         | 5              | 1  | 0  | 2   | 0  | 8     | 15:15                | 77             | 1     | 3  | 2  | 0     | 0         | 83  | 35             | 1     | 5  | 1  | 0         | 1                    | 43  |       |  |  |       |  |  |  |  |  |  |     |
| 3:30       | 5                     | 0  | 0  | 3   | 0 | 0 | 8         | 4              | 2  | 0  | 8   | 0  | 14    | 15:30                | 58             | 2     | 2  | 0  | 0     | 0         | 62  | 42             | 1     | 5  | 2  | 0         | 1                    | 51  |       |  |  |       |  |  |  |  |  |  |     |
| 3:45       | 6                     | 0  | 0  | 3   | 0 | 0 | 8         | 6              | 2  | 0  | 1   | 7  | 0     | 16                   | 15:45          | 89    | 2  | 2  | 5     | 0         | 0   | 98             | 40    | 1  | 3  | 0         | 0                    | 45  |       |  |  |       |  |  |  |  |  |  |     |
| 4:00       | 8                     | 0  | 0  | 1   | 0 | 0 | 9         | 5              | 3  | 0  | 6   | 0  | 0     | 14                   | 16:00          | 111   | 1  | 1  | 3     | 0         | 0   | 116            | 58    | 1  | 3  | 2         | 0                    | 2   | 66    |  |  |       |  |  |  |  |  |  |     |
| 4:15       | 5                     | 1  | 0  | 8   | 0 | 0 | 14        | 9              | 2  | 2  | 2   | 0  | 0     | 15                   | 16:15          | 118   | 2  | 3  | 6     | 0         | 1   | 130            | 51    | 2  | 4  | 1         | 0                    | 1   | 59    |  |  |       |  |  |  |  |  |  |     |
| 4:30       | 5                     | 0  | 1  | 6   | 0 | 0 | 12        | 9              | 2  | 0  | 5   | 0  | 0     | 16                   | 16:30          | 118   | 2  | 0  | 2     | 0         | 0   | 122            | 70    | 1  | 0  | 0         | 0                    | 1   | 72    |  |  |       |  |  |  |  |  |  |     |
| 4:45       | 13                    | 0  | 0  | 5   | 0 | 0 | 18        | 10             | 1  | 0  | 8   | 0  | 0     | 19                   | 16:45          | 104   | 2  | 0  | 2     | 0         | 0   | 108            | 43    | 4  | 2  | 1         | 0                    | 1   | 51    |  |  |       |  |  |  |  |  |  |     |
| 5:00       | 9                     | 0  | 0  | 6   | 0 | 0 | 15        | 16             | 0  | 0  | 5   | 0  | 0     | 21                   | 17:00          | 108   | 2  | 0  | 0     | 0         | 1   | 111            | 52    | 1  | 0  | 1         | 0                    | 1   | 55    |  |  |       |  |  |  |  |  |  |     |
| 5:15       | 15                    | 0  | 0  | 3   | 0 | 0 | 24        | 11             | 0  | 0  | 5   | 0  | 1     | 17                   | 17:15          | 126   | 0  | 2  | 1     | 0         | 0   | 129            | 33    | 0  | 1  | 1         | 0                    | 1   | 36    |  |  |       |  |  |  |  |  |  |     |
| 5:30       | 20                    | 1  | 1  | 2   | 0 | 0 | 24        | 15             | 2  | 0  | 8   | 0  | 0     | 25                   | 17:30          | 115   | 1  | 0  | 1     | 0         | 0   | 117            | 39    | 0  | 0  | 0         | 0                    | 1   | 40    |  |  |       |  |  |  |  |  |  |     |
| 5:45       | 11                    | 2  | 1  | 5   | 1 | 0 | 20        | 11             | 3  | 1  | 7   | 0  | 0     | 22                   | 17:45          | 102   | 0  | 1  | 0     | 0         | 0   | 103            | 40    | 1  | 1  | 0         | 1                    | 44  |       |  |  |       |  |  |  |  |  |  |     |
| 6:00       | 26                    | 2  | 0  | 5   | 0 | 1 | 34        | 15             | 3  | 0  | 4   | 1  | 0     | 23                   | 18:00          | 126   | 1  | 0  | 2     | 0         | 0   | 129            | 55    | 0  | 2  | 0         | 0                    | 1   | 58    |  |  |       |  |  |  |  |  |  |     |
| 6:15       | 16                    | 2  | 2  | 8   | 0 | 0 | 28        | 32             | 2  | 2  | 5   | 0  | 0     | 41                   | 18:15          | 102   | 1  | 0  | 2     | 0         | 0   | 105            | 41    | 0  | 5  | 0         | 0                    | 0   | 46    |  |  |       |  |  |  |  |  |  |     |
| 6:30       | 22                    | 4  | 0  | 6   | 0 | 0 | 32        | 51             | 0  | 1  | 8   | 0  | 0     | 60                   | 18:30          | 88    | 0  | 0  | 4     | 0         | 1   | 93             | 35    | 2  | 2  | 0         | 0                    | 1   | 40    |  |  |       |  |  |  |  |  |  |     |
| 6:45       | 30                    | 5  | 1  | 4   | 1 | 0 | 41        | 40             | 3  | 1  | 9   | 1  | 0     | 54                   | 18:45          | 67    | 0  | 0  | 5     | 0         | 0   | 72             | 29    | 1  | 2  | 1         | 0                    | 0   | 33    |  |  |       |  |  |  |  |  |  |     |
| 7:00       | 39                    | 2  | 3  | 11  | 0 | 0 | 55        | 59             | 2  | 1  | 3   | 1  | 1     | 67                   | 19:00          | 88    | 0  | 1  | 2     | 0         | 0   | 91             | 16    | 0  | 4  | 0         | 0                    | 0   | 20    |  |  |       |  |  |  |  |  |  |     |
| 7:15       | 43                    | 3  | 1  | 7   | 0 | 0 | 54        | 72             | 2  | 1  | 7   | 0  | 0     | 82                   | 19:15          | 77    | 1  | 0  | 2     | 0         | 0   | 80             | 11    | 0  | 2  | 0         | 0                    | 1   | 14    |  |  |       |  |  |  |  |  |  |     |
| 7:30       | 41                    | 1  | 2  | 7   | 0 | 0 | 51        | 74             | 1  | 1  | 6   | 0  | 0     | 82                   | 19:30          | 71    | 0  | 0  | 2     | 0         | 0   | 73             | 15    | 0  | 0  | 0         | 0                    | 2   | 18    |  |  |       |  |  |  |  |  |  |     |
| 7:45       | 42                    | 1  | 5  | 12  | 0 | 1 | 61        | 54             | 1  | 2  | 10  | 0  | 0     | 67                   | 19:45          | 74    | 0  | 1  | 1     | 0         | 1   | 77             | 20    | 0  | 0  | 1         | 0                    | 2   | 23    |  |  |       |  |  |  |  |  |  |     |
| 8:00       | 46                    | 3  | 3  | 13  | 0 | 0 | 65        | 48             | 5  | 0  | 9   | 1  | 0     | 63                   | 20:00          | 50    | 0  | 2  | 0     | 0         | 0   | 52             | 33    | 0  | 0  | 2         | 0                    | 1   | 36    |  |  |       |  |  |  |  |  |  |     |
| 8:15       | 42                    | 5  | 2  | 9   | 0 | 1 | 59        | 41             | 4  | 4  | 7   | 2  | 1     | 59                   | 20:15          | 44    | 0  | 0  | 0     | 0         | 0   | 44             | 12    | 0  | 2  | 0         | 0                    | 0   | 14    |  |  |       |  |  |  |  |  |  |     |
| 8:30       | 43                    | 3  | 2  | 15  | 0 | 1 | 64        | 46             | 4  | 3  | 10  | 2  | 0     | 65                   | 20:30          | 51    | 0  | 0  | 0     | 0         | 0   | 51             | 10    | 2  | 0  | 0         | 0                    | 0   | 12    |  |  |       |  |  |  |  |  |  |     |
| 8:45       | 42                    | 2  | 2  | 11  | 0 | 1 | 58        | 46             | 2  | 1  | 6   | 1  | 0     | 56                   | 20:45          | 30    | 1  | 0  | 1     | 0         | 1   | 33             | 11    | 0  | 0  | 0         | 0                    | 0   | 11    |  |  |       |  |  |  |  |  |  |     |
| 9:00       | 35                    | 3  | 4  | 21  | 0 | 0 | 63        | 51             | 4  | 7  | 10  | 1  | 1     | 74                   | 21:00          | 16    | 0  | 0  | 0     | 0         | 0   | 16             | 9     | 0  | 1  | 0         | 0                    | 0   | 10    |  |  |       |  |  |  |  |  |  |     |
| 9:15       | 44                    | 3  | 5  | 15  | 0 | 1 | 68        | 55             | 3  | 1  | 10  | 1  | 0     | 70                   | 21:15          | 11    | 0  | 0  | 0     | 0         | 0   | 11             | 5     | 0  | 0  | 0         | 0                    | 0   | 5     |  |  |       |  |  |  |  |  |  |     |
| 9:30       | 51                    | 4  | 2  | 12  | 0 | 0 | 69        | 41             | 0  | 3  | 7   | 0  | 0     | 51                   | 21:30          | 16    | 0  | 1  | 2     | 0         | 0   | 19             | 5     | 1  | 0  | 0         | 0                    | 1   | 7     |  |  |       |  |  |  |  |  |  |     |
| 9:45       | 45                    | 5  | 2  | 15  | 0 | 0 | 67        | 51             | 0  | 2  | 5   | 0  | 0     | 58                   | 21:45          | 12    | 0  | 0  | 2     | 0         | 0   | 14             | 2     | 0  | 0  | 0         | 0                    | 0   | 2     |  |  |       |  |  |  |  |  |  |     |
| 10:00      | 33                    | 0  | 5  | 12  | 0 | 0 | 50        | 50             | 1  | 2  | 9   | 0  | 1     | 63                   | 22:00          | 8     | 0  | 0  | 0     | 0         | 0   | 8              | 5     | 0  | 2  | 0         | 0                    | 0   | 7     |  |  |       |  |  |  |  |  |  |     |
| 10:15      | 51                    | 2  | 2  | 15  | 0 | 1 | 71        | 33             | 2  | 2  | 11  | 1  | 0     | 49                   | 22:15          | 8     | 1  | 2  | 2     | 0         | 0   | 13             | 1     | 0  | 0  | 0         | 0                    | 0   | 1     |  |  |       |  |  |  |  |  |  |     |
| 10:30      | 62                    | 3  | 2  | 9   | 1 | 0 | 77        | 31             | 0  | 0  | 15  | 0  | 0     | 46                   | 22:30          | 5     | 1  | 0  | 2     | 0         | 0   | 8              | 3     | 0  | 0  | 0         | 0                    | 0   | 8     |  |  |       |  |  |  |  |  |  |     |
| 10:45      | 44                    | 2  | 1  | 16  | 0 | 1 | 64        | 36             | 2  | 0  | 8   | 0  | 0     | 46                   | 22:45          | 4     | 0  | 1  | 1     | 0         | 0   | 6              | 3     | 0  | 0  | 0         | 0                    | 0   | 3     |  |  |       |  |  |  |  |  |  |     |
| 11:00      | 48                    | 2  | 2  | 18  | 0 | 0 | 70        | 41             | 0  | 0  | 5   | 0  | 1     | 47                   | 23:00          | 8     | 0  | 0  | 0     | 0         | 0   | 8              | 0     | 0  | 0  | 0         | 0                    | 0   | 0     |  |  |       |  |  |  |  |  |  |     |
| 11:15      | 51                    | 2  | 0  | 12  | 0 | 0 | 65        | 30             | 2  | 1  | 5   | 0  | 0     | 38                   | 23:15          | 5     | 0  | 0  | 0     | 0         | 0   | 5              | 2     | 0  | 0  | 0         | 0                    | 0   | 0     |  |  |       |  |  |  |  |  |  |     |
| 11:30      | 45                    | 0  | 1  | 15  | 0 | 0 | 61        | 15             | 2  | 0  | 2   | 0  | 0     | 39                   | 23:30          | 2     | 0  | 0  | 0     | 0         | 0   | 2              | 1     | 0  | 0  | 0         | 0                    | 0   | 3     |  |  |       |  |  |  |  |  |  |     |
| 11:45      | 40                    | 1  | 2  | 8   | 0 | 1 | 52        | 38             | 0  | 3  | 4   | 0  | 0     | 45                   | 23:45          | 1     | 0  | 1  | 1     | 0         | 0   | 3              | 0     | 0  | 1  | 0         | 0                    | 0   | 1     |  |  |       |  |  |  |  |  |  |     |
| TOTAL      | 1,115                 | 71 | 58 | 339 | 4 | 9 | 1,596     | 1,193          | 75 | 46 | 274 | 12 | 6     | 1,606                | TOTAL          | 2,775 | 42 | 36 | 89    | 0         | 19  | 2,961          | 1,225 | 47 | 72 | 50        | 0                    | 34  | 1,428 |  |  |       |  |  |  |  |  |  |     |
|            | AM PEAK HOUR 10:15 AM |    |    |     |   |   |           |                |    |    |     |    | 282   | PM PEAK HOUR 5:15 PM |                |       |    |    |       |           |     |                |       |    |    | 478       | PM PEAK HOUR 4:00 PM |     |       |  |  |       |  |  |  |  |  |  | 248 |
|            | AM PEAK VOLUME        |    |    |     |   |   | 282       | AM PEAK VOLUME |    |    |     |    |       | 298                  | PM PEAK VOLUME |       |    |    |       |           | 478 | PM PEAK VOLUME |       |    |    |           |                      | 248 |       |  |  |       |  |  |  |  |  |  |     |



## PREPARED BY PACIFIC TRAFFIC DATA SERVICES

**TY:** FONTANA  
**OCATION:** VALLEY E/O CHERRY

[illegible]

## PREPARED BY PACIFIC TRAFFIC DATA SERVICES

**CITY:** FONTANA  
**LOCATION:** SLOVER F/O REDWOOD

|                    |       |      |      |      |      |      |        |       |      |      |      |      |      |        |
|--------------------|-------|------|------|------|------|------|--------|-------|------|------|------|------|------|--------|
| <b>DAILY TOTAL</b> | 5,367 | 124  | 95   | 409  | 2    | 16   | 6,013  | 4,644 | 95   | 76   | 358  | 3    | 18   | 5,194  |
| <b>% OF TOTAL</b>  | 89.3% | 2.1% | 1.6% | 6.8% | 0.0% | 0.3% | 100.0% | 89.4% | 1.8% | 1.5% | 6.9% | 0.1% | 0.3% | 100.0% |

| CLASS 1 | PASSENGER VEHICLES | CLASS 4 | 4 OR MORE AXLE TRUCKS |
|---------|--------------------|---------|-----------------------|
| CLASS 2 | 2-AXLE TRUCKS      | CLASS 5 | RECREATION VEHICLES   |
| CLASS 3 | 3-AXLE TRUCKS      | CLASS 6 | BUSES                 |

## PREPARED BY PACIFIC TRAFFIC DATA SERVICES

**CITY:** FONTANA  
**LOCATION:** JURUPA E/O REDWOOD

[illegible]

| CLASS 1 | PASSENGER VEHICLES | CLASS 4 | 4 OR MORE AXLE TRUCKS |
|---------|--------------------|---------|-----------------------|
| CLASS 2 | 2-AXLE TRUCKS      | CLASS 5 | RECREATION VEHICLES   |
| CLASS 3 | 3-AXLE TRUCKS      | CLASS 6 | RIGSSES               |

# 24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

PREPARED BY PACIFIC TRAFFIC DATA SERVICES

DATE: 02/19/09 THURSDAY  
JOB #: CA09-0220-1-025

CITY: FONTANA  
LOCATION: BEECH S/O SLOVER

| AM TIME | NORTHBOUND               |    |    |    |   |   | SOUTHBOUND               |     |    |    |    |   | NORTHBOUND               |       |       |    |    |    | SOUTHBOUND               |   |       |       |    |    | TOTAL |    |   |       |
|---------|--------------------------|----|----|----|---|---|--------------------------|-----|----|----|----|---|--------------------------|-------|-------|----|----|----|--------------------------|---|-------|-------|----|----|-------|----|---|-------|
|         | 1                        | 2  | 3  | 4  | 5 | 6 | 1                        | 2   | 3  | 4  | 5  | 6 | 1                        | 2     | 3     | 4  | 5  | 6  | 1                        | 2 | 3     | 4     | 5  | 6  |       |    |   |       |
| 0:00    | 0                        | 0  | 0  | 0  | 0 | 0 | 0                        | 0   | 0  | 0  | 0  | 0 | 1                        | 12:00 | 19    | 0  | 0  | 2  | 0                        | 0 | 21    | 22    | 0  | 0  | 5     | 0  | 0 | 27    |
| 0:15    | 2                        | 0  | 0  | 0  | 0 | 0 | 0                        | 0   | 0  | 0  | 0  | 0 | 0                        | 12:15 | 26    | 0  | 0  | 2  | 0                        | 0 | 28    | 28    | 0  | 0  | 2     | 0  | 0 | 30    |
| 0:30    | 2                        | 0  | 0  | 0  | 0 | 0 | 2                        | 2   | 0  | 0  | 0  | 0 | 2                        | 12:30 | 18    | 0  | 0  | 0  | 0                        | 0 | 18    | 32    | 0  | 0  | 0     | 0  | 0 | 32    |
| 0:45    | 1                        | 0  | 0  | 2  | 0 | 0 | 3                        | 1   | 0  | 0  | 0  | 0 | 1                        | 12:45 | 29    | 0  | 0  | 0  | 0                        | 0 | 29    | 41    | 0  | 0  | 0     | 0  | 0 | 41    |
| 1:00    | 0                        | 0  | 0  | 2  | 0 | 0 | 2                        | 2   | 0  | 0  | 0  | 0 | 0                        | 13:00 | 28    | 0  | 2  | 0  | 0                        | 0 | 30    | 35    | 1  | 1  | 0     | 0  | 0 | 37    |
| 1:15    | 0                        | 0  | 0  | 0  | 0 | 0 | 0                        | 0   | 0  | 0  | 0  | 0 | 0                        | 13:15 | 22    | 0  | 0  | 1  | 0                        | 0 | 23    | 22    | 0  | 4  | 0     | 0  | 0 | 26    |
| 1:30    | 1                        | 0  | 0  | 0  | 0 | 0 | 1                        | 2   | 0  | 0  | 0  | 0 | 3                        | 13:30 | 31    | 0  | 1  | 2  | 0                        | 0 | 31    | 26    | 0  | 0  | 5     | 34 | 0 | 31    |
| 1:45    | 2                        | 0  | 0  | 0  | 0 | 0 | 2                        | 5   | 0  | 0  | 0  | 0 | 5                        | 13:45 | 35    | 0  | 0  | 0  | 0                        | 0 | 35    | 20    | 0  | 0  | 3     | 0  | 0 | 23    |
| 2:00    | 3                        | 0  | 0  | 2  | 0 | 0 | 5                        | 4   | 0  | 0  | 0  | 0 | 4                        | 14:00 | 22    | 1  | 0  | 0  | 0                        | 0 | 23    | 28    | 1  | 0  | 2     | 0  | 0 | 31    |
| 2:15    | 2                        | 0  | 0  | 1  | 0 | 0 | 2                        | 3   | 0  | 0  | 0  | 0 | 3                        | 14:15 | 16    | 0  | 0  | 2  | 0                        | 0 | 18    | 33    | 0  | 1  | 2     | 0  | 0 | 36    |
| 2:30    | 2                        | 0  | 0  | 0  | 0 | 0 | 2                        | 3   | 0  | 0  | 0  | 0 | 3                        | 14:30 | 20    | 0  | 0  | 3  | 0                        | 0 | 23    | 45    | 0  | 0  | 2     | 0  | 0 | 47    |
| 2:45    | 2                        | 1  | 0  | 0  | 0 | 0 | 3                        | 3   | 0  | 0  | 2  | 0 | 5                        | 14:45 | 28    | 0  | 1  | 0  | 0                        | 0 | 29    | 31    | 0  | 0  | 5     | 0  | 0 | 36    |
| 3:00    | 2                        | 0  | 0  | 1  | 0 | 0 | 2                        | 2   | 0  | 0  | 0  | 0 | 4                        | 15:00 | 33    | 0  | 0  | 0  | 0                        | 0 | 33    | 33    | 2  | 0  | 7     | 0  | 0 | 42    |
| 3:15    | 2                        | 0  | 0  | 0  | 0 | 0 | 3                        | 2   | 0  | 0  | 1  | 0 | 1                        | 15:15 | 32    | 1  | 0  | 3  | 0                        | 0 | 36    | 29    | 0  | 1  | 5     | 0  | 0 | 35    |
| 3:30    | 0                        | 0  | 0  | 0  | 0 | 0 | 0                        | 5   | 0  | 0  | 0  | 0 | 5                        | 15:30 | 48    | 2  | 1  | 3  | 0                        | 0 | 54    | 22    | 0  | 0  | 3     | 0  | 0 | 25    |
| 3:45    | 6                        | 0  | 1  | 0  | 0 | 0 | 7                        | 6   | 0  | 0  | 2  | 0 | 8                        | 15:45 | 45    | 0  | 0  | 2  | 0                        | 0 | 47    | 20    | 0  | 0  | 5     | 0  | 0 | 25    |
| 4:00    | 5                        | 0  | 0  | 2  | 0 | 0 | 7                        | 6   | 0  | 0  | 0  | 0 | 8                        | 16:00 | 50    | 0  | 0  | 8  | 0                        | 0 | 58    | 29    | 1  | 0  | 8     | 0  | 0 | 38    |
| 4:15    | 5                        | 0  | 0  | 0  | 0 | 0 | 5                        | 8   | 0  | 0  | 0  | 0 | 8                        | 16:15 | 44    | 2  | 0  | 5  | 0                        | 0 | 38    | 33    | 0  | 2  | 7     | 0  | 0 | 42    |
| 4:30    | 5                        | 0  | 0  | 0  | 0 | 0 | 5                        | 5   | 0  | 0  | 1  | 0 | 6                        | 16:30 | 35    | 0  | 2  | 2  | 0                        | 0 | 39    | 36    | 0  | 0  | 2     | 0  | 0 | 38    |
| 4:45    | 8                        | 0  | 0  | 0  | 0 | 0 | 8                        | 5   | 0  | 0  | 0  | 0 | 5                        | 16:45 | 51    | 0  | 0  | 0  | 0                        | 0 | 51    | 31    | 2  | 0  | 2     | 0  | 0 | 35    |
| 5:00    | 9                        | 2  | 0  | 2  | 0 | 0 | 13                       | 10  | 0  | 0  | 1  | 0 | 11                       | 17:00 | 44    | 0  | 0  | 5  | 0                        | 0 | 49    | 42    | 0  | 1  | 5     | 0  | 0 | 48    |
| 5:15    | 8                        | 1  | 0  | 2  | 0 | 0 | 11                       | 16  | 2  | 1  | 0  | 0 | 19                       | 17:15 | 48    | 1  | 0  | 5  | 0                        | 0 | 54    | 40    | 0  | 0  | 8     | 0  | 0 | 48    |
| 5:30    | 8                        | 0  | 0  | 1  | 0 | 0 | 9                        | 22  | 1  | 0  | 0  | 0 | 23                       | 17:30 | 36    | 0  | 1  | 9  | 0                        | 0 | 46    | 41    | 2  | 0  | 10    | 0  | 0 | 53    |
| 5:45    | 11                       | 0  | 0  | 4  | 0 | 0 | 15                       | 15  | 0  | 2  | 2  | 0 | 19                       | 17:45 | 55    | 0  | 2  | 3  | 0                        | 0 | 60    | 30    | 0  | 1  | 2     | 0  | 0 | 33    |
| 6:00    | 15                       | 0  | 1  | 5  | 0 | 0 | 21                       | 20  | 0  | 0  | 1  | 0 | 21                       | 18:00 | 44    | 2  | 0  | 3  | 0                        | 0 | 49    | 44    | 0  | 0  | 2     | 0  | 0 | 46    |
| 6:15    | 28                       | 1  | 2  | 0  | 0 | 0 | 33                       | 33  | 1  | 0  | 5  | 0 | 39                       | 18:15 | 41    | 0  | 0  | 0  | 0                        | 0 | 41    | 41    | 3  | 2  | 2     | 0  | 0 | 48    |
| 6:30    | 16                       | 0  | 0  | 1  | 0 | 0 | 17                       | 26  | 0  | 1  | 4  | 0 | 31                       | 18:30 | 32    | 0  | 0  | 3  | 0                        | 0 | 35    | 35    | 0  | 0  | 2     | 0  | 0 | 37    |
| 6:45    | 22                       | 0  | 0  | 6  | 0 | 0 | 28                       | 20  | 2  | 2  | 2  | 0 | 26                       | 18:45 | 33    | 0  | 0  | 2  | 0                        | 0 | 35    | 29    | 0  | 1  | 3     | 0  | 0 | 33    |
| 7:00    | 19                       | 2  | 0  | 2  | 0 | 0 | 23                       | 26  | 0  | 0  | 0  | 0 | 28                       | 19:00 | 30    | 1  | 1  | 0  | 0                        | 0 | 32    | 20    | 0  | 0  | 2     | 0  | 0 | 22    |
| 7:15    | 29                       | 2  | 0  | 2  | 0 | 0 | 33                       | 38  | 0  | 0  | 2  | 0 | 40                       | 19:15 | 42    | 0  | 0  | 1  | 0                        | 0 | 43    | 33    | 1  | 0  | 1     | 0  | 0 | 35    |
| 7:30    | 43                       | 1  | 1  | 2  | 0 | 0 | 47                       | 41  | 0  | 0  | 4  | 1 | 46                       | 19:30 | 28    | 0  | 0  | 3  | 0                        | 0 | 31    | 31    | 0  | 0  | 0     | 0  | 0 | 31    |
| 7:45    | 33                       | 0  | 4  | 5  | 0 | 0 | 42                       | 38  | 1  | 1  | 2  | 0 | 42                       | 19:45 | 22    | 0  | 0  | 2  | 0                        | 0 | 24    | 28    | 0  | 0  | 0     | 0  | 0 | 28    |
| 8:00    | 22                       | 0  | 0  | 0  | 0 | 0 | 22                       | 42  | 2  | 2  | 0  | 0 | 46                       | 20:00 | 18    | 0  | 0  | 0  | 0                        | 0 | 18    | 15    | 0  | 0  | 1     | 0  | 0 | 16    |
| 8:15    | 20                       | 1  | 1  | 7  | 0 | 0 | 29                       | 30  | 1  | 0  | 0  | 0 | 31                       | 20:15 | 9     | 0  | 0  | 1  | 0                        | 0 | 10    | 11    | 0  | 0  | 0     | 0  | 0 | 11    |
| 8:30    | 25                       | 2  | 1  | 3  | 0 | 0 | 31                       | 28  | 2  | 0  | 0  | 0 | 30                       | 20:30 | 8     | 0  | 0  | 2  | 0                        | 0 | 10    | 10    | 0  | 0  | 0     | 0  | 0 | 10    |
| 8:45    | 22                       | 0  | 2  | 3  | 0 | 0 | 27                       | 32  | 0  | 0  | 2  | 0 | 34                       | 20:45 | 5     | 0  | 0  | 2  | 0                        | 0 | 7     | 8     | 0  | 0  | 1     | 0  | 0 | 9     |
| 9:00    | 18                       | 0  | 0  | 2  | 0 | 0 | 20                       | 44  | 3  | 0  | 2  | 0 | 49                       | 21:00 | 5     | 0  | 0  | 0  | 0                        | 0 | 5     | 8     | 0  | 0  | 0     | 0  | 0 | 8     |
| 9:15    | 26                       | 2  | 0  | 0  | 0 | 0 | 28                       | 30  | 0  | 0  | 5  | 0 | 35                       | 21:15 | 11    | 0  | 0  | 0  | 0                        | 0 | 11    | 6     | 0  | 0  | 0     | 0  | 0 | 6     |
| 9:30    | 22                       | 0  | 0  | 5  | 0 | 0 | 27                       | 40  | 0  | 0  | 4  | 0 | 44                       | 21:30 | 15    | 0  | 0  | 0  | 0                        | 0 | 15    | 15    | 0  | 0  | 0     | 0  | 0 | 15    |
| 9:45    | 15                       | 0  | 5  | 2  | 0 | 0 | 22                       | 22  | 0  | 1  | 2  | 0 | 25                       | 21:45 | 5     | 0  | 0  | 0  | 0                        | 0 | 5     | 6     | 0  | 0  | 0     | 0  | 0 | 6     |
| 10:00   | 20                       | 0  | 5  | 1  | 0 | 0 | 26                       | 28  | 1  | 0  | 0  | 0 | 29                       | 22:00 | 8     | 0  | 0  | 1  | 0                        | 0 | 9     | 6     | 0  | 0  | 0     | 0  | 0 | 6     |
| 10:15   | 16                       | 0  | 1  | 2  | 0 | 0 | 19                       | 35  | 2  | 0  | 0  | 0 | 37                       | 22:15 | 6     | 0  | 0  | 0  | 0                        | 0 | 6     | 5     | 0  | 0  | 0     | 0  | 0 | 6     |
| 10:30   | 22                       | 1  | 2  | 0  | 0 | 0 | 25                       | 44  | 2  | 0  | 0  | 0 | 46                       | 22:30 | 6     | 0  | 0  | 0  | 0                        | 0 | 6     | 2     | 0  | 0  | 0     | 0  | 0 | 2     |
| 10:45   | 32                       | 1  | 2  | 2  | 0 | 0 | 37                       | 28  | 0  | 0  | 0  | 0 | 28                       | 22:45 | 5     | 0  | 0  | 0  | 0                        | 0 | 5     | 2     | 0  | 1  | 0     | 0  | 0 | 3     |
| 11:00   | 33                       | 0  | 1  | 3  | 0 | 0 | 37                       | 20  | 1  | 0  | 1  | 0 | 22                       | 23:00 | 2     | 0  | 0  | 0  | 0                        | 0 | 2     | 2     | 0  | 0  | 0     | 0  | 0 | 2     |
| 11:15   | 25                       | 0  | 3  | 3  | 0 | 0 | 31                       | 16  | 0  | 0  | 0  | 0 | 16                       | 23:15 | 2     | 0  | 0  | 0  | 0                        | 0 | 2     | 1     | 0  | 0  | 1     | 0  | 0 | 2     |
| 11:30   | 18                       | 1  | 2  | 4  | 0 | 0 | 25                       | 31  | 0  | 0  | 0  | 0 | 31                       | 23:30 | 1     | 0  | 0  | 0  | 0                        | 0 | 1     | 2     | 0  | 0  | 0     | 0  | 0 | 2     |
| 11:45   | 22                       | 2  | 2  | 2  | 0 | 0 | 28                       | 33  | 0  | 0  | 0  | 0 | 33                       | 23:45 | 3     | 0  | 1  | 0  | 0                        | 0 | 4     | 0     | 0  | 0  | 0     | 0  | 0 | 0     |
| TOTAL   | 649                      | 20 | 36 | 81 | 0 | 0 | 786                      | 870 | 21 | 12 | 49 | 1 | 953                      | TOTAL | 1,196 | 10 | 12 | 77 | 0                        | 0 | 1,295 | 1,109 | 13 | 11 | 109   | 0  | 0 | 1,242 |
|         | AM PEAK HOUR 7:00 AM 145 |    |    |    |   |   | AM PEAK HOUR 7:15 AM 174 |     |    |    |    |   | PM PEAK HOUR 3:30 PM 210 |       |       |    |    |    | PM PEAK HOUR 4:45 PM 184 |   |       |       |    |    |       |    |   |       |

| PM PEAK HOUR   | 3:30 PM | 4:45 PM |
|----------------|---------|---------|
| PM PEAK VOLUME | 210     | 184     |
| DAILY TOTAL    | 1,845   | 1,979   |
| % OF TOTAL     | 88.7%   | 90.2%   |

| AM PEAK HOUR   | 7:15 AM            | 7:00 AM               |
|----------------|--------------------|-----------------------|
| AM PEAK VOLUME | 174                | 145                   |
| CLASS 1        | PASSENGER VEHICLES | CLASS 4               |
| CLASS 2        | 2-AXLE TRUCKS      | CLASS 5               |
| CLASS 3        | 3-AXLE TRUCKS      | CLASS 6               |
|                |                    | 4 OR MORE AXLE TRUCKS |
|                |                    | RECREATION VEHICLES   |
|                |                    | BUSES                 |

|         |                    |         |
|---------|--------------------|---------|
| CLASS 1 | PASSENGER VEHICLES | CLASS 4 |
| CLASS 2 | 2-AXLE TRUCKS      | CLASS 5 |
| CLASS 3 | 3-AXLE TRUCKS      | CLASS 6 |

# 24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

PREPARED BY PACIFIC TRAFFIC DATA SERVICES

DATE: 02/19/09 THURSDAY  
JOB #: CA09-0220-1-030

CITY: FONTANA  
LOCATION: VALLEY E/O CTRUS

| AM TIME | EASTBOUND |    |    |     |   |   | WESTBOUND |       |    |    |     |   | EASTBOUND |       |       |    |    |     | WESTBOUND |   |       |    |    |     | TOTAL |   |       |
|---------|-----------|----|----|-----|---|---|-----------|-------|----|----|-----|---|-----------|-------|-------|----|----|-----|-----------|---|-------|----|----|-----|-------|---|-------|
|         | 1         | 2  | 3  | 4   | 5 | 6 | 1         | 2     | 3  | 4  | 5   | 6 | 1         | 2     | 3     | 4  | 5  | 6   | 1         | 2 | 3     | 4  | 5  | 6   |       |   |       |
| 0:00    | 0         | 0  | 0  | 0   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 50        | 2 | 0     | 3  | 0  | 0   | 55    |   |       |
| 0:15    | 0         | 0  | 0  | 0   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 55        | 0 | 1     | 2  | 0  | 0   | 60    |   |       |
| 0:30    | 1         | 0  | 0  | 0   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 65        | 0 | 1     | 2  | 0  | 0   | 68    |   |       |
| 0:45    | 2         | 0  | 0  | 0   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 59        | 2 | 2     | 2  | 0  | 1   | 66    |   |       |
| 1:00    | 2         | 0  | 0  | 0   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 68        | 1 | 0     | 4  | 0  | 0   | 73    |   |       |
| 1:15    | 2         | 1  | 1  | 2   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 88        | 2 | 3     | 2  | 0  | 0   | 95    |   |       |
| 1:30    | 3         | 0  | 0  | 3   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 84        | 0 | 0     | 2  | 0  | 1   | 87    |   |       |
| 1:45    | 4         | 0  | 2  | 2   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 70        | 2 | 0     | 2  | 1  | 0   | 75    |   |       |
| 2:00    | 5         | 0  | 0  | 2   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 50        | 0 | 1     | 2  | 0  | 0   | 53    |   |       |
| 2:15    | 5         | 0  | 0  | 1   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 55        | 3 | 2     | 3  | 0  | 0   | 63    |   |       |
| 2:30    | 6         | 1  | 0  | 2   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 68        | 0 | 2     | 5  | 0  | 0   | 75    |   |       |
| 2:45    | 6         | 0  | 1  | 2   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 84        | 0 | 3     | 6  | 0  | 1   | 94    |   |       |
| 3:00    | 8         | 0  | 0  | 0   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 85        | 1 | 0     | 6  | 0  | 0   | 92    |   |       |
| 3:15    | 8         | 0  | 0  | 0   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 95        | 0 | 0     | 3  | 0  | 0   | 98    |   |       |
| 3:30    | 12        | 1  | 0  | 1   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 101       | 0 | 1     | 5  | 0  | 0   | 107   |   |       |
| 3:45    | 16        | 0  | 0  | 2   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 115       | 1 | 3     | 2  | 0  | 0   | 121   |   |       |
| 4:00    | 10        | 0  | 1  | 0   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 135       | 2 | 2     | 4  | 0  | 1   | 144   |   |       |
| 4:15    | 15        | 0  | 2  | 3   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 126       | 1 | 2     | 6  | 0  | 0   | 135   |   |       |
| 4:30    | 11        | 1  | 0  | 3   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 151       | 3 | 3     | 8  | 0  | 0   | 165   |   |       |
| 4:45    | 10        | 0  | 0  | 2   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 132       | 6 | 3     | 5  | 0  | 1   | 147   |   |       |
| 5:00    | 8         | 0  | 1  | 4   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 126       | 1 | 2     | 8  | 0  | 0   | 137   |   |       |
| 5:15    | 10        | 2  | 0  | 5   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 104       | 2 | 0     | 7  | 1  | 0   | 114   |   |       |
| 5:30    | 15        | 0  | 0  | 6   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 116       | 2 | 1     | 5  | 0  | 0   | 124   |   |       |
| 5:45    | 29        | 0  | 0  | 0   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 95        | 1 | 0     | 3  | 0  | 1   | 100   |   |       |
| 6:00    | 33        | 1  | 1  | 8   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 99        | 1 | 2     | 2  | 0  | 0   | 104   |   |       |
| 6:15    | 45        | 0  | 0  | 8   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 84        | 0 | 3     | 2  | 0  | 0   | 89    |   |       |
| 6:30    | 51        | 0  | 0  | 9   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 88        | 1 | 3     | 6  | 1  | 1   | 100   |   |       |
| 6:45    | 55        | 2  | 0  | 5   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 84        | 2 | 2     | 2  | 0  | 0   | 90    |   |       |
| 7:00    | 68        | 3  | 2  | 5   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 70        | 0 | 2     | 2  | 0  | 0   | 74    |   |       |
| 7:15    | 50        | 3  | 2  | 4   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 77        | 0 | 1     | 1  | 0  | 0   | 79    |   |       |
| 7:30    | 44        | 3  | 3  | 8   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 95        | 0 | 0     | 0  | 0  | 0   | 95    |   |       |
| 7:45    | 51        | 1  | 2  | 5   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 65        | 0 | 0     | 0  | 0  | 0   | 66    |   |       |
| 8:00    | 65        | 2  | 1  | 6   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 55        | 1 | 0     | 1  | 0  | 0   | 57    |   |       |
| 8:15    | 74        | 2  | 0  | 8   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 32        | 0 | 0     | 0  | 0  | 0   | 33    |   |       |
| 8:30    | 88        | 3  | 3  | 9   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 28        | 0 | 0     | 0  | 0  | 0   | 34    |   |       |
| 8:45    | 84        | 3  | 2  | 5   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 32        | 0 | 0     | 0  | 0  | 0   | 33    |   |       |
| 9:00    | 88        | 2  | 1  | 5   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 33        | 0 | 0     | 0  | 0  | 0   | 34    |   |       |
| 9:15    | 80        | 1  | 2  | 6   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 28        | 1 | 0     | 0  | 0  | 0   | 29    |   |       |
| 9:30    | 48        | 1  | 2  | 5   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 26        | 0 | 0     | 0  | 0  | 0   | 26    |   |       |
| 9:45    | 56        | 2  | 1  | 5   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 12        | 0 | 0     | 0  | 0  | 0   | 12    |   |       |
| 10:00   | 88        | 1  | 0  | 8   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 8         | 0 | 0     | 0  | 0  | 0   | 8     |   |       |
| 10:15   | 84        | 0  | 0  | 5   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 8         | 0 | 0     | 0  | 0  | 0   | 9     |   |       |
| 10:30   | 88        | 0  | 1  | 6   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 9         | 0 | 0     | 0  | 0  | 0   | 9     |   |       |
| 10:45   | 48        | 0  | 2  | 5   | 1 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 6         | 0 | 0     | 0  | 0  | 0   | 6     |   |       |
| 11:00   | 44        | 1  | 0  | 5   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 5         | 0 | 0     | 1  | 0  | 0   | 4     |   |       |
| 11:15   | 51        | 3  | 0  | 6   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 2         | 0 | 0     | 0  | 0  | 0   | 2     |   |       |
| 11:30   | 44        | 2  | 2  | 5   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 3         | 0 | 0     | 0  | 0  | 0   | 3     |   |       |
| 11:45   | 35        | 0  | 2  | 4   | 0 | 0 | 0         | 0     | 0  | 0  | 0   | 0 | 0         | 0     | 0     | 0  | 0  | 0   | 1         | 0 | 0     | 0  | 0  | 0   | 1     |   |       |
| TOTAL   | 1,650     | 42 | 37 | 194 | 1 | 8 | 1,932     | 1,906 | 17 | 19 | 194 | 0 | 9         | 2,145 | 3,127 | 38 | 45 | 121 | 3         | 8 | 2,577 | 56 | 29 | 200 | 3     | 8 | 2,873 |

| CLASS       | 1     | 2    | 3    | 4    | 5    | 6    | TOTAL  | AM PEAK HOUR | 8:15 AM | AM PEAK VOLUME | 379  | TOTAL | 4:00 PM | PM PEAK HOUR | 4:45 PM | PM PEAK VOLUME | 494  |
|-------------|-------|------|------|------|------|------|--------|--------------|---------|----------------|------|-------|---------|--------------|---------|----------------|------|
|             |       |      |      |      |      |      |        |              |         |                |      |       |         |              |         |                |      |
| DAILY TOTAL | 4,777 | 80   | 82   | 315  | 4    | 16   | 5,274  | 90.6%        | 1.5%    | 1.6%           | 6.0% | 0.1%  | 0.3%    | 100.0%       | 89.3%   | 1.5%           | 1.0% |
| % OF TOTAL  | 90.6% | 1.5% | 1.6% | 6.0% | 0.1% | 0.3% | 100.0% | 89.3%        | 1.5%    | 1.0%           | 7.9% | 0.1%  | 0.3%    | 100.0%       | 89.3%   | 1.5%           | 1.0% |

| CLASS 1 | PASSENGER VEHICLES | CLASS 4 | 4 OR MORE AXLE TRUCKS |
|---------|--------------------|---------|-----------------------|
| CLASS 2 | 2-AXLE TRUCKS      | CLASS 5 | RECREATION VEHICLES   |
| CLASS 3 | 3-AXLE TRUCKS      | CLASS 6 | BUSES                 |

# 24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION) PREPARED BY PACIFIC TRAFFIC DATA SERVICES

DATE: 02/19/09  
 JOB #: CA09-0220-1-031

THURSDAY

CITY: FONTANA  
 LOCATION: SLOVER E/O OLEANADER

| AM TIME | EASTBOUND |     |    |     |   |   | WESTBOUND |       |    |    |    |   | PM    |       |       |    |    |     | EASTBOUND |   |   |     |    |      | WESTBOUND |       |    |    |     |   | TOTAL |       |
|---------|-----------|-----|----|-----|---|---|-----------|-------|----|----|----|---|-------|-------|-------|----|----|-----|-----------|---|---|-----|----|------|-----------|-------|----|----|-----|---|-------|-------|
|         | 1         | 2   | 3  | 4   | 5 | 6 | 1         | 2     | 3  | 4  | 5  | 6 | 1     | 2     | 3     | 4  | 5  | 6   | 1         | 2 | 3 | 4   | 5  | 6    | 1         | 2     | 3  | 4  | 5   | 6 |       |       |
| 0:00    | 6         | 0   | 0  | 0   | 0 | 0 | 6         | 0     | 0  | 0  | 0  | 0 | 3     | 12:00 | 68    | 1  | 0  | 5   | 0         | 0 | 0 | 0   | 0  | 0    | 74        | 50    | 2  | 0  | 2   | 0 | 1     | 55    |
| 0:15    | 5         | 0   | 0  | 0   | 0 | 0 | 5         | 0     | 0  | 0  | 0  | 0 | 6     | 12:15 | 77    | 1  | 2  | 10  | 0         | 0 | 0 | 0   | 0  | 0    | 90        | 51    | 2  | 1  | 2   | 0 | 1     | 57    |
| 0:30    | 9         | 0   | 0  | 0   | 0 | 0 | 9         | 0     | 0  | 0  | 0  | 0 | 5     | 12:30 | 75    | 3  | 6  | 3   | 0         | 0 | 0 | 0   | 0  | 0    | 87        | 58    | 3  | 1  | 3   | 0 | 0     | 65    |
| 0:45    | 8         | 0   | 0  | 0   | 0 | 0 | 8         | 0     | 0  | 0  | 0  | 0 | 10    | 12:45 | 88    | 2  | 2  | 5   | 0         | 0 | 0 | 0   | 0  | 0    | 97        | 44    | 0  | 1  | 2   | 0 | 0     | 47    |
| 1:00    | 8         | 0   | 0  | 0   | 0 | 0 | 8         | 0     | 0  | 0  | 0  | 0 | 9     | 13:00 | 80    | 0  | 3  | 9   | 0         | 0 | 0 | 0   | 0  | 0    | 92        | 35    | 2  | 4  | 6   | 0 | 0     | 47    |
| 1:15    | 11        | 0   | 0  | 0   | 0 | 0 | 11        | 0     | 0  | 0  | 0  | 0 | 8     | 13:15 | 95    | 0  | 1  | 3   | 0         | 1 | 1 | 1   | 1  | 1    | 100       | 60    | 2  | 0  | 4   | 0 | 1     | 67    |
| 1:30    | 10        | 0   | 0  | 0   | 0 | 0 | 10        | 0     | 0  | 0  | 0  | 0 | 5     | 13:30 | 126   | 0  | 1  | 3   | 0         | 1 | 3 | 0   | 1  | 1    | 131       | 51    | 2  | 0  | 4   | 0 | 1     | 58    |
| 1:45    | 5         | 1   | 0  | 0   | 0 | 0 | 6         | 5     | 0  | 0  | 0  | 0 | 5     | 13:45 | 115   | 2  | 2  | 5   | 0         | 0 | 0 | 0   | 0  | 0    | 124       | 44    | 3  | 1  | 3   | 0 | 0     | 51    |
| 2:00    | 8         | 0   | 0  | 1   | 0 | 0 | 9         | 4     | 0  | 0  | 0  | 0 | 4     | 14:00 | 106   | 5  | 1  | 6   | 1         | 0 | 1 | 0   | 0  | 0    | 119       | 48    | 2  | 1  | 5   | 0 | 0     | 56    |
| 2:15    | 9         | 0   | 0  | 0   | 0 | 0 | 9         | 7     | 0  | 0  | 0  | 0 | 7     | 14:15 | 90    | 1  | 3  | 3   | 0         | 0 | 0 | 0   | 0  | 0    | 97        | 62    | 2  | 3  | 3   | 0 | 0     | 72    |
| 2:30    | 8         | 0   | 0  | 0   | 0 | 0 | 8         | 8     | 0  | 0  | 0  | 0 | 9     | 14:30 | 99    | 2  | 4  | 8   | 0         | 1 | 1 | 1   | 1  | 1    | 114       | 55    | 4  | 2  | 5   | 0 | 0     | 66    |
| 2:45    | 8         | 0   | 1  | 0   | 0 | 0 | 9         | 9     | 1  | 0  | 0  | 0 | 10    | 14:45 | 95    | 0  | 5  | 7   | 0         | 2 | 2 | 2   | 2  | 2    | 109       | 51    | 5  | 5  | 8   | 0 | 1     | 70    |
| 3:00    | 9         | 0   | 0  | 2   | 0 | 0 | 11        | 10    | 0  | 0  | 0  | 0 | 10    | 15:00 | 115   | 1  | 3  | 5   | 0         | 0 | 0 | 0   | 0  | 0    | 124       | 81    | 2  | 2  | 5   | 0 | 0     | 90    |
| 3:15    | 11        | 1   | 0  | 1   | 0 | 0 | 13        | 26    | 0  | 0  | 0  | 0 | 26    | 15:15 | 106   | 2  | 2  | 9   | 1         | 0 | 1 | 0   | 1  | 0    | 120       | 70    | 2  | 3  | 6   | 0 | 0     | 81    |
| 3:30    | 16        | 0   | 0  | 0   | 0 | 0 | 16        | 11    | 0  | 0  | 0  | 0 | 11    | 15:30 | 121   | 4  | 2  | 10  | 0         | 1 | 1 | 1   | 1  | 1    | 138       | 78    | 1  | 3  | 6   | 1 | 1     | 90    |
| 3:45    | 20        | 0   | 0  | 0   | 0 | 0 | 20        | 19    | 0  | 0  | 0  | 0 | 21    | 15:45 | 116   | 2  | 4  | 5   | 0         | 0 | 0 | 0   | 0  | 0    | 127       | 65    | 2  | 2  | 6   | 0 | 0     | 76    |
| 4:00    | 15        | 0   | 0  | 1   | 0 | 0 | 16        | 18    | 0  | 0  | 2  | 0 | 20    | 16:00 | 135   | 2  | 2  | 5   | 0         | 0 | 0 | 0   | 0  | 0    | 144       | 72    | 0  | 2  | 8   | 0 | 2     | 84    |
| 4:15    | 9         | 0   | 0  | 3   | 0 | 0 | 12        | 11    | 0  | 0  | 1  | 0 | 12    | 16:15 | 117   | 3  | 2  | 8   | 0         | 0 | 0 | 0   | 0  | 0    | 130       | 59    | 5  | 1  | 9   | 0 | 0     | 74    |
| 4:30    | 11        | 1   | 0  | 2   | 0 | 0 | 14        | 15    | 0  | 1  | 1  | 0 | 17    | 16:30 | 114   | 3  | 4  | 9   | 0         | 1 | 1 | 1   | 1  | 1    | 131       | 106   | 2  | 0  | 8   | 0 | 0     | 116   |
| 4:45    | 15        | 0   | 1  | 2   | 0 | 0 | 18        | 25    | 1  | 0  | 1  | 0 | 27    | 16:45 | 102   | 4  | 5  | 5   | 0         | 0 | 0 | 0   | 0  | 0    | 116       | 88    | 5  | 0  | 7   | 1 | 0     | 101   |
| 5:00    | 20        | 0   | 0  | 2   | 0 | 0 | 22        | 35    | 0  | 0  | 1  | 0 | 36    | 17:00 | 132   | 2  | 2  | 12  | 0         | 0 | 0 | 0   | 0  | 0    | 148       | 100   | 4  | 1  | 5   | 0 | 0     | 110   |
| 5:15    | 28        | 2   | 0  | 2   | 0 | 0 | 32        | 55    | 0  | 0  | 0  | 0 | 55    | 17:15 | 125   | 3  | 2  | 15  | 0         | 0 | 0 | 0   | 0  | 0    | 145       | 104   | 2  | 2  | 5   | 0 | 1     | 114   |
| 5:30    | 33        | 2   | 0  | 5   | 0 | 0 | 40        | 50    | 0  | 0  | 0  | 0 | 50    | 17:30 | 115   | 3  | 2  | 10  | 0         | 0 | 0 | 0   | 0  | 0    | 130       | 94    | 0  | 0  | 6   | 0 | 0     | 100   |
| 5:45    | 35        | 1   | 2  | 8   | 0 | 0 | 46        | 48    | 2  | 0  | 3  | 0 | 53    | 17:45 | 109   | 2  | 2  | 5   | 0         | 1 | 1 | 1   | 1  | 1    | 119       | 80    | 0  | 2  | 5   | 0 | 0     | 87    |
| 6:00    | 40        | 2   | 1  | 6   | 0 | 0 | 49        | 74    | 1  | 1  | 2  | 0 | 78    | 18:00 | 117   | 0  | 4  | 8   | 0         | 0 | 0 | 0   | 0  | 0    | 129       | 66    | 0  | 3  | 2   | 0 | 0     | 71    |
| 6:15    | 55        | 1   | 0  | 8   | 0 | 0 | 64        | 70    | 0  | 2  | 1  | 0 | 73    | 18:15 | 121   | 0  | 1  | 6   | 0         | 0 | 0 | 0   | 0  | 0    | 128       | 95    | 4  | 0  | 5   | 0 | 0     | 104   |
| 6:30    | 58        | 0   | 0  | 8   | 0 | 1 | 67        | 80    | 0  | 2  | 5  | 0 | 87    | 18:30 | 105   | 1  | 2  | 5   | 0         | 0 | 0 | 0   | 0  | 0    | 113       | 89    | 2  | 0  | 4   | 0 | 1     | 96    |
| 6:45    | 66        | 0   | 1  | 5   | 0 | 0 | 72        | 77    | 4  | 2  | 4  | 0 | 87    | 18:45 | 84    | 2  | 0  | 1   | 0         | 0 | 0 | 0   | 0  | 0    | 87        | 88    | 2  | 2  | 1   | 0 | 0     | 93    |
| 7:00    | 90        | 2   | 4  | 15  | 0 | 0 | 111       | 89    | 2  | 3  | 5  | 0 | 101   | 19:00 | 88    | 0  | 0  | 0   | 0         | 0 | 0 | 0   | 0  | 0    | 70        | 70    | 0  | 0  | 0   | 0 | 0     | 70    |
| 7:15    | 89        | 4   | 3  | 10  | 0 | 0 | 106       | 83    | 3  | 2  | 5  | 1 | 94    | 19:15 | 70    | 0  | 2  | 0   | 0         | 0 | 0 | 0   | 0  | 0    | 72        | 40    | 0  | 0  | 0   | 0 | 0     | 42    |
| 7:30    | 107       | 5   | 3  | 8   | 0 | 1 | 124       | 91    | 2  | 1  | 4  | 0 | 98    | 19:30 | 68    | 0  | 3  | 2   | 0         | 0 | 0 | 0   | 0  | 0    | 73        | 44    | 0  | 0  | 0   | 0 | 0     | 46    |
| 7:45    | 90        | 2   | 4  | 5   | 0 | 0 | 101       | 106   | 2  | 0  | 6  | 0 | 114   | 19:45 | 77    | 1  | 2  | 1   | 0         | 0 | 0 | 0   | 0  | 0    | 81        | 51    | 0  | 0  | 2   | 0 | 0     | 53    |
| 8:00    | 64        | 2   | 1  | 8   | 0 | 0 | 75        | 95    | 1  | 0  | 4  | 0 | 101   | 20:00 | 84    | 0  | 1  | 2   | 0         | 0 | 0 | 0   | 0  | 0    | 87        | 32    | 0  | 0  | 1   | 0 | 0     | 33    |
| 8:15    | 51        | 2   | 2  | 10  | 0 | 1 | 66        | 73    | 2  | 2  | 5  | 0 | 82    | 20:15 | 80    | 0  | 0  | 2   | 0         | 0 | 0 | 0   | 0  | 0    | 82        | 44    | 0  | 0  | 0   | 0 | 0     | 44    |
| 8:30    | 60        | 5   | 2  | 6   | 1 | 0 | 74        | 69    | 0  | 1  | 6  | 0 | 76    | 20:30 | 62    | 0  | 0  | 1   | 0         | 0 | 0 | 0   | 0  | 0    | 63        | 32    | 1  | 0  | 0   | 0 | 0     | 33    |
| 8:45    | 50        | 8   | 2  | 5   | 0 | 0 | 65        | 70    | 0  | 2  | 5  | 0 | 77    | 20:45 | 55    | 0  | 0  | 0   | 0         | 0 | 0 | 0   | 0  | 0    | 55        | 50    | 0  | 0  | 0   | 0 | 0     | 50    |
| 9:00    | 66        | 9   | 2  | 5   | 0 | 2 | 84        | 84    | 3  | 0  | 5  | 0 | 92    | 21:00 | 40    | 0  | 0  | 0   | 0         | 0 | 0 | 0   | 0  | 0    | 40        | 29    | 0  | 0  | 0   | 0 | 0     | 29    |
| 9:15    | 61        | 9   | 1  | 10  | 0 | 0 | 81        | 66    | 0  | 3  | 1  | 0 | 71    | 21:15 | 30    | 0  | 0  | 0   | 0         | 0 | 0 | 0   | 0  | 0    | 30        | 20    | 0  | 0  | 0   | 0 | 0     | 20    |
| 9:30    | 70        | 8   | 0  | 5   | 0 | 1 | 84        | 50    | 0  | 1  | 2  | 0 | 53    | 21:30 | 28    | 0  | 0  | 1   | 0         | 0 | 0 | 0   | 0  | 0    | 29        | 16    | 0  | 1  | 0   | 0 | 0     | 17    |
| 9:45    | 51        | 8   | 0  | 9   | 0 | 0 | 68        | 55    | 0  | 2  | 2  | 1 | 60    | 21:45 | 22    | 0  | 1  | 2   | 0         | 0 | 0 | 0   | 0  | 0    | 25        | 11    | 0  | 0  | 1   | 0 | 0     | 12    |
| 10:00   | 55        | 7   | 1  | 7   | 1 | 0 | 71        | 48    | 1  | 0  | 2  | 0 | 51    | 22:00 | 16    | 0  | 0  | 2   | 0         | 0 | 0 | 0   | 0  | 0    | 18        | 8     | 0  | 0  | 0   | 0 | 0     | 8     |
| 10:15   | 68        | 6   | 2  | 8   | 0 | 1 | 85        | 51    | 2  | 0  | 3  | 0 | 57    | 22:15 | 11    | 0  | 0  | 0   | 0         | 0 | 0 | 0   | 0  | 0    | 11        | 8     | 1  | 0  | 0   | 0 | 0     | 9     |
| 10:30   | 48        | 6   | 2  | 8   | 0 | 0 | 64        | 62    | 2  | 0  | 3  | 0 | 67    | 22:30 | 20    | 0  | 0  | 0   | 0         | 0 | 0 | 0   | 0  | 0    | 20        | 5     | 0  | 0  | 0   | 0 | 0     | 5     |
| 10:45   | 88        | 5   | 2  | 8   | 0 | 0 | 103       | 66    | 1  | 2  | 3  | 0 | 72    | 22:45 | 14    | 0  | 0  | 0   | 0         | 0 | 0 | 0   | 0  | 0    | 14        | 6     | 0  | 0  | 0   | 0 | 0     | 6     |
| 11:00   | 54        | 5   | 0  | 6   | 0 | 1 | 66        | 60    | 2  | 0  | 2  | 0 | 65    | 23:00 | 11    | 0  | 0  | 0   | 0         | 0 | 0 | 0   | 0  | 0    | 11        | 2     | 0  | 0  | 0   | 0 | 0     | 2     |
| 11:15   | 48        | 2   | 1  | 4   | 0 | 0 | 55        | 48    | 0  | 1  | 2  | 0 | 51    | 23:15 | 18    | 0  | 0  | 0   | 0         | 0 | 0 | 0   | 0  | 0    | 18        | 2     | 0  | 0  | 0   | 0 | 0     | 2     |
| 11:30   | 44        | 2   | 2  | 2   | 0 | 0 | 50        | 51    | 0  | 1  | 0  | 0 | 52    | 23:30 | 9     | 0  | 0  | 1   | 0         | 0 | 0 | 0   | 0  | 0    | 10        | 2     | 0  | 0  | 2   | 0 | 0     | 4     |
| 11:45   | 51        | 6   | 4  | 5   | 0 | 1 | 67        | 62    | 3  | 1  | 2  | 0 | 68    | 23:45 | 9     | 0  | 0  | 0   | 0         | 0 | 0 | 0   | 0  | 0    | 9         | 5     | 0  | 0  | 0   | 0 | 0     | 5     |
| TOTAL   | 1,841     | 114 | 44 | 200 | 2 | 9 | 2,210     | 2,082 | 35 | 30 | 91 | 2 | 2,245 | TOTAL | 3,760 | 52 | 78 | 199 | 2         | 9 | 4 | 100 | PM | 5:00 | 542       | 2,422 | 64 | 43 | 145 | 2 | 12    | 2,688 |

| DAILY TOTAL |  | 5,601 | 166  | 122  | 399  | 4    | 18   | 6,310  | 4,504 | 99   | 73   | 236  | 4    | 17   | 4,933  |
|-------------|--|-------|------|------|------|------|------|--------|-------|------|------|------|------|------|--------|
| % OF TOTAL  |  | 88.8% | 2.6% | 1.9% | 6.3% | 0.1% | 0.3% | 100.0% | 91.3% | 2.0% | 1.5% | 4.8% | 0.1% | 0.3% | 100.0% |

| CLASS 1 | PASSENGER VEHICLES | CLASS 4 | 4 OR MORE AXLE TRUCKS |
|---------|--------------------|---------|-----------------------|
| CLASS 2 | 2-AXLE TRUCKS      | CLASS 5 | RECREATION VEHICLES   |
| CLASS 3 | 3-AXLE TRUCKS      | CLASS 6 | BUSES                 |

**DATE:** 02/19/09      **THURSDAY**  
**JOB #:** CA09-0220-1-026

**CITY:** FONTANA  
**LOCATION:** VALLEY E

FONTANA  
VALLEY E/O BEECH

| AM<br>TIME | EASTBOUND |   |   |   |   |   | TOTAL | WESTBOUND |   |   |   |   |   | TOTAL | AM PEAK HOUR<br>7:45 AM | AM PEAK VOLUME | 404 | 7:45 AM | 417 |
|------------|-----------|---|---|---|---|---|-------|-----------|---|---|---|---|---|-------|-------------------------|----------------|-----|---------|-----|
|            | 1         | 2 | 3 | 4 | 5 | 6 |       | 1         | 2 | 3 | 4 | 5 | 6 |       |                         |                |     |         |     |
|            |           |   |   |   |   |   |       |           |   |   |   |   |   |       |                         |                |     |         |     |
| 0:00       | 0         | 0 | 0 | 0 | 0 | 0 | 0     | 0         | 0 | 0 | 0 | 0 | 0 | 0     | 0                       | 0              | 0   | 0       |     |
| 0:15       | 1         | 0 | 0 | 0 | 0 | 0 | 1     | 1         | 0 | 0 | 2 | 0 | 0 | 0     | 0                       | 0              | 0   | 0       |     |
| 0:30       | 2         | 0 | 1 | 0 | 0 | 0 | 3     | 0         | 0 | 0 | 1 | 0 | 0 | 0     | 0                       | 0              | 0   | 0       |     |
| 0:45       | 2         | 1 | 0 | 0 | 0 | 0 | 3     | 2         | 0 | 0 | 0 | 0 | 0 | 0     | 0                       | 0              | 0   | 0       |     |
| 1:00       | 0         | 0 | 0 | 1 | 0 | 0 | 1     | 1         | 0 | 0 | 0 | 0 | 0 | 0     | 0                       | 0              | 0   | 0       |     |
| 1:15       | 4         | 0 | 0 | 0 | 0 | 0 | 4     | 1         | 0 | 0 | 0 | 0 | 0 | 0     | 0                       | 0              | 0   | 0       |     |
| 1:30       | 5         | 0 | 0 | 0 | 0 | 0 | 5     | 3         | 0 | 0 | 2 | 0 | 0 | 0     | 0                       | 0              | 0   | 0       |     |
| 1:45       | 2         | 0 | 0 | 0 | 0 | 0 | 2     | 2         | 0 | 0 | 1 | 0 | 0 | 0     | 0                       | 0              | 0   | 0       |     |
| 2:00       | 6         | 0 | 0 | 0 | 0 | 0 | 6     | 3         | 0 | 0 | 0 | 0 | 0 | 0     | 0                       | 0              | 0   | 0       |     |
| 2:15       | 5         | 0 | 0 | 2 | 0 | 0 | 7     | 2         | 1 | 0 | 1 | 0 | 0 | 0     | 0                       | 0              | 0   | 0       |     |
| 2:30       | 5         | 2 | 1 | 2 | 0 | 0 | 10    | 2         | 3 | 0 | 2 | 0 | 0 | 0     | 0                       | 0              | 0   | 0       |     |
| 2:45       | 10        | 1 | 0 | 0 | 0 | 0 | 11    | 5         | 0 | 1 | 2 | 0 | 0 | 0     | 0                       | 0              | 0   | 0       |     |
| 3:00       | 12        | 0 | 0 | 0 | 0 | 0 | 12    | 8         | 1 | 0 | 1 | 0 | 0 | 0     | 0                       | 0              | 0   | 0       |     |
| 3:15       | 7         | 0 | 0 | 0 | 0 | 0 | 7     | 5         | 0 | 0 | 0 | 0 | 0 | 0     | 0                       | 0              | 0   | 0       |     |
| 3:30       | 8         | 0 | 1 | 1 | 0 | 0 | 10    | 7         | 0 | 0 | 0 | 0 | 0 | 0     | 0                       | 0              | 0   | 0       |     |
| 3:45       | 6         | 0 | 0 | 0 | 0 | 0 | 6     | 8         | 1 | 0 | 0 | 0 | 0 | 0     | 0                       | 0              | 0   | 0       |     |
| 4:00       | 5         | 2 | 0 | 0 | 0 | 0 | 7     | 5         | 1 | 0 | 3 | 0 | 0 | 0     | 0                       | 0              | 0   | 0       |     |
| 4:15       | 5         | 2 | 0 | 0 | 0 | 0 | 1     | 11        | 0 | 0 | 2 | 0 | 0 | 0     | 0                       | 0              | 0   | 0       |     |
| 4:30       | 11        | 1 | 0 | 0 | 0 | 0 | 12    | 22        | 3 | 0 | 0 | 0 | 0 | 0     | 0                       | 0              | 0   | 0       |     |
| 4:45       | 16        | 0 | 0 | 0 | 0 | 0 | 16    | 16        | 0 | 0 | 1 | 0 | 0 | 0     | 0                       | 0              | 0   | 0       |     |
| 5:00       | 20        | 1 | 1 | 1 | 0 | 1 | 24    | 30        | 2 | 0 | 2 | 0 | 0 | 0     | 0                       | 0              | 0   | 0       |     |
| 5:15       | 21        | 2 | 0 | 0 | 0 | 0 | 23    | 35        | 1 | 1 | 5 | 0 | 0 | 1     | 43                      | 17:15          | 126 | 4       |     |
| 5:30       | 35        | 3 | 0 | 0 | 0 | 0 | 38    | 50        | 0 | 0 | 8 | 0 | 0 | 0     | 58                      | 17:30          | 121 | 2       |     |
| 5:45       | 50        | 3 | 0 | 2 | 0 | 0 | 55    | 48        | 0 | 0 | 7 | 0 | 0 | 0     | 55                      | 17:45          | 101 | 2       |     |
| 6:00       | 44        | 1 | 0 | 3 | 0 | 0 | 48    | 51        | 1 | 0 | 5 | 0 | 0 | 0     | 57                      | 18:00          | 114 | 2       |     |
| 6:15       | 51        | 4 | 0 | 0 | 0 | 0 | 55    | 60        | 0 | 2 | 0 | 0 | 0 | 0     | 62                      | 18:15          | 95  | 1       |     |
| 6:30       | 66        | 2 | 2 | 0 | 0 | 0 | 71    | 55        | 2 | 1 | 3 | 0 | 0 | 0     | 61                      | 18:30          | 90  | 2       |     |
| 6:45       | 60        | 3 | 1 | 0 | 0 | 0 | 63    | 78        | 2 | 1 | 1 | 0 | 0 | 1     | 83                      | 18:45          | 89  | 0       |     |
| 7:00       | 80        | 6 | 1 | 4 | 0 | 0 | 92    | 85        | 2 | 1 | 3 | 0 | 0 | 0     | 91                      | 19:00          | 96  | 2       |     |
| 7:15       | 77        | 5 | 2 | 2 | 0 | 0 | 86    | 98        | 3 | 0 | 3 | 0 | 0 | 0     | 104                     | 19:15          | 91  | 0       |     |
| 7:30       | 67        | 7 | 0 | 5 | 0 | 0 | 79    | 99        | 4 | 0 | 5 | 0 | 0 | 0     | 108                     | 19:30          | 70  |         |     |

|                    |       |      |      |      |      |      |        |       |      |      |      |      |        |
|--------------------|-------|------|------|------|------|------|--------|-------|------|------|------|------|--------|
| <b>DAILY TOTAL</b> | 5,280 | 146  | 79   | 149  | 3    | 12   | 5,669  | 140   | 49   | 277  | 3    | 9    | 5,063  |
| <b>% OF TOTAL</b>  | 93.1% | 2.6% | 1.4% | 2.6% | 0.1% | 0.2% | 100.0% | 90.6% | 2.8% | 1.0% | 5.5% | 0.1% | 100.0% |

|                |                    |                |                       |
|----------------|--------------------|----------------|-----------------------|
| <b>CLASS 1</b> | PASSENGER VEHICLES | <b>CLASS 4</b> | 4 OR MORE AXLE TRUCKS |
| <b>CLASS 2</b> | 2-AXLE TRUCKS      | <b>CLASS 5</b> | RECREATION VEHICLES   |
| <b>CLASS 3</b> | 3-AXLE TRUCKS      | <b>CLASS 6</b> | BUSSES                |

# 24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

PREPARED BY PACIFIC TRAFFIC DATA SERVICES

DATE: 02/19/09  
JOB #: CA09-0220-1-028

CITY: FONTANA  
LOCATION: CITRUS S/O SLOVER

| TIME  | NORTHBOUND |    |    |     |   |   | SOUTHBOUND |       |    |    |     |   | NORTHBOUND |       |    |    |     |   | SOUTHBOUND |       |    |    |     |   | TOTAL |       |
|-------|------------|----|----|-----|---|---|------------|-------|----|----|-----|---|------------|-------|----|----|-----|---|------------|-------|----|----|-----|---|-------|-------|
|       | 1          | 2  | 3  | 4   | 5 | 6 | 1          | 2     | 3  | 4  | 5   | 6 | 1          | 2     | 3  | 4  | 5   | 6 | 1          | 2     | 3  | 4  | 5   | 6 |       |       |
| 0:00  | 3          | 0  | 0  | 0   | 0 | 0 | 28         | 0     | 0  | 0  | 0   | 0 | 35         | 0     | 0  | 0  | 0   | 0 | 41         | 50    | 0  | 0  | 0   | 0 | 58    |       |
| 0:15  | 2          | 0  | 0  | 1   | 0 | 0 | 31         | 0     | 0  | 0  | 0   | 0 | 40         | 0     | 0  | 8  | 0   | 0 | 48         | 68    | 0  | 0  | 4   | 0 | 72    |       |
| 0:30  | 5          | 0  | 2  | 0   | 0 | 0 | 22         | 0     | 0  | 0  | 0   | 0 | 41         | 0     | 0  | 5  | 0   | 0 | 46         | 54    | 1  | 0  | 5   | 0 | 60    |       |
| 0:45  | 5          | 0  | 1  | 2   | 0 | 0 | 8          | 0     | 0  | 0  | 0   | 0 | 44         | 0     | 1  | 5  | 0   | 0 | 50         | 55    | 2  | 2  | 0   | 0 | 68    |       |
| 1:00  | 2          | 0  | 0  | 1   | 0 | 0 | 41         | 0     | 0  | 2  | 0   | 0 | 39         | 0     | 2  | 7  | 0   | 0 | 48         | 62    | 0  | 2  | 8   | 0 | 72    |       |
| 1:15  | 10         | 0  | 0  | 0   | 0 | 0 | 35         | 0     | 0  | 1  | 0   | 0 | 44         | 0     | 2  | 7  | 0   | 0 | 53         | 70    | 0  | 1  | 7   | 0 | 78    |       |
| 1:30  | 5          | 0  | 0  | 1   | 0 | 0 | 40         | 0     | 0  | 3  | 0   | 0 | 47         | 0     | 2  | 4  | 0   | 0 | 53         | 48    | 2  | 0  | 10  | 0 | 60    |       |
| 1:45  | 6          | 0  | 0  | 2   | 0 | 0 | 44         | 0     | 1  | 3  | 0   | 0 | 51         | 0     | 0  | 8  | 0   | 0 | 59         | 40    | 1  | 0  | 2   | 0 | 43    |       |
| 2:00  | 5          | 0  | 1  | 2   | 0 | 0 | 34         | 0     | 0  | 2  | 0   | 0 | 44         | 1     | 0  | 4  | 0   | 0 | 49         | 55    | 0  | 0  | 2   | 0 | 57    |       |
| 2:15  | 5          | 0  | 1  | 2   | 0 | 0 | 50         | 0     | 0  | 4  | 0   | 0 | 31         | 0     | 0  | 5  | 0   | 0 | 36         | 51    | 0  | 0  | 5   | 0 | 56    |       |
| 2:30  | 7          | 0  | 2  | 0   | 0 | 0 | 51         | 0     | 0  | 2  | 0   | 0 | 32         | 1     | 1  | 5  | 0   | 0 | 39         | 41    | 0  | 0  | 8   | 0 | 49    |       |
| 2:45  | 5          | 1  | 0  | 1   | 0 | 0 | 44         | 0     | 0  | 2  | 0   | 0 | 44         | 2     | 2  | 6  | 0   | 0 | 54         | 44    | 0  | 2  | 1   | 0 | 47    |       |
| 3:00  | 5          | 0  | 0  | 2   | 0 | 0 | 37         | 0     | 1  | 1  | 0   | 0 | 48         | 2     | 0  | 5  | 0   | 0 | 55         | 31    | 1  | 0  | 2   | 0 | 34    |       |
| 3:15  | 9          | 0  | 1  | 0   | 0 | 0 | 35         | 0     | 1  | 2  | 0   | 0 | 50         | 1     | 0  | 7  | 0   | 0 | 58         | 62    | 2  | 0  | 1   | 0 | 65    |       |
| 3:30  | 8          | 0  | 0  | 3   | 0 | 0 | 11         | 33    | 0  | 1  | 3   | 0 | 51         | 2     | 2  | 5  | 0   | 0 | 60         | 55    | 2  | 2  | 8   | 0 | 67    |       |
| 3:45  | 8          | 0  | 0  | 0   | 0 | 0 | 51         | 0     | 0  | 2  | 0   | 0 | 44         | 3     | 3  | 4  | 0   | 0 | 54         | 50    | 3  | 1  | 7   | 0 | 61    |       |
| 4:00  | 15         | 0  | 2  | 0   | 0 | 0 | 17         | 48    | 1  | 0  | 2   | 0 | 45         | 0     | 2  | 8  | 0   | 0 | 55         | 58    | 2  | 0  | 5   | 0 | 65    |       |
| 4:15  | 11         | 0  | 0  | 5   | 0 | 0 | 16         | 37    | 0  | 0  | 1   | 0 | 49         | 0     | 0  | 8  | 0   | 0 | 57         | 71    | 0  | 0  | 7   | 0 | 78    |       |
| 4:30  | 16         | 1  | 1  | 1   | 0 | 0 | 19         | 35    | 0  | 1  | 1   | 0 | 60         | 0     | 1  | 12 | 0   | 0 | 73         | 49    | 0  | 2  | 5   | 0 | 56    |       |
| 4:45  | 20         | 1  | 0  | 2   | 0 | 0 | 23         | 40    | 0  | 2  | 4   | 1 | 34         | 2     | 2  | 10 | 0   | 0 | 48         | 60    | 2  | 3  | 7   | 0 | 72    |       |
| 5:00  | 18         | 2  | 0  | 2   | 0 | 0 | 22         | 55    | 0  | 0  | 5   | 0 | 30         | 1     | 0  | 8  | 0   | 0 | 39         | 72    | 0  | 2  | 5   | 0 | 79    |       |
| 5:15  | 33         | 0  | 0  | 2   | 0 | 0 | 35         | 51    | 2  | 0  | 8   | 0 | 42         | 2     | 0  | 10 | 0   | 0 | 54         | 73    | 0  | 0  | 7   | 0 | 80    |       |
| 5:30  | 40         | 0  | 1  | 0   | 0 | 0 | 41         | 41    | 2  | 1  | 8   | 0 | 52         | 17    | 30 | 1  | 15  | 0 | 62         | 48    | 2  | 2  | 10  | 0 | 80    |       |
| 5:45  | 51         | 1  | 1  | 4   | 0 | 0 | 57         | 33    | 0  | 2  | 9   | 0 | 62         | 0     | 2  | 2  | 0   | 0 | 66         | 58    | 1  | 1  | 2   | 0 | 62    |       |
| 6:00  | 66         | 0  | 1  | 5   | 0 | 0 | 72         | 26    | 0  | 1  | 8   | 0 | 55         | 0     | 0  | 5  | 0   | 0 | 60         | 50    | 2  | 0  | 5   | 0 | 57    |       |
| 6:15  | 62         | 0  | 2  | 6   | 0 | 0 | 70         | 35    | 0  | 2  | 7   | 0 | 44         | 1     | 2  | 6  | 0   | 0 | 60         | 44    | 3  | 0  | 5   | 0 | 52    |       |
| 6:30  | 81         | 1  | 2  | 5   | 0 | 0 | 89         | 51    | 0  | 3  | 8   | 0 | 62         | 18    | 30 | 0  | 3   | 8 | 65         | 35    | 2  | 1  | 8   | 0 | 46    |       |
| 6:45  | 55         | 0  | 3  | 6   | 1 | 0 | 65         | 44    | 0  | 2  | 8   | 0 | 54         | 62    | 0  | 2  | 5   | 0 | 69         | 44    | 0  | 1  | 8   | 0 | 53    |       |
| 7:00  | 80         | 0  | 4  | 8   | 0 | 0 | 92         | 41    | 2  | 1  | 7   | 0 | 51         | 19    | 00 | 33 | 2   | 2 | 39         | 51    | 0  | 0  | 4   | 0 | 55    |       |
| 7:15  | 63         | 1  | 2  | 11  | 0 | 0 | 77         | 30    | 1  | 2  | 5   | 0 | 38         | 19    | 15 | 34 | 0   | 1 | 36         | 48    | 1  | 2  | 7   | 0 | 58    |       |
| 7:30  | 57         | 0  | 5  | 8   | 1 | 0 | 71         | 38    | 0  | 2  | 1   | 0 | 41         | 19    | 30 | 40 | 0   | 0 | 43         | 32    | 2  | 0  | 4   | 0 | 38    |       |
| 7:45  | 55         | 0  | 4  | 7   | 0 | 0 | 66         | 40    | 0  | 3  | 12  | 0 | 55         | 19    | 45 | 22 | 0   | 0 | 24         | 33    | 0  | 0  | 5   | 0 | 38    |       |
| 8:00  | 70         | 2  | 2  | 5   | 0 | 0 | 79         | 30    | 2  | 1  | 2   | 0 | 35         | 20    | 00 | 28 | 0   | 0 | 28         | 18    | 0  | 0  | 1   | 0 | 19    |       |
| 8:15  | 65         | 1  | 2  | 4   | 0 | 0 | 72         | 30    | 1  | 2  | 3   | 0 | 36         | 20    | 15 | 35 | 1   | 0 | 36         | 10    | 1  | 2  | 2   | 0 | 15    |       |
| 8:30  | 67         | 0  | 1  | 12  | 0 | 0 | 80         | 31    | 2  | 0  | 2   | 0 | 35         | 35    | 30 | 20 | 0   | 1 | 21         | 20    | 0  | 1  | 6   | 0 | 27    |       |
| 8:45  | 53         | 0  | 2  | 10  | 0 | 0 | 65         | 30    | 2  | 0  | 3   | 0 | 35         | 20    | 45 | 15 | 0   | 0 | 17         | 11    | 0  | 0  | 2   | 0 | 13    |       |
| 9:00  | 40         | 1  | 0  | 8   | 0 | 0 | 49         | 33    | 3  | 1  | 3   | 0 | 40         | 21    | 00 | 11 | 0   | 0 | 11         | 18    | 0  | 0  | 0   | 0 | 18    |       |
| 9:15  | 44         | 0  | 0  | 7   | 0 | 0 | 51         | 41    | 2  | 2  | 4   | 0 | 49         | 21    | 15 | 18 | 0   | 0 | 18         | 8     | 0  | 0  | 0   | 0 | 8     |       |
| 9:30  | 51         | 1  | 0  | 8   | 0 | 0 | 60         | 35    | 1  | 2  | 2   | 0 | 40         | 21    | 30 | 11 | 0   | 0 | 12         | 6     | 0  | 0  | 0   | 0 | 6     |       |
| 9:45  | 62         | 2  | 5  | 6   | 0 | 0 | 75         | 44    | 0  | 2  | 1   | 0 | 47         | 21    | 45 | 20 | 0   | 0 | 20         | 8     | 0  | 0  | 2   | 0 | 10    |       |
| 10:00 | 33         | 2  | 5  | 5   | 0 | 0 | 45         | 41    | 2  | 4  | 2   | 0 | 49         | 22    | 00 | 16 | 0   | 0 | 16         | 8     | 0  | 0  | 1   | 0 | 9     |       |
| 10:15 | 45         | 2  | 1  | 5   | 0 | 0 | 53         | 35    | 2  | 2  | 6   | 0 | 45         | 22    | 15 | 11 | 0   | 0 | 11         | 12    | 0  | 0  | 2   | 0 | 14    |       |
| 10:30 | 55         | 1  | 2  | 8   | 0 | 0 | 66         | 30    | 2  | 1  | 3   | 0 | 36         | 22    | 30 | 8  | 0   | 0 | 9          | 5     | 0  | 0  | 0   | 0 | 5     |       |
| 10:45 | 40         | 1  | 2  | 8   | 0 | 0 | 51         | 28    | 1  | 2  | 1   | 0 | 32         | 22    | 45 | 6  | 0   | 0 | 6          | 5     | 0  | 1  | 0   | 0 | 6     |       |
| 11:00 | 35         | 2  | 1  | 5   | 0 | 0 | 43         | 33    | 2  | 1  | 5   | 0 | 41         | 23    | 00 | 5  | 0   | 0 | 5          | 8     | 0  | 0  | 0   | 0 | 8     |       |
| 11:15 | 44         | 2  | 3  | 5   | 1 | 0 | 55         | 42    | 1  | 2  | 5   | 0 | 50         | 23    | 15 | 2  | 0   | 0 | 3          | 8     | 0  | 0  | 1   | 0 | 9     |       |
| 11:30 | 51         | 2  | 2  | 1   | 0 | 0 | 56         | 40    | 2  | 3  | 5   | 0 | 50         | 23    | 30 | 2  | 0   | 0 | 4          | 4     | 0  | 0  | 0   | 0 | 4     |       |
| 11:45 | 47         | 0  | 2  | 2   | 0 | 0 | 51         | 31    | 2  | 2  | 6   | 0 | 46         | 23    | 45 | 4  | 0   | 0 | 6          | 5     | 0  | 0  | 0   | 0 | 5     |       |
| TOTAL | 1,615      | 27 | 61 | 193 | 3 | 0 | 1,899      | 1,803 | 35 | 53 | 174 | 1 | 2,066      | 1,617 | 21 | 34 | 205 | 0 | 1,877      | 1,816 | 32 | 28 | 198 | 0 | 0     | 2,074 |

| AM             | PM             | 6:00 PM        | 4:45 PM        |
|----------------|----------------|----------------|----------------|
| 220            | 254            | 254            | 293            |
| AM PEAK HOUR   | PM PEAK HOUR   | PM PEAK HOUR   | PM PEAK HOUR   |
| AM PEAK VOLUME | PM PEAK VOLUME | PM PEAK VOLUME | PM PEAK VOLUME |

| CLASS 1            | CLASS 2       | CLASS 3       | CLASS 4               | CLASS 5             | CLASS 6 |
|--------------------|---------------|---------------|-----------------------|---------------------|---------|
| PASSENGER VEHICLES | 2-AXLE TRUCKS | 3-AXLE TRUCKS | 4 OR MORE AXLE TRUCKS | RECREATION VEHICLES | BUSES   |
| 3,232              | 48            | 95            | 398                   | 3                   | 0       |
| 85.6%              | 1.3%          | 2.5%          | 0.1%                  | 0.0%                | 100.0%  |
| 3,619              | 67            | 81            | 372                   | 1                   | 0       |
| 87.4%              | 1.6%          | 2.0%          | 9.0%                  | 0.0%                | 100.0%  |
| 4,140              | 0             | 0             | 0                     | 0                   | 0       |
| 100.0%             | 0.0%          | 0.0%          | 0.0%                  | 0.0%                | 100.0%  |



# 24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

PREPARED BY PACIFIC TRAFFIC DATA SERVICES

DATE: 02/19/09  
JOB #: CA09-0220-1-029

THURSDAY

CITY: FONTANA  
LOCATION: CITRUS S/O SANTA ANA

| AM TIME | NORTHBOUND |    |    |     |   |   | SOUTHBOUND |       |    |    |     |   | NORTHBOUND |                      |       |    |    |     | SOUTHBOUND |                      |   |   |   |   | TOTAL |       |       |    |    |     |       |    |       |
|---------|------------|----|----|-----|---|---|------------|-------|----|----|-----|---|------------|----------------------|-------|----|----|-----|------------|----------------------|---|---|---|---|-------|-------|-------|----|----|-----|-------|----|-------|
|         | 1          | 2  | 3  | 4   | 5 | 6 | 1          | 2     | 3  | 4  | 5   | 6 | 1          | 2                    | 3     | 4  | 5  | 6   | 1          | 2                    | 3 | 4 | 5 | 6 | 1     | 2     | 3     | 4  | 5  | 6   | TOTAL |    |       |
| 0:00    | 5          | 0  | 0  | 0   | 0 | 0 | 2          | 0     | 0  | 0  | 0   | 0 | 22         | 0                    | 0     | 0  | 2  | 0   | 0          | 0                    | 0 | 0 | 0 | 0 | 24    | 47    | 0     | 0  | 7  | 0   | 0     | 54 |       |
| 0:15    | 6          | 0  | 0  | 0   | 0 | 0 | 5          | 0     | 0  | 0  | 0   | 0 | 35         | 0                    | 0     | 2  | 0  | 0   | 0          | 0                    | 0 | 0 | 0 | 0 | 37    | 55    | 0     | 0  | 4  | 0   | 0     | 59 |       |
| 0:30    | 5          | 0  | 0  | 2   | 0 | 0 | 7          | 6     | 0  | 0  | 0   | 0 | 44         | 0                    | 1     | 4  | 0  | 0   | 0          | 0                    | 0 | 0 | 0 | 0 | 49    | 51    | 0     | 0  | 5  | 0   | 0     | 56 |       |
| 0:45    | 10         | 0  | 0  | 0   | 0 | 0 | 10         | 6     | 0  | 0  | 0   | 0 | 41         | 0                    | 0     | 2  | 0  | 0   | 0          | 0                    | 0 | 0 | 0 | 0 | 43    | 40    | 0     | 0  | 5  | 0   | 0     | 45 |       |
| 1:00    | 4          | 0  | 1  | 0   | 0 | 0 | 5          | 6     | 0  | 0  | 0   | 0 | 30         | 0                    | 0     | 5  | 0  | 0   | 0          | 0                    | 0 | 0 | 0 | 0 | 35    | 44    | 1     | 1  | 8  | 0   | 0     | 54 |       |
| 1:15    | 5          | 0  | 0  | 0   | 0 | 0 | 5          | 5     | 0  | 0  | 0   | 0 | 26         | 0                    | 2     | 2  | 0  | 0   | 0          | 0                    | 0 | 0 | 0 | 0 | 30    | 37    | 0     | 2  | 9  | 0   | 0     | 48 |       |
| 1:30    | 5          | 0  | 0  | 1   | 0 | 0 | 6          | 4     | 0  | 0  | 2   | 0 | 44         | 0                    | 0     | 2  | 0  | 0   | 0          | 0                    | 0 | 0 | 0 | 0 | 46    | 51    | 0     | 2  | 10 | 0   | 0     | 63 |       |
| 1:45    | 9          | 0  | 0  | 0   | 0 | 0 | 9          | 5     | 0  | 0  | 2   | 0 | 35         | 0                    | 0     | 5  | 0  | 0   | 0          | 0                    | 0 | 0 | 0 | 0 | 40    | 44    | 2     | 2  | 8  | 0   | 0     | 56 |       |
| 2:00    | 8          | 0  | 0  | 2   | 0 | 0 | 10         | 6     | 0  | 0  | 0   | 0 | 28         | 0                    | 0     | 2  | 0  | 0   | 0          | 0                    | 0 | 0 | 0 | 0 | 30    | 35    | 0     | 0  | 5  | 0   | 0     | 40 |       |
| 2:15    | 8          | 0  | 1  | 2   | 0 | 0 | 11         | 5     | 0  | 0  | 0   | 0 | 33         | 0                    | 1     | 4  | 0  | 0   | 0          | 0                    | 0 | 0 | 0 | 0 | 38    | 40    | 0     | 1  | 6  | 0   | 0     | 47 |       |
| 2:30    | 15         | 0  | 0  | 1   | 0 | 0 | 16         | 10    | 0  | 0  | 2   | 0 | 42         | 0                    | 0     | 5  | 0  | 0   | 0          | 0                    | 0 | 0 | 0 | 0 | 47    | 48    | 0     | 2  | 8  | 0   | 0     | 58 |       |
| 2:45    | 7          | 1  | 0  | 0   | 0 | 0 | 8          | 8     | 0  | 1  | 4   | 0 | 35         | 0                    | 0     | 6  | 0  | 0   | 0          | 0                    | 0 | 0 | 0 | 0 | 41    | 55    | 1     | 2  | 10 | 0   | 0     | 68 |       |
| 3:00    | 8          | 0  | 0  | 0   | 0 | 0 | 8          | 9     | 0  | 2  | 2   | 0 | 41         | 0                    | 0     | 2  | 9  | 0   | 0          | 0                    | 0 | 0 | 0 | 0 | 52    | 44    | 2     | 1  | 1  | 0   | 0     | 48 |       |
| 3:15    | 8          | 0  | 2  | 0   | 0 | 0 | 10         | 9     | 0  | 0  | 0   | 0 | 28         | 1                    | 0     | 6  | 0  | 0   | 0          | 0                    | 0 | 0 | 0 | 0 | 35    | 60    | 0     | 0  | 1  | 0   | 0     | 61 |       |
| 3:30    | 9          | 0  | 2  | 1   | 0 | 0 | 12         | 8     | 0  | 0  | 0   | 0 | 33         | 2                    | 0     | 6  | 0  | 0   | 0          | 0                    | 0 | 0 | 0 | 0 | 41    | 51    | 0     | 2  | 0  | 0   | 0     | 53 |       |
| 3:45    | 9          | 0  | 1  | 2   | 0 | 0 | 12         | 8     | 0  | 1  | 0   | 0 | 20         | 0                    | 0     | 5  | 0  | 0   | 0          | 0                    | 0 | 0 | 0 | 0 | 25    | 44    | 0     | 1  | 5  | 0   | 0     | 50 |       |
| 4:00    | 15         | 0  | 0  | 3   | 0 | 0 | 18         | 10    | 0  | 0  | 4   | 0 | 29         | 2                    | 1     | 4  | 0  | 0   | 0          | 0                    | 0 | 0 | 0 | 0 | 36    | 52    | 0     | 2  | 1  | 0   | 0     | 55 |       |
| 4:15    | 11         | 1  | 0  | 2   | 0 | 0 | 14         | 15    | 0  | 0  | 0   | 0 | 37         | 3                    | 2     | 8  | 0  | 0   | 0          | 0                    | 0 | 0 | 0 | 0 | 50    | 71    | 0     | 0  | 5  | 0   | 0     | 76 |       |
| 4:30    | 16         | 0  | 1  | 1   | 0 | 0 | 18         | 20    | 0  | 1  | 0   | 0 | 45         | 0                    | 2     | 5  | 0  | 0   | 0          | 0                    | 0 | 0 | 0 | 0 | 52    | 54    | 2     | 0  | 8  | 0   | 0     | 64 |       |
| 4:45    | 20         | 0  | 0  | 2   | 0 | 0 | 22         | 11    | 0  | 0  | 0   | 0 | 25         | 0                    | 3     | 5  | 0  | 0   | 0          | 0                    | 0 | 0 | 0 | 0 | 33    | 66    | 2     | 2  | 8  | 0   | 0     | 78 |       |
| 5:00    | 28         | 0  | 0  | 5   | 0 | 0 | 33         | 16    | 0  | 0  | 2   | 0 | 28         | 2                    | 2     | 4  | 0  | 0   | 0          | 0                    | 0 | 0 | 0 | 0 | 36    | 57    | 1     | 1  | 7  | 0   | 0     | 66 |       |
| 5:15    | 35         | 0  | 0  | 1   | 0 | 0 | 36         | 22    | 1  | 2  | 3   | 0 | 33         | 3                    | 0     | 5  | 0  | 0   | 0          | 0                    | 0 | 0 | 0 | 0 | 41    | 75    | 0     | 0  | 5  | 0   | 0     | 80 |       |
| 5:30    | 41         | 1  | 1  | 1   | 1 | 0 | 45         | 19    | 2  | 0  | 5   | 0 | 40         | 3                    | 1     | 2  | 0  | 0   | 0          | 0                    | 0 | 0 | 0 | 0 | 46    | 43    | 0     | 0  | 5  | 0   | 0     | 80 |       |
| 5:45    | 33         | 0  | 2  | 4   | 0 | 0 | 39         | 20    | 2  | 0  | 4   | 0 | 26         | 17                   | 45    | 46 | 2  | 0   | 1          | 0                    | 0 | 0 | 0 | 0 | 49    | 60    | 0     | 2  | 10 | 0   | 0     | 72 |       |
| 6:00    | 50         | 0  | 2  | 5   | 0 | 0 | 57         | 28    | 3  | 1  | 2   | 0 | 34         | 18                   | 00    | 40 | 0  | 0   | 0          | 0                    | 0 | 0 | 0 | 0 | 40    | 66    | 1     | 1  | 11 | 0   | 0     | 79 |       |
| 6:15    | 54         | 1  | 2  | 5   | 0 | 0 | 62         | 31    | 0  | 2  | 2   | 0 | 35         | 18                   | 15    | 55 | 0  | 1   | 2          | 0                    | 0 | 0 | 0 | 0 | 58    | 51    | 2     | 0  | 13 | 0   | 0     | 66 |       |
| 6:30    | 51         | 0  | 1  | 5   | 0 | 0 | 57         | 33    | 0  | 3  | 3   | 0 | 39         | 18                   | 30    | 51 | 0  | 2   | 1          | 0                    | 0 | 0 | 0 | 0 | 64    | 58    | 2     | 0  | 4  | 0   | 0     | 64 |       |
| 6:45    | 68         | 2  | 2  | 6   | 0 | 0 | 78         | 26    | 0  | 2  | 5   | 1 | 34         | 18                   | 45    | 45 | 1  | 0   | 2          | 0                    | 0 | 0 | 0 | 0 | 48    | 40    | 0     | 0  | 5  | 0   | 0     | 45 |       |
| 7:00    | 79         | 2  | 3  | 5   | 0 | 0 | 89         | 28    | 1  | 2  | 4   | 0 | 35         | 19                   | 00    | 28 | 0  | 0   | 0          | 0                    | 0 | 0 | 0 | 0 | 28    | 35    | 0     | 0  | 5  | 0   | 0     | 40 |       |
| 7:15    | 50         | 1  | 3  | 7   | 0 | 0 | 61         | 40    | 2  | 1  | 6   | 0 | 49         | 19                   | 15    | 22 | 0  | 0   | 0          | 0                    | 0 | 0 | 0 | 0 | 52    | 44    | 0     | 0  | 8  | 0   | 0     | 58 |       |
| 7:30    | 55         | 0  | 4  | 5   | 1 | 0 | 65         | 35    | 2  | 0  | 6   | 0 | 43         | 19                   | 30    | 20 | 2  | 0   | 0          | 0                    | 0 | 0 | 0 | 0 | 22    | 51    | 1     | 1  | 5  | 0   | 0     | 58 |       |
| 7:45    | 51         | 0  | 4  | 8   | 0 | 0 | 63         | 38    | 2  | 0  | 8   | 0 | 48         | 19                   | 45    | 18 | 1  | 1   | 0          | 0                    | 0 | 0 | 0 | 0 | 20    | 46    | 0     | 3  | 1  | 0   | 0     | 50 |       |
| 8:00    | 53         | 0  | 5  | 8   | 0 | 0 | 66         | 30    | 0  | 1  | 8   | 0 | 39         | 20                   | 00    | 29 | 2  | 2   | 1          | 0                    | 0 | 0 | 0 | 0 | 34    | 35    | 0     | 0  | 2  | 0   | 0     | 37 |       |
| 8:15    | 70         | 1  | 5  | 8   | 0 | 0 | 84         | 33    | 0  | 2  | 7   | 0 | 42         | 20                   | 15    | 15 | 0  | 0   | 0          | 0                    | 0 | 0 | 0 | 0 | 15    | 44    | 0     | 0  | 3  | 0   | 0     | 47 |       |
| 8:30    | 69         | 2  | 2  | 7   | 0 | 0 | 80         | 51    | 1  | 4  | 2   | 0 | 58         | 20                   | 30    | 11 | 0  | 0   | 1          | 0                    | 0 | 0 | 0 | 0 | 12    | 15    | 0     | 1  | 0  | 0   | 0     | 16 |       |
| 8:45    | 50         | 3  | 2  | 5   | 0 | 0 | 60         | 44    | 2  | 0  | 2   | 0 | 48         | 20                   | 45    | 8  | 1  | 0   | 0          | 0                    | 0 | 0 | 0 | 0 | 9     | 11    | 0     | 0  | 2  | 0   | 0     | 13 |       |
| 9:00    | 64         | 2  | 2  | 5   | 0 | 0 | 73         | 60    | 0  | 0  | 2   | 0 | 62         | 21                   | 00    | 8  | 0  | 0   | 0          | 0                    | 0 | 0 | 0 | 0 | 8     | 8     | 0     | 0  | 1  | 0   | 0     | 9  |       |
| 9:15    | 66         | 2  | 2  | 5   | 1 | 0 | 76         | 51    | 2  | 4  | 0   | 0 | 57         | 21                   | 15    | 6  | 0  | 0   | 0          | 0                    | 0 | 0 | 0 | 0 | 6     | 8     | 0     | 3  | 0  | 0   | 0     | 11 |       |
| 9:30    | 50         | 4  | 2  | 6   | 0 | 0 | 62         | 55    | 2  | 0  | 0   | 0 | 57         | 21                   | 30    | 8  | 1  | 0   | 0          | 0                    | 0 | 0 | 0 | 0 | 9     | 9     | 0     | 0  | 0  | 0   | 0     | 5  |       |
| 9:45    | 57         | 1  | 1  | 2   | 0 | 0 | 61         | 58    | 1  | 0  | 0   | 0 | 59         | 21                   | 45    | 12 | 0  | 0   | 0          | 0                    | 0 | 0 | 0 | 0 | 12    | 5     | 0     | 0  | 0  | 0   | 0     | 5  |       |
| 10:00   | 51         | 2  | 3  | 3   | 0 | 0 | 59         | 48    | 0  | 2  | 2   | 0 | 52         | 22                   | 00    | 15 | 0  | 0   | 0          | 0                    | 0 | 0 | 0 | 0 | 15    | 10    | 0     | 0  | 1  | 0   | 0     | 11 |       |
| 10:15   | 48         | 2  | 0  | 3   | 0 | 0 | 53         | 44    | 0  | 0  | 4   | 0 | 43         | 22                   | 15    | 10 | 0  | 0   | 0          | 0                    | 0 | 0 | 0 | 0 | 10    | 5     | 0     | 0  | 0  | 0   | 0     | 5  |       |
| 10:30   | 40         | 0  | 0  | 6   | 0 | 0 | 46         | 40    | 0  | 0  | 3   | 0 | 40         | 22                   | 30    | 8  | 0  | 0   | 1          | 0                    | 0 | 0 | 0 | 0 | 9     | 12    | 0     | 0  | 0  | 0   | 0     | 12 |       |
| 10:45   | 51         | 0  | 1  | 2   | 0 | 0 | 54         | 35    | 0  | 0  | 4   | 0 | 39         | 22                   | 45    | 6  | 0  | 0   | 0          | 0                    | 0 | 0 | 0 | 0 | 6     | 8     | 0     | 0  | 0  | 0   | 0     | 8  |       |
| 11:00   | 66         | 1  | 0  | 2   | 0 | 0 | 69         | 44    | 1  | 0  | 1   | 0 | 46         | 23                   | 00    | 5  | 0  | 0   | 0          | 0                    | 0 | 0 | 0 | 0 | 5     | 8     | 0     | 0  | 0  | 0   | 0     | 8  |       |
| 11:15   | 61         | 0  | 0  | 1   | 0 | 0 | 62         | 30    | 0  | 1  | 2   | 0 | 33         | 23                   | 15    | 1  | 0  | 0   | 1          | 0                    | 0 | 0 | 0 | 0 | 2     | 6     | 0     | 0  | 0  | 0   | 0     | 6  |       |
| 11:30   | 58         | 0  | 0  | 4   | 0 | 0 | 62         | 33    | 0  | 0  | 0   | 0 | 33         | 23                   | 30    | 2  | 0  | 0   | 2          | 0                    | 0 | 0 | 0 | 0 | 4     | 5     | 0     | 0  | 0  | 0   | 0     | 5  |       |
| 11:45   | 48         | 1  | 0  | 2   | 0 | 0 | 51         | 42    | 0  | 0  | 2   | 0 | 44         | 23                   | 45    | 2  | 0  | 1   | 1          | 0                    | 0 | 0 | 0 | 0 | 4     | 5     | 0     | 0  | 1  | 0   | 0     | 6  |       |
| TOTAL   | 1,680      | 30 | 57 | 146 | 3 | 0 | 1,916      | 1,192 | 24 | 32 | 106 | 1 | 1,355      | TOTAL                | 1,245 | 26 | 24 | 113 | 0          | 0                    | 0 | 0 | 0 | 0 | 0     | 1,408 | 1,809 | 17 | 30 | 205 | 0     | 0  | 2,061 |
|         |            |    |    |     |   |   |            |       |    |    |     |   |            | PM PEAK HOUR 5:45 PM |       |    |    |     |            | PM PEAK HOUR 4:30 PM |   |   |   |   |       | TOTAL |       |    |    |     |       |    |       |
|         |            |    |    |     |   |   |            |       |    |    |     |   |            | PM PEAK VOLUME       |       |    |    |     |            | PM PEAK VOLUME       |   |   |   |   |       | TOTAL |       |    |    |     |       |    |       |
|         |            |    |    |     |   |   |            |       |    |    |     |   |            | 201                  |       |    |    |     |            | 288                  |   |   |   |   |       | 2,061 |       |    |    |     |       |    |       |

|             |       |    |    |     |   |   |       |       |    |    |   |
|-------------|-------|----|----|-----|---|---|-------|-------|----|----|---|
| DAILY TOTAL | 2,925 | 56 | 81 | 259 | 3 | 0 | 3,324 | 3,001 | 41 | 62 | 3 |
|-------------|-------|----|----|-----|---|---|-------|-------|----|----|---|

## PREPARED BY PACIFIC TRAFFIC DATA SERVICES

**CITY:** FONTANA  
**LOCATION:** CITRUS S/O SAN BERNARDINO

|             |         |                    |         |                       |      |      |        |       |      |      |      |      |      |        |  |
|-------------|---------|--------------------|---------|-----------------------|------|------|--------|-------|------|------|------|------|------|--------|--|
|             | CLASS 1 | PASSENGER VEHICLES | CLASS 4 | 4 OR MORE AXLE TRUCKS |      |      |        |       |      |      |      |      |      |        |  |
|             | CLASS 2 | 2-AXLE TRUCKS      | CLASS 5 | RECREATION VEHICLES   |      |      |        |       |      |      |      |      |      |        |  |
|             | CLASS 3 | 3-AXLE TRUCKS      | CLASS 6 | BUSES                 |      |      |        |       |      |      |      |      |      |        |  |
| DAILY TOTAL | 7,833   | 65                 | 79      | 359                   | 16   | 4    | 8,356  | 7,184 | 55   | 143  | 396  | 3    | 1    | 7,782  |  |
| % OF TOTAL  | 93.7%   | 0.8%               | 0.9%    | 4.3%                  | 0.2% | 0.0% | 100.0% | 92.3% | 0.7% | 1.8% | 5.1% | 0.0% | 0.0% | 100.0% |  |

PREPARED BY PACIFIC TRAFFIC DATA SERVICES

CITY: FONTANA

LOCATION: TIRUPA F/O OIFANADER

|                       | CLASS 1     | CLASS 2     | CLASS 3     | CLASS 4     | CLASS 5     | CLASS 6     |
|-----------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| PASSENGER VEHICLES    |             |             |             |             |             |             |
| 2-AXLE TRUCKS         |             |             |             |             |             |             |
| 3-AXLE TRUCKS         |             |             |             |             |             |             |
| 4 OR MORE AXLE TRUCKS |             |             |             |             |             |             |
| RECREATION VEHICLES   |             |             |             |             |             |             |
| BUSSES                |             |             |             |             |             |             |
|                       | DAILY TOTAL | DAILY TOTAL | DAILY TOTAL | DAILY TOTAL | DAILY TOTAL | DAILY TOTAL |
|                       | 6,358       | 60          | 53          | 227         | 6           | 8           |
|                       | 94.7%       | 0.9%        | 0.8%        | 3.4%        | 0.1%        | 0.1%        |
|                       | % OF TOTAL  | % OF TOTAL  | % OF TOTAL  | % OF TOTAL  | % OF TOTAL  | % OF TOTAL  |
|                       | 100.0%      | 0.7%        | 0.8%        | 3.7%        | 0.0%        | 0.2%        |
|                       | 100.0%      | 100.0%      | 100.0%      | 100.0%      | 100.0%      | 100.0%      |

| CLASS 1 | PASSENGER VEHICLES | CLASS 4 | 4 OR MORE AXLE TRUCKS |
|---------|--------------------|---------|-----------------------|
| CLASS 2 | 2-AXLE TRUCKS      | CLASS 5 | RECREATION VEHICLES   |
| CLASS 3 | 3-AXLE TRUCKS      | CLASS 6 | BUSSES                |

PREPARED BY PACIFIC TRAFFIC DATA SERVICES

|                  |                   |
|------------------|-------------------|
| <b>CITY:</b>     | FONTANA           |
| <b>LOCATION:</b> | SIERRA S/O SLOVER |

[illegible]

| CLASS 1 | PASSENGER VEHICLES | CLASS 4 | 4 OR MORE AXLE TRUCKS |
|---------|--------------------|---------|-----------------------|
| CLASS 2 | 2-AXLE TRUCKS      | CLASS 5 | RECREATION VEHICLES   |
| CLASS 3 | 3-AXLE TRUCKS      | CLASS 6 | BUSSES                |

PREPARED BY PACIFIC TRAFFIC DATA SERVICES

**CITY:** FONTANA  
**LOCATION:** SIERRA S/O JURUPA

|                    | CLASS 1 | CLASS 2 | CLASS 3 | CLASS 4 | CLASS 5 | CLASS 6 | 4 OR MORE AXLE TRUCKS<br>RECREATION VEHICLES<br>BUSSSES | DAILY TOTAL | % OF TOTAL | 10,152 | 166  | 114  | 239  | 7    | 17   | 10,695 | 8,872 | 246  | 91   | 195  | 5    | 16   | 9,425  |
|--------------------|---------|---------|---------|---------|---------|---------|---------------------------------------------------------|-------------|------------|--------|------|------|------|------|------|--------|-------|------|------|------|------|------|--------|
| PASSENGER VEHICLES |         |         |         |         |         |         |                                                         |             |            | 94.9%  | 1.6% | 1.1% | 2.2% | 0.1% | 0.2% | 100.0% | 94.1% | 2.6% | 1.0% | 2.1% | 0.1% | 0.2% | 100.0% |

| CLASS 1 | PASSENGER VEHICLES | CLASS 4 | 4 OR MORE AXLE TRUCKS |
|---------|--------------------|---------|-----------------------|
| CLASS 2 | 2-AXLE TRUCKS      | CLASS 5 | RECREATION VEHICLES   |
| CLASS 3 | 3-AXLE TRUCKS      | CLASS 6 | BUSSES                |

# 24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

PREPARED BY PACIFIC TRAFFIC DATA SERVICES

DATE: 02/19/09  
JOB #: CA09-0220-1-035

THURSDAY

CITY: FONTANA  
LOCATION: ARMSTRONG S/O SIERRA

| TIME  | NORTHBOUND |     |    |     |   |   | SOUTHBOUND     |       |     |    |     |   | NORTHBOUND |                |       |       |    |    | SOUTHBOUND |   |       |       |       |     | TOTAL |     |   |       |       |
|-------|------------|-----|----|-----|---|---|----------------|-------|-----|----|-----|---|------------|----------------|-------|-------|----|----|------------|---|-------|-------|-------|-----|-------|-----|---|-------|-------|
|       | 1          | 2   | 3  | 4   | 5 | 6 | TOTAL          | 1     | 2   | 3  | 4   | 5 | 6          | TOTAL          | 1     | 2     | 3  | 4  | 5          | 6 | TOTAL | 1     | 2     | 3   | 4     | 5   | 6 | TOTAL |       |
| 0:00  | 1          | 0   | 0  | 0   | 0 | 0 | 1              | 5     | 0   | 0  | 0   | 0 | 0          | 5              | 84    | 2     | 0  | 0  | 0          | 0 | 0     | 87    | 81    | 5   | 3     | 5   | 0 | 0     | 94    |
| 0:15  | 8          | 0   | 1  | 0   | 0 | 0 | 9              | 4     | 0   | 0  | 0   | 0 | 0          | 4              | 84    | 4     | 2  | 0  | 0          | 0 | 0     | 90    | 84    | 2   | 1     | 2   | 0 | 1     | 90    |
| 0:30  | 5          | 0   | 0  | 0   | 0 | 0 | 5              | 3     | 0   | 1  | 0   | 0 | 0          | 4              | 88    | 3     | 1  | 1  | 0          | 0 | 0     | 93    | 88    | 5   | 3     | 5   | 0 | 0     | 101   |
| 0:45  | 13         | 1   | 0  | 0   | 0 | 0 | 14             | 2     | 1   | 0  | 2   | 0 | 0          | 5              | 96    | 2     | 0  | 2  | 0          | 0 | 1     | 101   | 95    | 5   | 2     | 6   | 0 | 0     | 108   |
| 1:00  | 9          | 0   | 0  | 0   | 0 | 0 | 9              | 1     | 0   | 0  | 3   | 0 | 0          | 4              | 77    | 4     | 1  | 5  | 1          | 0 | 0     | 88    | 77    | 3   | 5     | 6   | 0 | 0     | 91    |
| 1:15  | 10         | 0   | 0  | 1   | 0 | 0 | 11             | 0     | 0   | 0  | 0   | 0 | 0          | 0              | 104   | 5     | 2  | 3  | 0          | 0 | 0     | 114   | 67    | 3   | 3     | 2   | 0 | 1     | 76    |
| 1:30  | 12         | 2   | 0  | 0   | 0 | 0 | 14             | 2     | 0   | 0  | 0   | 0 | 0          | 2              | 114   | 5     | 2  | 2  | 0          | 0 | 0     | 123   | 84    | 2   | 2     | 2   | 1 | 0     | 91    |
| 1:45  | 5          | 1   | 0  | 0   | 0 | 0 | 6              | 8     | 0   | 0  | 2   | 0 | 0          | 10             | 126   | 5     | 3  | 1  | 0          | 0 | 0     | 135   | 105   | 4   | 4     | 3   | 0 | 0     | 116   |
| 2:00  | 4          | 0   | 0  | 0   | 0 | 0 | 4              | 5     | 0   | 0  | 1   | 0 | 0          | 6              | 107   | 6     | 2  | 0  | 0          | 0 | 0     | 115   | 115   | 5   | 2     | 2   | 0 | 0     | 124   |
| 2:15  | 15         | 0   | 0  | 1   | 0 | 0 | 16             | 12    | 0   | 0  | 0   | 0 | 0          | 12             | 118   | 5     | 6  | 1  | 1          | 1 | 2     | 133   | 101   | 8   | 2     | 5   | 0 | 1     | 117   |
| 2:30  | 10         | 0   | 0  | 0   | 0 | 0 | 10             | 6     | 1   | 1  | 0   | 0 | 0          | 8              | 143   | 109   | 7  | 7  | 5          | 0 | 1     | 129   | 126   | 5   | 4     | 7   | 0 | 0     | 142   |
| 2:45  | 16         | 0   | 0  | 0   | 0 | 0 | 16             | 5     | 1   | 0  | 1   | 0 | 0          | 7              | 113   | 2     | 5  | 2  | 0          | 0 | 0     | 122   | 115   | 8   | 5     | 5   | 0 | 0     | 133   |
| 3:00  | 9          | 1   | 0  | 0   | 0 | 0 | 10             | 12    | 1   | 0  | 2   | 0 | 0          | 15             | 124   | 4     | 3  | 4  | 0          | 0 | 0     | 135   | 135   | 3   | 6     | 4   | 1 | 0     | 149   |
| 3:15  | 10         | 1   | 1  | 3   | 0 | 0 | 15             | 18    | 0   | 0  | 0   | 0 | 0          | 18             | 151   | 1     | 1  | 3  | 0          | 1 | 0     | 157   | 154   | 4   | 4     | 3   | 0 | 0     | 165   |
| 3:30  | 26         | 0   | 0  | 0   | 0 | 0 | 26             | 11    | 2   | 0  | 0   | 0 | 0          | 13             | 162   | 3     | 3  | 1  | 1          | 0 | 0     | 170   | 188   | 10  | 7     | 3   | 0 | 0     | 208   |
| 3:45  | 33         | 2   | 0  | 1   | 0 | 0 | 36             | 18    | 2   | 2  | 2   | 0 | 0          | 24             | 188   | 3     | 3  | 3  | 1          | 0 | 0     | 198   | 175   | 3   | 0     | 2   | 0 | 1     | 181   |
| 4:00  | 16         | 1   | 0  | 0   | 0 | 0 | 17             | 16    | 1   | 1  | 1   | 0 | 0          | 19             | 195   | 1     | 3  | 4  | 2          | 0 | 0     | 205   | 199   | 1   | 5     | 2   | 0 | 1     | 208   |
| 4:15  | 30         | 2   | 0  | 1   | 0 | 0 | 33             | 20    | 0   | 0  | 0   | 0 | 0          | 20             | 201   | 0     | 4  | 5  | 0          | 0 | 0     | 210   | 201   | 2   | 5     | 3   | 0 | 0     | 211   |
| 4:30  | 35         | 1   | 0  | 2   | 0 | 0 | 38             | 25    | 0   | 0  | 2   | 0 | 0          | 27             | 226   | 3     | 5  | 3  | 1          | 1 | 1     | 239   | 184   | 2   | 3     | 0   | 0 | 0     | 189   |
| 4:45  | 44         | 2   | 0  | 5   | 0 | 0 | 51             | 30    | 1   | 0  | 1   | 0 | 0          | 32             | 221   | 1     | 1  | 5  | 1          | 0 | 0     | 229   | 206   | 1   | 2     | 2   | 0 | 0     | 211   |
| 5:00  | 45         | 2   | 1  | 5   | 0 | 0 | 53             | 62    | 2   | 0  | 5   | 0 | 0          | 69             | 232   | 1     | 3  | 6  | 0          | 0 | 0     | 242   | 215   | 1   | 2     | 2   | 0 | 0     | 221   |
| 5:15  | 51         | 2   | 1  | 7   | 0 | 0 | 61             | 84    | 3   | 0  | 6   | 0 | 0          | 93             | 244   | 0     | 3  | 5  | 0          | 0 | 0     | 252   | 221   | 4   | 1     | 2   | 0 | 0     | 228   |
| 5:30  | 88         | 5   | 0  | 8   | 0 | 0 | 101            | 70    | 2   | 1  | 5   | 0 | 0          | 78             | 218   | 0     | 1  | 4  | 0          | 1 | 1     | 224   | 254   | 3   | 2     | 4   | 0 | 0     | 263   |
| 5:45  | 105        | 4   | 0  | 5   | 0 | 0 | 114            | 115   | 2   | 0  | 4   | 0 | 0          | 121            | 226   | 2     | 2  | 8  | 0          | 0 | 0     | 238   | 184   | 2   | 2     | 5   | 0 | 1     | 194   |
| 6:00  | 135        | 5   | 1  | 4   | 0 | 0 | 145            | 102   | 1   | 0  | 6   | 0 | 0          | 109            | 189   | 3     | 0  | 9  | 0          | 0 | 0     | 201   | 162   | 5   | 3     | 6   | 0 | 0     | 176   |
| 6:15  | 121        | 3   | 2  | 2   | 0 | 0 | 128            | 162   | 0   | 1  | 2   | 0 | 0          | 165            | 185   | 1     | 0  | 5  | 0          | 0 | 0     | 207   | 154   | 2   | 5     | 5   | 0 | 0     | 166   |
| 6:30  | 125        | 8   | 0  | 1   | 0 | 0 | 134            | 151   | 2   | 1  | 5   | 0 | 2          | 161            | 183   | 0     | 1  | 4  | 0          | 1 | 1     | 182   | 141   | 2   | 2     | 2   | 0 | 0     | 147   |
| 6:45  | 151        | 3   | 3  | 6   | 0 | 0 | 163            | 154   | 6   | 1  | 6   | 0 | 2          | 169            | 184   | 2     | 2  | 2  | 0          | 0 | 0     | 148   | 132   | 1   | 5     | 5   | 0 | 0     | 143   |
| 7:00  | 176        | 8   | 0  | 6   | 0 | 0 | 190            | 171   | 5   | 1  | 3   | 0 | 1          | 181            | 190   | 3     | 0  | 2  | 0          | 0 | 0     | 140   | 111   | 2   | 4     | 6   | 0 | 1     | 124   |
| 7:15  | 188        | 2   | 0  | 1   | 0 | 0 | 191            | 168   | 9   | 3  | 4   | 0 | 1          | 185            | 191   | 0     | 1  | 3  | 0          | 0 | 2     | 150   | 106   | 0   | 2     | 8   | 1 | 0     | 117   |
| 7:30  | 226        | 3   | 0  | 1   | 0 | 0 | 230            | 195   | 5   | 0  | 7   | 0 | 0          | 207            | 193   | 0     | 2  | 2  | 0          | 0 | 0     | 110   | 117   | 0   | 2     | 5   | 0 | 0     | 124   |
| 7:45  | 214        | 3   | 1  | 6   | 0 | 0 | 224            | 196   | 6   | 0  | 4   | 0 | 1          | 207            | 194   | 88    | 1  | 0  | 3          | 0 | 0     | 92    | 84    | 1   | 2     | 2   | 0 | 0     | 89    |
| 8:00  | 217        | 1   | 0  | 3   | 0 | 0 | 221            | 210   | 6   | 2  | 2   | 0 | 1          | 221            | 200   | 84    | 2  | 0  | 1          | 0 | 0     | 87    | 88    | 0   | 1     | 2   | 0 | 0     | 92    |
| 8:15  | 174        | 3   | 2  | 6   | 0 | 0 | 185            | 185   | 4   | 0  | 3   | 0 | 0          | 192            | 201   | 35    | 0  | 0  | 0          | 1 | 0     | 36    | 72    | 1   | 0     | 0   | 0 | 0     | 73    |
| 8:30  | 171        | 7   | 0  | 5   | 0 | 0 | 183            | 197   | 1   | 2  | 4   | 0 | 1          | 205            | 203   | 45    | 0  | 0  | 0          | 0 | 0     | 52    | 51    | 0   | 0     | 1   | 0 | 0     | 52    |
| 8:45  | 174        | 2   | 1  | 5   | 0 | 0 | 182            | 168   | 10  | 4  | 3   | 0 | 0          | 185            | 204   | 51    | 1  | 0  | 0          | 0 | 0     | 52    | 44    | 0   | 1     | 2   | 0 | 0     | 47    |
| 9:00  | 145        | 3   | 0  | 7   | 0 | 0 | 155            | 141   | 8   | 0  | 5   | 0 | 1          | 155            | 210   | 32    | 0  | 1  | 0          | 0 | 0     | 33    | 35    | 1   | 2     | 0   | 0 | 0     | 38    |
| 9:15  | 151        | 4   | 0  | 8   | 0 | 0 | 163            | 152   | 4   | 2  | 6   | 0 | 0          | 164            | 211   | 20    | 0  | 0  | 1          | 0 | 0     | 21    | 33    | 2   | 0     | 0   | 0 | 0     | 35    |
| 9:30  | 162        | 5   | 1  | 4   | 0 | 0 | 172            | 132   | 5   | 1  | 8   | 0 | 0          | 146            | 213   | 16    | 0  | 0  | 0          | 0 | 0     | 16    | 45    | 1   | 0     | 1   | 0 | 0     | 47    |
| 9:45  | 131        | 5   | 2  | 5   | 0 | 0 | 143            | 121   | 5   | 2  | 2   | 0 | 0          | 130            | 214   | 11    | 0  | 0  | 0          | 0 | 0     | 11    | 12    | 1   | 0     | 2   | 0 | 0     | 15    |
| 10:00 | 121        | 5   | 0  | 8   | 0 | 0 | 134            | 105   | 5   | 2  | 2   | 1 | 1          | 116            | 220   | 19    | 1  | 0  | 0          | 0 | 0     | 20    | 15    | 1   | 1     | 0   | 0 | 0     | 17    |
| 10:15 | 115        | 4   | 0  | 4   | 0 | 0 | 123            | 115   | 8   | 1  | 4   | 0 | 0          | 128            | 221   | 8     | 0  | 0  | 1          | 0 | 0     | 9     | 26    | 0   | 0     | 0   | 0 | 0     | 26    |
| 10:30 | 101        | 5   | 0  | 2   | 0 | 0 | 108            | 126   | 5   | 0  | 2   | 0 | 0          | 133            | 223   | 8     | 0  | 0  | 0          | 0 | 0     | 8     | 8     | 1   | 0     | 1   | 0 | 0     | 10    |
| 10:45 | 88         | 2   | 0  | 5   | 0 | 0 | 95             | 115   | 6   | 0  | 2   | 0 | 0          | 123            | 224   | 6     | 0  | 0  | 0          | 0 | 0     | 6     | 7     | 0   | 0     | 1   | 0 | 0     | 8     |
| 11:00 | 95         | 2   | 1  | 3   | 0 | 0 | 101            | 102   | 6   | 2  | 3   | 0 | 1          | 114            | 230   | 8     | 0  | 0  | 0          | 0 | 0     | 8     | 2     | 0   | 0     | 2   | 0 | 0     | 4     |
| 11:15 | 101        | 2   | 0  | 1   | 0 | 0 | 104            | 88    | 2   | 0  | 5   | 0 | 0          | 95             | 231   | 9     | 0  | 0  | 0          | 0 | 0     | 9     | 8     | 0   | 1     | 0   | 0 | 0     | 9     |
| 11:30 | 90         | 0   | 0  | 2   | 0 | 0 | 92             | 84    | 3   | 0  | 2   | 0 | 0          | 89             | 233   | 5     | 0  | 0  | 0          | 0 | 0     | 5     | 5     | 0   | 0     | 0   | 0 | 0     | 5     |
| 11:45 | 74         | 1   | 2  | 3   | 0 | 0 | 80             | 95    | 2   | 1  | 1   | 0 | 0          | 99             | 234   | 3     | 0  | 0  | 0          | 0 | 0     | 3     | 4     | 0   | 0     | 0   | 0 | 0     | 4     |
| TOTAL | 4,046      | 113 | 20 | 137 | 0 | 0 | 4,316          | 3,969 | 133 | 32 | 129 | 1 | 12         | 4,276          | TOTAL | 5,147 | 85 | 70 | 107        | 9 | 10    | 5,428 | 4,916 | 112 | 106   | 133 | 3 | 9     | 5,279 |
|       |            |     |    |     |   |   | 866            |       |     |    |     |   |            | 827            |       |       |    |    |            |   |       | 962   |       |     |       |     |   | 923   |       |
|       |            |     |    |     |   |   | AM PEAK HOUR   |       |     |    |     |   |            | 7:30 AM        |       |       |    |    |            |   |       |       |       |     |       |     |   |       |       |
|       |            |     |    |     |   |   | AM PEAK VOLUME |       |     |    |     |   |            | AM PEAK VOLUME |       |       |    |    |            |   |       |       |       |     |       |     |   |       |       |
|       |            |     |    |     |   |   | AM PEAK HOUR   |       |     |    |     |   |            | 7:30 AM        |       |       |    |    |            |   |       |       |       |     |       |     |   |       |       |
|       |            |     |    |     |   |   | AM PEAK VOLUME |       |     |    |     |   |            | AM PEAK VOLUME |       |       |    |    |            |   |       |       |       |     |       |     |   |       |       |
|       |            |     |    |     |   |   | AM PEAK HOUR   |       |     |    |     |   |            | 7:30 AM        |       |       |    |    |            |   |       |       |       |     |       |     |   |       |       |
|       |            |     |    |     |   |   | AM PEAK VOLUME |       |     |    |     |   |            | AM PEAK VOLUME |       |       |    |    |            |   |       |       |       |     |       |     |   |       |       |

|             |       |      |      |      |      |      |        |       |      |      |      |      |      |        |
|-------------|-------|------|------|------|------|------|--------|-------|------|------|------|------|------|--------|
| DAILY TOTAL | 9,193 | 198  | 90   | 244  | 9    | 10   | 9,744  | 8,885 | 245  | 138  | 262  | 4    | 21   | 9,555  |
| % OF TOTAL  | 94.3% | 2.0% | 0.9% | 2.5% | 0.1% | 0.1% | 100.0% | 93.0% | 2.6% | 1.4% | 2.7% | 0.0% | 0.2% | 100.0% |

|         |                    |         |                       |
|---------|--------------------|---------|-----------------------|
| CLASS 1 | PASSENGER VEHICLES | CLASS 4 | 4 OR MORE AXLE TRUCKS |
| CLASS 2 | 2-AXLE TRUCKS      | CLASS 5 | RECREATION VEHICLES   |
| CLASS 3 | 3-AXLE TRUCKS      | CLASS 6 | BUSES                 |

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## **Intersections**



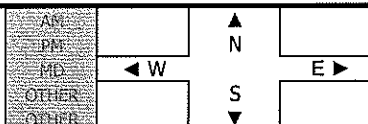
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# Intersection Turning Movement

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

|                             |                                             |                                    |                                       |                            |
|-----------------------------|---------------------------------------------|------------------------------------|---------------------------------------|----------------------------|
| DATE:<br>2/10/09<br>TUESDAY | LOCATION:<br>NORTH & SOUTH:<br>EAST & WEST: | FONTANA<br>I-15 SB RAMPS<br>JURUPA | PROJECT #:<br>LOCATION #:<br>CONTROL: | CA09-0213-1<br>1<br>SIGNAL |
|-----------------------------|---------------------------------------------|------------------------------------|---------------------------------------|----------------------------|

NOTES:



|    | NORTHBOUND<br>I-15 SB RAMPS |         |         | SOUTHBOUND<br>I-15 SB RAMPS |           |           | EASTBOUND<br>JURUPA |         |         | WESTBOUND<br>JURUPA |         |         | TOTAL |       |
|----|-----------------------------|---------|---------|-----------------------------|-----------|-----------|---------------------|---------|---------|---------------------|---------|---------|-------|-------|
|    | NL<br>X                     | NT<br>X | NR<br>X | SL<br>1.3                   | ST<br>0.3 | SR<br>1.3 | EL<br>X             | ET<br>3 | ER<br>1 | WL<br>2             | WT<br>3 | WR<br>X |       |       |
| AM | 6:30 AM                     |         |         |                             |           |           |                     |         |         |                     |         |         | 0     |       |
|    | 6:45 AM                     |         |         |                             |           |           |                     |         |         |                     |         |         | 0     |       |
|    | 7:00 AM                     |         |         | 139                         | 1         | 107       |                     | 70      | 17      | 49                  | 115     |         | 498   |       |
|    | 7:15 AM                     |         |         | 161                         | 0         | 126       |                     | 65      | 27      | 58                  | 129     |         | 566   |       |
|    | 7:30 AM                     |         |         | 184                         | 0         | 154       |                     | 71      | 41      | 49                  | 149     |         | 648   |       |
|    | 7:45 AM                     |         |         | 201                         | 0         | 170       |                     | 63      | 29      | 56                  | 156     |         | 675   |       |
|    | 8:00 AM                     |         |         | 168                         | 1         | 135       |                     | 74      | 29      | 58                  | 144     |         | 609   |       |
|    | 8:15 AM                     |         |         | 138                         | 0         | 83        |                     | 97      | 36      | 47                  | 131     |         | 532   |       |
|    | 8:30 AM                     |         |         | 97                          | 0         | 77        |                     | 95      | 35      | 52                  | 124     |         | 480   |       |
|    | 8:45 AM                     |         |         | 98                          | 0         | 63        |                     | 88      | 43      | 33                  | 128     |         | 453   |       |
|    | 9:00 AM                     |         |         |                             |           |           |                     |         |         |                     |         |         | 0     |       |
|    | 9:15 AM                     |         |         |                             |           |           |                     |         |         |                     |         |         | 0     |       |
|    | VOLUMES                     | 0       | 0       | 0                           | 1,186     | 2         | 915                 | 0       | 623     | 257                 | 402     | 1,076   | 0     | 4,461 |
|    | APPROACH %                  | 0%      | 0%      | 0%                          | 56%       | 0%        | 44%                 | 0%      | 71%     | 29%                 | 27%     | 73%     | 0%    |       |
|    | APP/DEPART                  | 0       | /       | 0                           | 2,103     | /         | 661                 | 880     | /       | 1,809               | 1,478   | /       | 1,991 | 0     |
| PM | BEGIN PEAK HR               | 7:15 AM |         |                             |           |           |                     |         |         |                     |         |         |       |       |
|    | VOLUMES                     | 0       | 0       | 0                           | 714       | 1         | 585                 | 0       | 273     | 126                 | 221     | 578     | 0     | 2,498 |
|    | APPROACH %                  | 0%      | 0%      | 0%                          | 55%       | 0%        | 45%                 | 0%      | 68%     | 32%                 | 28%     | 72%     | 0%    |       |
|    | PEAK HR FACTOR              | 0.000   |         |                             | 0.876     |           |                     | 0.891   |         |                     | 0.942   |         |       | 0.925 |
|    | APP/DEPART                  | 0       | /       | 0                           | 1,300     | /         | 348                 | 399     | /       | 987                 | 799     | /       | 1,163 | 0     |
|    | 3:30 PM                     |         |         |                             |           |           |                     |         |         |                     |         |         |       | 0     |
|    | 3:45 PM                     |         |         |                             |           |           |                     |         |         |                     |         |         |       | 0     |
|    | 4:00 PM                     |         |         |                             | 93        | 1         | 74                  |         | 201     | 106                 | 97      | 90      |       | 662   |
|    | 4:15 PM                     |         |         |                             | 97        | 3         | 95                  |         | 190     | 99                  | 95      | 92      |       | 671   |
|    | 4:30 PM                     |         |         |                             | 89        | 5         | 89                  |         | 229     | 113                 | 101     | 98      |       | 724   |
|    | 4:45 PM                     |         |         |                             | 104       | 6         | 77                  |         | 212     | 117                 | 96      | 87      |       | 699   |
|    | 5:00 PM                     |         |         |                             | 91        | 3         | 89                  |         | 205     | 143                 | 101     | 101     |       | 733   |
|    | 5:15 PM                     |         |         |                             | 82        | 10        | 85                  |         | 202     | 128                 | 95      | 93      |       | 695   |
|    | 5:30 PM                     |         |         |                             | 88        | 2         | 97                  |         | 183     | 105                 | 103     | 96      |       | 674   |
|    | 5:45 PM                     |         |         |                             | 101       | 2         | 80                  |         | 143     | 91                  | 96      | 95      |       | 608   |
|    | 6:00 PM                     |         |         |                             |           |           |                     |         |         |                     |         |         |       | 0     |
|    | 6:15 PM                     |         |         |                             |           |           |                     |         |         |                     |         |         |       | 0     |
|    | VOLUMES                     | 0       | 0       | 0                           | 745       | 32        | 686                 | 0       | 1,565   | 902                 | 784     | 752     | 0     | 5,466 |
|    | APPROACH %                  | 0%      | 0%      | 0%                          | 51%       | 2%        | 47%                 | 0%      | 63%     | 37%                 | 51%     | 49%     | 0%    |       |
|    | APP/DEPART                  | 0       | /       | 0                           | 1,463     | /         | 1,718               | 2,467   | /       | 2,310               | 1,536   | /       | 1,438 | 0     |
|    | BEGIN PEAK HR               | 4:30 PM |         |                             |           |           |                     |         |         |                     |         |         |       |       |
|    | VOLUMES                     | 0       | 0       | 0                           | 366       | 24        | 340                 | 0       | 848     | 501                 | 393     | 379     | 0     | 2,851 |
|    | APPROACH %                  | 0%      | 0%      | 0%                          | 50%       | 3%        | 47%                 | 0%      | 63%     | 37%                 | 51%     | 49%     | 0%    |       |
|    | PEAK HR FACTOR              | 0.000   |         |                             | 0.976     |           |                     | 0.969   |         |                     | 0.955   |         |       | 0.972 |
|    | APP/DEPART                  | 0       | /       | 0                           | 730       | /         | 918                 | 1,349   | /       | 1,214               | 772     | /       | 719   | 0     |

# Intersection Turning Movement

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

|                             |                                             |                                    |                                       |                            |
|-----------------------------|---------------------------------------------|------------------------------------|---------------------------------------|----------------------------|
| DATE:<br>2/10/09<br>TUESDAY | LOCATION:<br>NORTH & SOUTH:<br>EAST & WEST: | FONTANA<br>I-15 NB RAMPS<br>JURUPA | PROJECT #:<br>LOCATION #:<br>CONTROL: | CA09-0213-1<br>2<br>SIGNAL |
|-----------------------------|---------------------------------------------|------------------------------------|---------------------------------------|----------------------------|

|        |                                                                                                                                                |
|--------|------------------------------------------------------------------------------------------------------------------------------------------------|
| NOTES: | <div> <div>AM</div> <div>PM</div> <div>ND</div> <div>OTHER</div> </div> <div> <div>▲ N</div> <div>◀ W</div> <div>S</div> <div>▶ E</div> </div> |
|--------|------------------------------------------------------------------------------------------------------------------------------------------------|

|        | NORTHBOUND<br>I-15 NB RAMPS |           |           | SOUTHBOUND<br>I-15 NB RAMPS |         |         | EASTBOUND<br>JURUPA |         |         | WESTBOUND<br>JURUPA |         |         |       |
|--------|-----------------------------|-----------|-----------|-----------------------------|---------|---------|---------------------|---------|---------|---------------------|---------|---------|-------|
| LANES: | NL<br>1.3                   | NT<br>0.3 | NR<br>1.3 | SL<br>X                     | ST<br>X | SR<br>X | EL<br>2             | ET<br>3 | ER<br>X | WL<br>X             | WT<br>3 | WR<br>1 | TOTAL |

|    |                |         |    |       |       |    |       |       |       |       |       |       |       |
|----|----------------|---------|----|-------|-------|----|-------|-------|-------|-------|-------|-------|-------|
| AM | 6:30 AM        |         |    |       |       |    |       |       |       |       |       |       | 0     |
|    | 6:45 AM        |         |    |       |       |    |       |       |       |       |       |       | 0     |
|    | 7:00 AM        | 53      | 0  | 106   |       |    | 40    | 162   |       |       | 106   | 113   | 580   |
|    | 7:15 AM        | 54      | 1  | 120   |       |    | 36    | 184   |       |       | 128   | 116   | 639   |
|    | 7:30 AM        | 77      | 0  | 122   |       |    | 35    | 211   |       |       | 116   | 110   | 671   |
|    | 7:45 AM        | 91      | 0  | 132   |       |    | 42    | 219   |       |       | 120   | 95    | 699   |
|    | 8:00 AM        | 85      | 0  | 111   |       |    | 45    | 199   |       |       | 115   | 82    | 637   |
|    | 8:15 AM        | 84      | 0  | 107   |       |    | 46    | 194   |       |       | 101   | 82    | 614   |
|    | 8:30 AM        | 72      | 0  | 93    |       |    | 49    | 151   |       |       | 103   | 104   | 572   |
|    | 8:45 AM        | 68      | 0  | 101   |       |    | 58    | 133   |       |       | 97    | 89    | 546   |
|    | 9:00 AM        |         |    |       |       |    |       |       |       |       |       |       | 0     |
|    | 9:15 AM        |         |    |       |       |    |       |       |       |       |       |       | 0     |
|    | VOLUMES        | 584     | 1  | 892   | 0     | 0  | 351   | 1,453 | 0     | 0     | 886   | 791   | 4,958 |
|    | APPROACH %     | 40%     | 0% | 60%   | 0%    | 0% | 19%   | 81%   | 0%    | 0%    | 53%   | 47%   |       |
| PM | APP/DEPART     | 1,477   | /  | 1,143 | 0     | /  | 1,804 | /     | 2,345 | 1,677 | /     | 1,470 | 0     |
|    | BEGIN PEAK HR  | 7:15 AM |    |       |       |    |       |       |       |       |       |       |       |
|    | VOLUMES        | 307     | 1  | 485   | 0     | 0  | 158   | 813   | 0     | 0     | 479   | 403   | 2,646 |
|    | APPROACH %     | 39%     | 0% | 61%   | 0%    | 0% | 16%   | 84%   | 0%    | 0%    | 54%   | 46%   |       |
|    | PEAK HR FACTOR | 0.889   |    |       | 0.000 |    |       | 0.930 |       |       | 0.904 |       |       |
|    | APP/DEPART     | 793     | /  | 562   | 0     | /  | 971   | /     | 1,298 | 882   | /     | 786   | 0     |
|    | 3:30 PM        |         |    |       |       |    |       |       |       |       |       |       | 0     |
|    | 3:45 PM        |         |    |       |       |    |       |       |       |       |       |       | 0     |
|    | 4:00 PM        | 31      | 0  | 49    |       |    | 143   | 159   |       |       | 154   | 203   | 739   |
|    | 4:15 PM        | 27      | 0  | 39    |       |    | 140   | 156   |       |       | 160   | 202   | 724   |
|    | 4:30 PM        | 31      | 1  | 51    |       |    | 143   | 166   |       |       | 173   | 202   | 767   |
|    | 4:45 PM        | 32      | 0  | 44    |       |    | 129   | 179   |       |       | 151   | 191   | 726   |
|    | 5:00 PM        | 30      | 0  | 40    |       |    | 123   | 165   |       |       | 168   | 170   | 696   |
|    | 5:15 PM        | 29      | 0  | 47    |       |    | 117   | 172   |       |       | 163   | 164   | 692   |
|    | 5:30 PM        | 32      | 0  | 41    |       |    | 105   | 159   |       |       | 161   | 145   | 643   |
|    | 5:45 PM        | 27      | 0  | 36    |       |    | 96    | 151   |       |       | 154   | 121   | 585   |
|    | 6:00 PM        |         |    |       |       |    |       |       |       |       |       |       | 0     |
|    | 6:15 PM        |         |    |       |       |    |       |       |       |       |       |       | 0     |
|    | VOLUMES        | 239     | 1  | 347   | 0     | 0  | 996   | 1,307 | 0     | 0     | 1,284 | 1,398 | 5,572 |
|    | APPROACH %     | 41%     | 0% | 59%   | 0%    | 0% | 43%   | 57%   | 0%    | 0%    | 48%   | 52%   |       |
|    | APP/DEPART     | 587     | /  | 2,395 | 0     | /  | 2,303 | /     | 1,654 | 2,682 | /     | 1,523 | 0     |
|    | BEGIN PEAK HR  | 4:00 PM |    |       |       |    |       |       |       |       |       |       |       |
|    | VOLUMES        | 121     | 1  | 183   | 0     | 0  | 555   | 660   | 0     | 0     | 638   | 798   | 2,956 |
|    | APPROACH %     | 40%     | 0% | 60%   | 0%    | 0% | 46%   | 54%   | 0%    | 0%    | 44%   | 56%   |       |
|    | PEAK HR FACTOR | 0.919   |    |       | 0.000 |    |       | 0.983 |       |       | 0.957 |       |       |
|    | APP/DEPART     | 305     | /  | 1,354 | 0     | /  | 1,215 | /     | 843   | 1,436 | /     | 759   | 0     |

# **Intersection Turning Movement**

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

|                             |                                             |                                       |                                       |                            |
|-----------------------------|---------------------------------------------|---------------------------------------|---------------------------------------|----------------------------|
| DATE:<br>2/24/09<br>TUESDAY | LOCATION:<br>NORTH & SOUTH:<br>EAST & WEST: | FONTANA<br>ETIWANDA<br>SAN BARNARDINO | PROJECT #:<br>LOCATION #:<br>CONTROL: | CA09-0213-1<br>3<br>SIGNAL |
|-----------------------------|---------------------------------------------|---------------------------------------|---------------------------------------|----------------------------|

|        |                                                                                                                                                                   |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NOTES: | <div> <div>AM</div> <div>PM</div> <div>PM</div> <div>OTHER</div> <div>OTHER</div> </div> <div> <div>▲ N</div> <div>◀ W</div> <div>◀ S</div> <div>▶ E</div> </div> |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|        | NORTHBOUND<br>ETIWANDA |         |         | SOUTHBOUND<br>ETIWANDA |         |         | EASTBOUND<br>SAN BARNARDINO |         |         | WESTBOUND<br>SAN BARNARDINO |         |         |       |
|--------|------------------------|---------|---------|------------------------|---------|---------|-----------------------------|---------|---------|-----------------------------|---------|---------|-------|
| LANES: | NL<br>1                | NT<br>2 | NR<br>1 | SL<br>1                | ST<br>2 | SR<br>1 | EL<br>2                     | ET<br>2 | ER<br>1 | WL<br>2                     | WT<br>2 | WR<br>1 | TOTAL |

|                |            |       |     |       |       |     |       |       |     |       |     |     |       |       |
|----------------|------------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-----|-----|-------|-------|
| AM             | 6:30 AM    |       |     |       |       |     |       |       |     |       |     |     |       | 0     |
|                | 6:45 AM    |       |     |       |       |     |       |       |     |       |     |     |       | 0     |
|                | 7:00 AM    | 32    | 73  | 10    | 1     | 89  | 15    | 17    | 35  | 15    | 6   | 32  | 7     | 332   |
|                | 7:15 AM    | 52    | 92  | 12    | 2     | 95  | 19    | 12    | 28  | 19    | 14  | 33  | 4     | 382   |
|                | 7:30 AM    | 60    | 85  | 27    | 1     | 97  | 22    | 14    | 44  | 25    | 9   | 46  | 4     | 434   |
|                | 7:45 AM    | 50    | 93  | 13    | 10    | 94  | 18    | 29    | 48  | 36    | 20  | 37  | 8     | 456   |
|                | 8:00 AM    | 42    | 83  | 9     | 7     | 109 | 16    | 18    | 37  | 18    | 12  | 37  | 6     | 394   |
|                | 8:15 AM    | 41    | 73  | 10    | 3     | 85  | 15    | 17    | 38  | 15    | 7   | 41  | 5     | 350   |
|                | 8:30 AM    | 40    | 76  | 17    | 9     | 76  | 21    | 22    | 38  | 26    | 9   | 35  | 6     | 375   |
|                | 8:45 AM    | 36    | 92  | 15    | 11    | 79  | 15    | 16    | 36  | 27    | 14  | 37  | 11    | 389   |
|                | 9:00 AM    |       |     |       |       |     |       |       |     |       |     |     |       | 0     |
|                | 9:15 AM    |       |     |       |       |     |       |       |     |       |     |     |       | 0     |
|                | VOLUMES    | 353   | 667 | 113   | 44    | 724 | 141   | 145   | 304 | 181   | 91  | 298 | 51    | 3,112 |
|                | APPROACH % | 31%   | 59% | 10%   | 5%    | 80% | 16%   | 23%   | 48% | 29%   | 21% | 68% | 12%   |       |
|                | APP/DEPART | 1,133 | /   | 863   | 909   | /   | 996   | 630   | /   | 461   | 440 | /   | 792   | 0     |
| BEGIN PEAK HR  | 7:15 AM    |       |     |       |       |     |       |       |     |       |     |     |       |       |
| VOLUMES        | 204        | 353   | 61  | 20    | 395   | 75  | 73    | 157   | 98  | 55    | 153 | 22  | 1,666 |       |
| APPROACH %     | 33%        | 57%   | 10% | 4%    | 81%   | 15% | 22%   | 48%   | 30% | 24%   | 67% | 10% |       |       |
| PEAK HR FACTOR | 0.898      |       |     | 0.928 |       |     | 0.726 |       |     | 0.885 |     |     | 0.913 |       |
| APP/DEPART     | 618        | /     | 448 | 490   | /     | 548 | 328   | /     | 238 | 230   | /   | 432 | 0     |       |
| PM             | 3:30 PM    |       |     |       |       |     |       |       |     |       |     |     |       | 0     |
|                | 3:45 PM    |       |     |       |       |     |       |       |     |       |     |     |       | 0     |
|                | 4:00 PM    | 45    | 95  | 11    | 5     | 138 | 30    | 51    | 122 | 73    | 14  | 36  | 6     | 626   |
|                | 4:15 PM    | 39    | 90  | 12    | 7     | 128 | 31    | 52    | 94  | 55    | 12  | 35  | 3     | 558   |
|                | 4:30 PM    | 43    | 112 | 6     | 9     | 168 | 32    | 62    | 90  | 74    | 8   | 43  | 8     | 655   |
|                | 4:45 PM    | 31    | 115 | 10    | 10    | 108 | 20    | 44    | 76  | 65    | 9   | 33  | 4     | 525   |
|                | 5:00 PM    | 57    | 153 | 14    | 9     | 90  | 15    | 66    | 85  | 82    | 15  | 38  | 3     | 627   |
|                | 5:15 PM    | 52    | 145 | 9     | 3     | 78  | 16    | 55    | 87  | 68    | 13  | 31  | 2     | 559   |
|                | 5:30 PM    | 43    | 112 | 6     | 16    | 85  | 15    | 61    | 88  | 75    | 16  | 35  | 3     | 555   |
|                | 5:45 PM    | 42    | 98  | 7     | 12    | 72  | 16    | 40    | 55  | 39    | 10  | 41  | 1     | 433   |
|                | 6:00 PM    |       |     |       |       |     |       |       |     |       |     |     |       | 0     |
|                | 6:15 PM    |       |     |       |       |     |       |       |     |       |     |     |       | 0     |
|                | VOLUMES    | 352   | 920 | 75    | 71    | 867 | 175   | 431   | 697 | 531   | 97  | 292 | 30    | 4,538 |
|                | APPROACH % | 26%   | 68% | 6%    | 6%    | 78% | 16%   | 26%   | 42% | 32%   | 23% | 70% | 7%    |       |
|                | APP/DEPART | 1,347 | /   | 1,381 | 1,113 | /   | 1,495 | 1,659 | /   | 843   | 419 | /   | 819   | 0     |
| BEGIN PEAK HR  | 4:30 PM    |       |     |       |       |     |       |       |     |       |     |     |       |       |
| VOLUMES        | 183        | 525   | 39  | 31    | 444   | 83  | 227   | 338   | 289 | 45    | 145 | 17  | 2,366 |       |
| APPROACH %     | 24%        | 70%   | 5%  | 6%    | 80%   | 15% | 27%   | 40%   | 34% | 22%   | 70% | 8%  |       |       |
| PEAK HR FACTOR | 0.834      |       |     | 0.667 |       |     | 0.916 |       |     | 0.877 |     |     | 0.903 |       |
| APP/DEPART     | 747        | /     | 769 | 558   | /     | 778 | 854   | /     | 408 | 207   | /   | 411 | 0     |       |

# Intersection Turning Movement

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

|                             |                                             |                                      |                                       |                            |
|-----------------------------|---------------------------------------------|--------------------------------------|---------------------------------------|----------------------------|
| DATE:<br>2/10/09<br>TUESDAY | LOCATION:<br>NORTH & SOUTH:<br>EAST & WEST: | FONTANA<br>ETIWANDA<br>I-10 WB RAMPS | PROJECT #:<br>LOCATION #:<br>CONTROL: | CA09-0213-1<br>4<br>SIGNAL |
|-----------------------------|---------------------------------------------|--------------------------------------|---------------------------------------|----------------------------|

|        |                                                                                                                                                                                           |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NOTES: | <div> <div>AM</div> <div>PM</div> <div>PM</div> <div>OTHER</div> <div>OTHER</div> </div> <div> <div>◀ W</div> <div>S</div> <div>E ▶</div> </div> <div> <div>▲ N</div> <div>▼</div> </div> |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

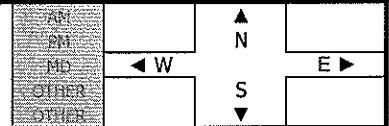
|        | NORTHBOUND |           |           | SOUTHBOUND |         |         | EASTBOUND     |         |         | WESTBOUND     |         |         |       |
|--------|------------|-----------|-----------|------------|---------|---------|---------------|---------|---------|---------------|---------|---------|-------|
|        | ETIWANDA   |           |           | ETIWANDA   |         |         | I-10 WB RAMPS |         |         | I-10 WB RAMPS |         |         |       |
| LANES: | NL<br>X    | NT<br>2.5 | NR<br>1.5 | SL<br>X    | ST<br>2 | SR<br>1 | EL<br>X       | ET<br>X | ER<br>X | WL<br>2       | WT<br>X | WR<br>1 | TOTAL |

|                |               |         |       |       |       |       |       |       |     |     |       |     |       |       |
|----------------|---------------|---------|-------|-------|-------|-------|-------|-------|-----|-----|-------|-----|-------|-------|
| AM             | 6:30 AM       |         |       |       |       |       |       |       |     |     |       |     |       | 0     |
|                | 6:45 AM       |         |       |       |       |       |       |       |     |     |       |     |       | 0     |
|                | 7:00 AM       |         | 55    | 72    |       | 90    | 37    |       |     | 71  |       | 30  | 355   |       |
|                | 7:15 AM       |         | 90    | 81    |       | 84    | 44    |       |     | 79  |       | 35  | 413   |       |
|                | 7:30 AM       |         | 84    | 94    |       | 135   | 50    |       |     | 90  |       | 41  | 494   |       |
|                | 7:45 AM       |         | 82    | 87    |       | 120   | 48    |       |     | 115 |       | 45  | 497   |       |
|                | 8:00 AM       |         | 101   | 90    |       | 141   | 42    |       |     | 62  |       | 42  | 478   |       |
|                | 8:15 AM       |         | 106   | 82    |       | 108   | 41    |       |     | 55  |       | 34  | 426   |       |
|                | 8:30 AM       |         | 85    | 99    |       | 92    | 45    |       |     | 65  |       | 33  | 419   |       |
|                | 8:45 AM       |         | 88    | 82    |       | 103   | 41    |       |     | 51  |       | 27  | 392   |       |
|                | 9:00 AM       |         |       |       |       |       |       |       |     |     |       |     | 0     |       |
|                | 9:15 AM       |         |       |       |       |       |       |       |     |     |       |     | 0     |       |
|                | VOLUMES       | 0       | 691   | 687   | 0     | 873   | 348   | 0     | 0   | 0   | 588   | 0   | 287   | 3,474 |
|                | APPROACH %    | 0%      | 50%   | 50%   | 0%    | 71%   | 29%   | 0%    | 0%  | 0%  | 67%   | 0%  | 33%   |       |
| APP/DEPART     | 1,378         | /       | 978   | 1,221 | /     | 1,461 | 0     | /     | 687 | 875 | /     | 348 | 0     |       |
| BEGIN PEAK HR  | 7:30 AM       |         |       |       |       |       |       |       |     |     |       |     |       |       |
| VOLUMES        | 0             | 373     | 353   | 0     | 504   | 181   | 0     | 0     | 0   | 322 | 0     | 162 | 1,895 |       |
| APPROACH %     | 0%            | 51%     | 49%   | 0%    | 74%   | 26%   | 0%    | 0%    | 0%  | 67% | 0%    | 33% |       |       |
| PEAK HR FACTOR |               | 0.950   |       |       | 0.926 |       |       | 0.000 |     |     | 0.756 |     | 0.953 |       |
| APP/DEPART     | 726           | /       | 535   | 685   | /     | 826   | 0     | /     | 353 | 484 | /     | 181 | 0     |       |
| PM             | 3:30 PM       |         |       |       |       |       |       |       |     |     |       |     | 0     |       |
|                | 3:45 PM       |         |       |       |       |       |       |       |     |     |       |     | 0     |       |
|                | 4:00 PM       |         | 119   | 117   |       | 159   | 48    |       |     | 32  |       | 28  | 503   |       |
|                | 4:15 PM       |         | 117   | 119   |       | 140   | 42    |       |     | 28  |       | 23  | 469   |       |
|                | 4:30 PM       |         | 141   | 97    |       | 162   | 29    |       |     | 32  |       | 32  | 493   |       |
|                | 4:45 PM       |         | 141   | 96    |       | 171   | 41    |       |     | 26  |       | 52  | 527   |       |
|                | 5:00 PM       |         | 162   | 116   |       | 182   | 47    |       |     | 25  |       | 42  | 574   |       |
|                | 5:15 PM       |         | 132   | 97    |       | 150   | 39    |       |     | 35  |       | 53  | 506   |       |
|                | 5:30 PM       |         | 126   | 67    |       | 152   | 47    |       |     | 37  |       | 44  | 473   |       |
|                | 5:45 PM       |         | 135   | 64    |       | 105   | 31    |       |     | 32  |       | 46  | 413   |       |
|                | 6:00 PM       |         |       |       |       |       |       |       |     |     |       |     | 0     |       |
|                | 6:15 PM       |         |       |       |       |       |       |       |     |     |       |     | 0     |       |
|                | VOLUMES       | 0       | 1,073 | 773   | 0     | 1,221 | 324   | 0     | 0   | 0   | 247   | 0   | 320   | 3,958 |
|                | APPROACH %    | 0%      | 58%   | 42%   | 0%    | 79%   | 21%   | 0%    | 0%  | 0%  | 44%   | 0%  | 56%   |       |
|                | APP/DEPART    | 1,846   | /     | 1,393 | 1,545 | /     | 1,468 | 0     | /   | 773 | 567   | /   | 324   | 0     |
|                | BEGIN PEAK HR | 4:30 PM |       |       |       |       |       |       |     |     |       |     |       |       |
|                | VOLUMES       | 0       | 576   | 406   | 0     | 665   | 156   | 0     | 0   | 0   | 118   | 0   | 179   | 2,100 |
| APPROACH %     | 0%            | 59%     | 41%   | 0%    | 81%   | 19%   | 0%    | 0%    | 0%  | 40% | 0%    | 60% |       |       |
| PEAK HR FACTOR |               | 0.883   |       |       | 0.896 |       |       | 0.000 |     |     | 0.844 |     | 0.915 |       |
| APP/DEPART     | 982           | /       | 755   | 821   | /     | 783   | 0     | /     | 406 | 297 | /     | 156 | 0     |       |

## Intersection Turning Movement

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

|                                    |                                                    |                                             |                                              |                            |
|------------------------------------|----------------------------------------------------|---------------------------------------------|----------------------------------------------|----------------------------|
| <b>DATE:</b><br>2/10/09<br>TUESDAY | <b>LOCATION:</b><br>NORTH & SOUTH:<br>EAST & WEST: | <b>FONTANA</b><br>ETIWANDA<br>I-10 EB RAMPS | <b>PROJECT #:</b><br>LOCATION #:<br>CONTROL: | CA09-0213-1<br>5<br>SIGNAL |
| <b>NOTES:</b>                      |                                                    |                                             |                                              |                            |



|                |            | NORTHBOUND |         |         | SOUTHBOUND |         |         | EASTBOUND     |         |         | WESTBOUND     |         |       |       |
|----------------|------------|------------|---------|---------|------------|---------|---------|---------------|---------|---------|---------------|---------|-------|-------|
|                |            | ETIWANDA   |         |         | ETIWANDA   |         |         | I-10 EB RAMPS |         |         | I-10 EB RAMPS |         |       |       |
| LANES:         | NL<br>X    | NT<br>2    | NR<br>1 | SL<br>X | ST<br>2    | SR<br>1 | EL<br>2 | ET<br>X       | ER<br>1 | WL<br>X | WT<br>X       | WR<br>X | TOTAL |       |
| AM             | 6:30 AM    |            |         |         |            |         |         |               |         |         |               |         | 0     |       |
|                | 6:45 AM    |            |         |         |            |         |         |               |         |         |               |         | 0     |       |
|                | 7:00 AM    |            | 101     | 65      |            | 145     | 19      | 19            |         | 114     |               |         | 463   |       |
|                | 7:15 AM    |            | 138     | 53      |            | 145     | 22      | 29            |         | 135     |               |         | 522   |       |
|                | 7:30 AM    |            | 159     | 64      |            | 200     | 25      | 24            |         | 129     |               |         | 601   |       |
|                | 7:45 AM    |            | 135     | 77      |            | 198     | 30      | 27            |         | 119     |               |         | 586   |       |
|                | 8:00 AM    |            | 160     | 71      |            | 170     | 44      | 29            |         | 83      |               |         | 557   |       |
|                | 8:15 AM    |            | 136     | 55      |            | 135     | 27      | 44            |         | 89      |               |         | 486   |       |
|                | 8:30 AM    |            | 151     | 52      |            | 128     | 16      | 37            |         | 72      |               |         | 456   |       |
|                | 8:45 AM    |            | 150     | 59      |            | 144     | 16      | 27            |         | 63      |               |         | 459   |       |
|                | 9:00 AM    |            |         |         |            |         |         |               |         |         |               |         | 0     |       |
|                | 9:15 AM    |            |         |         |            |         |         |               |         |         |               |         | 0     |       |
|                | VOLUMES    | 0          | 1,130   | 496     | 0          | 1,265   | 199     | 236           | 0       | 804     | 0             | 0       | 0     | 4,130 |
|                | APPROACH % | 0%         | 69%     | 31%     | 0%         | 86%     | 14%     | 23%           | 0%      | 77%     | 0%            | 0%      | 0%    |       |
|                | APP/DEPART | 1,626      | /       | 1,366   | 1,464      | /       | 2,069   | 1,040         | /       | 496     | 0             | /       | 199   | 0     |
| BEGIN PEAK HR  | 7:15 AM    |            |         |         |            |         |         |               |         |         |               |         |       |       |
| VOLUMES        | 0          | 592        | 265     | 0       | 713        | 121     | 109     | 0             | 466     | 0       | 0             | 0       | 2,266 |       |
| APPROACH %     | 0%         | 69%        | 31%     | 0%      | 85%        | 15%     | 19%     | 0%            | 81%     | 0%      | 0%            | 0%      |       |       |
| PEAK HR FACTOR |            | 0.927      |         |         | 0.914      |         |         | 0.877         |         |         | 0.000         |         | 0.943 |       |
| APP/DEPART     | 857        | /          | 701     | 834     | /          | 1,179   | 575     | /             | 265     | 0       | /             | 121     | 0     |       |
| PM             | 3:30 PM    |            |         |         |            |         |         |               |         |         |               |         | 0     |       |
|                | 3:45 PM    |            |         |         |            |         |         |               |         |         |               |         | 0     |       |
|                | 4:00 PM    |            | 200     | 119     |            | 121     | 66      | 32            |         | 58      |               |         | 596   |       |
|                | 4:15 PM    |            | 214     | 117     |            | 122     | 47      | 24            |         | 61      |               |         | 585   |       |
|                | 4:30 PM    |            | 207     | 130     |            | 138     | 62      | 22            |         | 59      |               |         | 618   |       |
|                | 4:45 PM    |            | 208     | 143     |            | 165     | 37      | 24            |         | 50      |               |         | 627   |       |
|                | 5:00 PM    |            | 245     | 163     |            | 162     | 53      | 21            |         | 50      |               |         | 694   |       |
|                | 5:15 PM    |            | 195     | 151     |            | 153     | 34      | 28            |         | 41      |               |         | 602   |       |
|                | 5:30 PM    |            | 172     | 141     |            | 164     | 26      | 27            |         | 26      |               |         | 556   |       |
|                | 5:45 PM    |            | 159     | 110     |            | 120     | 21      | 29            |         | 25      |               |         | 464   |       |
|                | 6:00 PM    |            |         |         |            |         |         |               |         |         |               |         | 0     |       |
|                | 6:15 PM    |            |         |         |            |         |         |               |         |         |               |         | 0     |       |
|                | VOLUMES    | 0          | 1,600   | 1,074   | 0          | 1,145   | 346     | 207           | 0       | 370     | 0             | 0       | 0     | 4,742 |
|                | APPROACH % | 0%         | 60%     | 40%     | 0%         | 77%     | 23%     | 36%           | 0%      | 64%     | 0%            | 0%      | 0%    |       |
|                | APP/DEPART | 2,674      | /       | 1,807   | 1,491      | /       | 1,515   | 577           | /       | 1,074   | 0             | /       | 346   | 0     |
| BEGIN PEAK HR  | 4:30 PM    |            |         |         |            |         |         |               |         |         |               |         |       |       |
| VOLUMES        | 0          | 855        | 587     | 0       | 618        | 186     | 95      | 0             | 200     | 0       | 0             | 0       | 2,541 |       |
| APPROACH %     | 0%         | 59%        | 41%     | 0%      | 77%        | 23%     | 32%     | 0%            | 68%     | 0%      | 0%            | 0%      |       |       |
| PEAK HR FACTOR |            | 0.884      |         |         | 0.935      |         |         | 0.910         |         |         | 0.000         |         | 0.915 |       |
| APP/DEPART     | 1,442      | /          | 950     | 804     | /          | 818     | 295     | /             | 587     | 0       | /             | 186     | 0     |       |

# Intersection Turning Movement

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

|                             |                                             |                                |                                       |                            |
|-----------------------------|---------------------------------------------|--------------------------------|---------------------------------------|----------------------------|
| DATE:<br>2/10/09<br>TUESDAY | LOCATION:<br>NORTH & SOUTH:<br>EAST & WEST: | FONTANA<br>ETIWANDA<br>AIRPORT | PROJECT #:<br>LOCATION #:<br>CONTROL: | CA09-0213-1<br>6<br>SIGNAL |
|-----------------------------|---------------------------------------------|--------------------------------|---------------------------------------|----------------------------|

|        |                                                                                                                                                  |
|--------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| NOTES: | <div> <div>AM</div> <div>PM</div> <div>MD</div> <div>OTHER</div> </div> <div> <div>◀ W</div> <div>▲ N</div> <div>▼ S</div> <div>▶ E</div> </div> |
|--------|--------------------------------------------------------------------------------------------------------------------------------------------------|

|        | NORTHBOUND<br>ETIWANDA |         |         | SOUTHBOUND<br>ETIWANDA |         |         | EASTBOUND<br>AIRPORT |         |         | WESTBOUND<br>AIRPORT |         |         |       |
|--------|------------------------|---------|---------|------------------------|---------|---------|----------------------|---------|---------|----------------------|---------|---------|-------|
| LANES: | NL<br>1                | NT<br>2 | NR<br>0 | SL<br>1                | ST<br>2 | SR<br>0 | EL<br>1              | ET<br>2 | ER<br>0 | WL<br>1              | WT<br>1 | WR<br>1 | TOTAL |

|                |         |     |       |       |     |       |       |     |     |       |     |     |       |       |
|----------------|---------|-----|-------|-------|-----|-------|-------|-----|-----|-------|-----|-----|-------|-------|
| AM             | 6:30 AM |     |       |       |     |       |       |     |     |       |     |     | 0     |       |
|                | 6:45 AM |     |       |       |     |       |       |     |     |       |     |     | 0     |       |
|                | 7:00 AM | 12  | 108   | 10    | 64  | 157   | 38    | 16  | 6   | 5     | 3   | 8   | 45    | 472   |
|                | 7:15 AM | 3   | 114   | 10    | 65  | 165   | 45    | 14  | 4   | 4     | 8   | 11  | 70    | 513   |
|                | 7:30 AM | 12  | 112   | 11    | 67  | 201   | 61    | 22  | 14  | 10    | 7   | 23  | 82    | 622   |
|                | 7:45 AM | 9   | 126   | 112   | 68  | 192   | 58    | 16  | 22  | 11    | 16  | 23  | 75    | 728   |
|                | 8:00 AM | 12  | 140   | 17    | 77  | 135   | 46    | 23  | 12  | 5     | 8   | 20  | 65    | 560   |
|                | 8:15 AM | 8   | 126   | 12    | 56  | 126   | 37    | 14  | 11  | 4     | 11  | 15  | 58    | 478   |
|                | 8:30 AM | 8   | 130   | 15    | 56  | 109   | 27    | 16  | 10  | 8     | 14  | 20  | 51    | 464   |
|                | 8:45 AM | 12  | 135   | 17    | 51  | 128   | 28    | 18  | 14  | 9     | 6   | 21  | 51    | 490   |
|                | 9:00 AM |     |       |       |     |       |       |     |     |       |     |     |       | 0     |
|                | 9:15 AM |     |       |       |     |       |       |     |     |       |     |     |       | 0     |
|                | VOLUMES | 76  | 991   | 204   | 504 | 1,213 | 340   | 139 | 93  | 56    | 73  | 141 | 497   | 4,327 |
| APPROACH %     | 6%      | 78% | 16%   | 25%   | 59% | 17%   | 48%   | 32% | 19% | 10%   | 20% | 70% |       |       |
| APP/DEPART     | 1,271   | /   | 1,627 | 2,057 | /   | 1,342 | 288   | /   | 801 | 711   | /   | 557 | 0     |       |
| BEGIN PEAK HR  | 7:15 AM |     |       |       |     |       |       |     |     |       |     |     |       |       |
| VOLUMES        | 36      | 492 | 150   | 277   | 693 | 210   | 75    | 52  | 30  | 39    | 77  | 292 | 2,423 |       |
| APPROACH %     | 5%      | 73% | 22%   | 23%   | 59% | 18%   | 48%   | 33% | 19% | 10%   | 19% | 72% |       |       |
| PEAK HR FACTOR | 0.686   |     |       | 0.897 |     |       | 0.801 |     |     | 0.895 |     |     | 0.832 |       |
| APP/DEPART     | 678     | /   | 859   | 1,180 | /   | 762   | 157   | /   | 479 | 408   | /   | 323 | 0     |       |
| PM             | 3:30 PM |     |       |       |     |       |       |     |     |       |     |     | 0     |       |
|                | 3:45 PM |     |       |       |     |       |       |     |     |       |     |     | 0     |       |
|                | 4:00 PM | 5   | 169   | 5     | 41  | 123   | 11    | 42  | 20  | 9     | 15  | 18  | 108   | 566   |
|                | 4:15 PM | 6   | 168   | 6     | 43  | 119   | 14    | 54  | 23  | 13    | 16  | 24  | 113   | 599   |
|                | 4:30 PM | 4   | 145   | 9     | 36  | 141   | 18    | 64  | 17  | 20    | 11  | 24  | 141   | 630   |
|                | 4:45 PM | 6   | 168   | 7     | 34  | 162   | 14    | 63  | 14  | 10    | 12  | 15  | 125   | 630   |
|                | 5:00 PM | 5   | 208   | 3     | 41  | 162   | 15    | 79  | 26  | 16    | 19  | 16  | 113   | 703   |
|                | 5:15 PM | 4   | 192   | 2     | 36  | 147   | 11    | 49  | 15  | 9     | 10  | 15  | 93    | 583   |
|                | 5:30 PM | 8   | 177   | 3     | 25  | 148   | 10    | 44  | 15  | 7     | 13  | 10  | 92    | 552   |
|                | 5:45 PM | 4   | 161   | 7     | 29  | 109   | 11    | 22  | 15  | 10    | 9   | 15  | 81    | 473   |
|                | 6:00 PM |     |       |       |     |       |       |     |     |       |     |     |       | 0     |
|                | 6:15 PM |     |       |       |     |       |       |     |     |       |     |     |       | 0     |
|                | VOLUMES | 42  | 1,388 | 42    | 285 | 1,111 | 104   | 417 | 145 | 94    | 105 | 137 | 866   | 4,736 |
| APPROACH %     | 3%      | 94% | 3%    | 19%   | 74% | 7%    | 64%   | 22% | 14% | 9%    | 12% | 78% |       |       |
| APP/DEPART     | 1,472   | /   | 2,671 | 1,500 | /   | 1,310 | 656   | /   | 472 | 1,108 | /   | 283 | 0     |       |
| BEGIN PEAK HR  | 4:15 PM |     |       |       |     |       |       |     |     |       |     |     |       |       |
| VOLUMES        | 21      | 689 | 25    | 154   | 584 | 61    | 260   | 80  | 59  | 58    | 79  | 492 | 2,562 |       |
| APPROACH %     | 3%      | 94% | 3%    | 19%   | 73% | 8%    | 65%   | 20% | 15% | 9%    | 13% | 78% |       |       |
| PEAK HR FACTOR | 0.851   |     |       | 0.916 |     |       | 0.824 |     |     | 0.893 |     |     | 0.911 |       |
| APP/DEPART     | 735     | /   | 1,441 | 799   | /   | 701   | 399   | /   | 259 | 629   | /   | 161 | 0     |       |

COUNTS UNLIMITED INC.  
25424 JACLYN AVENUE  
MORENO VALLEY CA. 92557  
951-247-6716

CITY OF FONTANA  
N/S: ETIWANDA AVENUE  
E/W: JURUPA AVENUE  
WEATHER: SUNNY

File Name : FOETJAMCL  
Site Code : 0438825  
Start Date : 3/21/2006  
Page No : 1

Groups Printed- PASSENGER VEHICLES - LARGE 2 AXLE VEHICLES - 3 AXLE VEHICLES - 4+ AXLE TRUCKS  
ETIWANDA AVENUE JURUPA AVENUE ETIWANDA AVENUE JURUPA AVENUE

| Start Time            | Southbound |      |       |            | Westbound |      |       |            | Northbound |      |       |            | Eastbound |      |       |            | Int. Total |
|-----------------------|------------|------|-------|------------|-----------|------|-------|------------|------------|------|-------|------------|-----------|------|-------|------------|------------|
|                       | Left       | Thru | Right | App. Total | Left      | Thru | Right | App. Total | Left       | Thru | Right | App. Total | Left      | Thru | Right | App. Total |            |
| 07:00 AM              | 22         | 104  | 21    | 147        | 14        | 139  | 24    | 177        | 48         | 89   | 8     | 145        | 35        | 80   | 57    | 172        | 641        |
| 07:15 AM              | 21         | 117  | 27    | 165        | 19        | 142  | 32    | 193        | 32         | 109  | 11    | 152        | 30        | 85   | 56    | 171        | 681        |
| 07:30 AM              | 17         | 117  | 24    | 158        | 13        | 186  | 39    | 238        | 49         | 147  | 8     | 204        | 31        | 57   | 32    | 120        | 720        |
| 07:45 AM              | 16         | 113  | 38    | 167        | 17        | 163  | 24    | 204        | 53         | 112  | 15    | 180        | 33        | 80   | 52    | 165        | 716        |
| Total                 | 76         | 451  | 110   | 637        | 63        | 630  | 119   | 812        | 182        | 457  | 42    | 681        | 129       | 302  | 197   | 628        | 2756       |
| 08:00 AM              | 35         | 150  | 34    | 219        | 16        | 93   | 14    | 123        | 42         | 105  | 10    | 157        | 30        | 85   | 46    | 161        | 660        |
| 08:15 AM              | 24         | 127  | 36    | 187        | 9         | 103  | 5     | 117        | 46         | 106  | 15    | 167        | 41        | 81   | 30    | 152        | 623        |
| 08:30 AM              | 18         | 96   | 31    | 145        | 16        | 85   | 14    | 115        | 37         | 92   | 12    | 141        | 22        | 74   | 30    | 126        | 527        |
| 08:45 AM              | 20         | 78   | 30    | 128        | 12        | 91   | 14    | 117        | 41         | 89   | 14    | 144        | 26        | 66   | 33    | 125        | 514        |
| Total                 | 97         | 451  | 131   | 679        | 53        | 372  | 47    | 472        | 166        | 392  | 51    | 609        | 119       | 306  | 139   | 564        | 2324       |
| Grand Total           | 173        | 902  | 241   | 1316       | 116       | 1002 | 166   | 1284       | 348        | 849  | 93    | 1290       | 248       | 608  | 336   | 1192       | 5082       |
| Apprch %              | 13.1       | 68.5 | 18.3  |            | 9         | 78   | 12.9  |            | 27         | 65.8 | 7.2   |            | 20.8      | 51   | 28.2  |            |            |
| Total %               | 3.4        | 17.7 | 4.7   | 25.9       | 2.3       | 19.7 | 3.3   | 25.3       | 6.8        | 16.7 | 1.8   | 25.4       | 4.9       | 12   | 6.6   | 23.5       |            |
| PASSENGER VEHICLES    | 134        | 605  | 169   | 908        | 63        | 887  | 136   | 1086       | 249        | 586  | 53    | 888        | 166       | 503  | 250   | 919        | 3801       |
| PASSENGER VEHICLES    | 77.5       | 67.1 | 70.1  | 69         | 54.3      | 88.5 | 81.9  | 84.6       | 71.6       | 69   | 57    | 68.8       | 66.9      | 82.7 | 74.4  | 77.1       | 74.8       |
| LARGE 2-AXLE VEHICLES | 7          | 65   | 19    | 91         | 5         | 36   | 10    | 51         | 27         | 60   | 11    | 98         | 19        | 38   | 23    | 80         | 320        |
| LARGE 2-AXLE VEHICLES | 4          | 7.2  | 7.9   | 6.9        | 4.3       | 3.6  | 6     | 4          | 7.8        | 7.1  | 11.8  | 7.6        | 7.7       | 6.2  | 6.8   | 6.7        | 6.3        |
| 3 AXLE VEHICLES       | 11         | 47   | 9     | 67         | 11        | 8    | 7     | 26         | 5          | 38   | 8     | 51         | 16        | 12   | 5     | 33         | 177        |
| 3 AXLE VEHICLES       | 6.4        | 5.2  | 3.7   | 5.1        | 9.5       | 0.8  | 4.2   | 2          | 1.4        | 4.5  | 8.6   | 4          | 6.5       | 2    | 1.5   | 2.8        | 3.5        |
| 4+ AXLE TRUCKS        | 21         | 185  | 44    | 250        | 37        | 71   | 13    | 121        | 67         | 165  | 21    | 253        | 47        | 55   | 58    | 160        | 784        |
| 4+ AXLE TRUCKS        | 12.1       | 20.5 | 18.3  | 19         | 31.9      | 7.1  | 7.8   | 9.4        | 19.3       | 19.4 | 22.6  | 19.6       | 19        | 9    | 17.3  | 13.4       | 15.4       |

| Start Time                                                 | ETIWANDA AVENUE Southbound |      |       |            | JURUPA AVENUE Westbound |      |       |            | ETIWANDA AVENUE Northbound |      |       |            | JURUPA AVENUE Eastbound |      |       |            | Int. Total |
|------------------------------------------------------------|----------------------------|------|-------|------------|-------------------------|------|-------|------------|----------------------------|------|-------|------------|-------------------------|------|-------|------------|------------|
|                                                            | Left                       | Thru | Right | App. Total | Left                    | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                    | Thru | Right | App. Total |            |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                            |      |       |            |                         |      |       |            |                            |      |       |            |                         |      |       |            |            |
| Peak Hour for Entire Intersection Begins at 07:15 AM       |                            |      |       |            |                         |      |       |            |                            |      |       |            |                         |      |       |            |            |
| 07:15 AM                                                   | 21                         | 117  | 27    | 165        | 19                      | 142  | 32    | 193        | 32                         | 109  | 11    | 152        | 30                      | 85   | 56    | 171        | 681        |
| 07:30 AM                                                   | 17                         | 117  | 24    | 158        | 13                      | 186  | 39    | 238        | 49                         | 147  | 8     | 204        | 31                      | 57   | 32    | 120        | 720        |
| 07:45 AM                                                   | 16                         | 113  | 38    | 167        | 17                      | 163  | 24    | 204        | 53                         | 112  | 15    | 180        | 33                      | 80   | 52    | 165        | 716        |
| 08:00 AM                                                   | 35                         | 150  | 34    | 219        | 16                      | 93   | 14    | 123        | 42                         | 105  | 10    | 157        | 30                      | 85   | 46    | 161        | 660        |
| Total Volume                                               | 89                         | 497  | 123   | 709        | 65                      | 584  | 109   | 758        | 176                        | 473  | 44    | 693        | 124                     | 307  | 186   | 617        | 2777       |
| % App. Total                                               | 12.6                       | 70.1 | 17.3  |            | 8.6                     | 77   | 14.4  |            | 25.4                       | 68.3 | 6.3   |            | 20.1                    | 49.8 | 30.1  |            |            |
| PHF                                                        | .636                       | .828 | .809  | .809       | .855                    | .785 | .699  | .796       | .830                       | .804 | .733  | .849       | .939                    | .903 | .830  | .902       | .964       |



COUNTS UNLIMITED INC.  
25424 JACLYN AVENUE  
MORENO VALLEY CA. 92557  
951-247-6716

CITY OF FONTANA  
N/S: ETIWANDA AVENUE  
E/W: JURUPA AVENUE  
WEATHER: SUNNY

File Name : FOETJUPM  
Site Code : 0438811  
Start Date : 4/20/2006  
Page No : 1

| Groups Printed- PASSENGER VEHICLES - LARGE 2 AXLE VEHICLES - 3 AXLE VEHICLES - 4+ AXLE TRUCKS |                 |      |       |           |               |      |       |           |                 |      |       |           |               |      |       |           |            |  |  |
|-----------------------------------------------------------------------------------------------|-----------------|------|-------|-----------|---------------|------|-------|-----------|-----------------|------|-------|-----------|---------------|------|-------|-----------|------------|--|--|
|                                                                                               | ETIWANDA AVENUE |      |       |           | JURUPA AVENUE |      |       |           | ETIWANDA AVENUE |      |       |           | JURUPA AVENUE |      |       |           |            |  |  |
|                                                                                               | Southbound      |      |       |           | Westbound     |      |       |           | Northbound      |      |       |           | Eastbound     |      |       |           |            |  |  |
| Start Time                                                                                    | Left            | Thru | Right | App Total | Left          | Thru | Right | App Total | Left            | Thru | Right | App Total | Left          | Thru | Right | App Total | Int. Total |  |  |
| 03:45 PM                                                                                      | 78              | 138  | 36    | 252       | 14            | 107  | 15    | 136       | 51              | 132  | 39    | 222       | 34            | 176  | 65    | 275       | 885        |  |  |
| Total                                                                                         | 78              | 138  | 36    | 252       | 14            | 107  | 15    | 136       | 51              | 132  | 39    | 222       | 34            | 176  | 65    | 275       | 885        |  |  |
| 04:00 PM                                                                                      | 71              | 154  | 37    | 262       | 15            | 114  | 21    | 150       | 78              | 115  | 31    | 224       | 29            | 153  | 83    | 265       | 901        |  |  |
| 04:15 PM                                                                                      | 84              | 134  | 37    | 255       | 14            | 98   | 21    | 133       | 67              | 119  | 34    | 220       | 34            | 195  | 71    | 300       | 908        |  |  |
| 04:30 PM                                                                                      | 94              | 172  | 49    | 315       | 15            | 119  | 30    | 164       | 78              | 165  | 41    | 284       | 39            | 178  | 78    | 295       | 1058       |  |  |
| 04:45 PM                                                                                      | 76              | 147  | 55    | 278       | 11            | 127  | 21    | 159       | 67              | 109  | 21    | 197       | 47            | 219  | 81    | 347       | 981        |  |  |
| Total                                                                                         | 325             | 607  | 178   | 1110      | 55            | 458  | 93    | 606       | 290             | 508  | 127   | 925       | 149           | 745  | 313   | 1207      | 3848       |  |  |
| 05:00 PM                                                                                      | 49              | 146  | 39    | 234       | 21            | 140  | 14    | 175       | 61              | 110  | 22    | 193       | 25            | 234  | 74    | 333       | 935        |  |  |
| 05:15 PM                                                                                      | 78              | 132  | 32    | 242       | 11            | 119  | 19    | 149       | 46              | 112  | 19    | 177       | 26            | 217  | 84    | 327       | 895        |  |  |
| 05:30 PM                                                                                      | 67              | 143  | 34    | 244       | 12            | 100  | 24    | 136       | 48              | 127  | 22    | 197       | 22            | 227  | 84    | 333       | 910        |  |  |
| Grand Total                                                                                   | 597             | 1166 | 319   | 2082      | 113           | 924  | 165   | 1202      | 496             | 989  | 229   | 1714      | 256           | 1599 | 620   | 2475      | 7473       |  |  |
| Apprch %                                                                                      | 28.7            | 56   | 15.3  |           | 9.4           | 76.9 | 13.7  |           | 28.9            | 57.7 | 13.4  |           | 10.3          | 64.6 | 25.1  |           |            |  |  |
| Total %                                                                                       | 8               | 15.6 | 4.3   | 27.9      | 1.5           | 12.4 | 2.2   | 16.1      | 6.6             | 13.2 | 3.1   | 22.9      | 3.4           | 21.4 | 8.3   | 33.1      |            |  |  |
| PASSENGER VEHICLES                                                                            | 534             | 946  | 261   | 1741      | 75            | 834  | 136   | 1045      | 418             | 783  | 152   | 1353      | 197           | 1419 | 538   | 2154      | 6293       |  |  |
| PASSENGER VEHICLES                                                                            | 89.4            | 81.1 | 81.8  | 83.6      | 66.4          | 90.3 | 82.4  | 86.9      | 84.3            | 79.2 | 66.4  | 78.9      | 77            | 88.7 | 86.8  | 87        | 84.2       |  |  |
| LARGE 2 AXLE VEHICLES                                                                         | 14              | 49   | 16    | 79        | 5             | 27   | 7     | 39        | 21              | 32   | 13    | 66        | 15            | 44   | 24    | 83        | 267        |  |  |
| LARGE 2 AXLE VEHICLES                                                                         | 2.3             | 4.2  | 5     | 3.8       | 4.4           | 2.9  | 4.2   | 3.2       | 4.2             | 3.2  | 5.7   | 3.9       | 5.9           | 2.8  | 3.9   | 3.4       | 3.6        |  |  |
| 3 AXLE VEHICLES                                                                               | 20              | 57   | 17    | 94        | 14            | 18   | 8     | 40        | 12              | 37   | 17    | 66        | 9             | 40   | 10    | 59        | 259        |  |  |
| % 3 AXLE VEHICLES                                                                             | 3.4             | 4.9  | 5.3   | 4.5       | 12.4          | 1.9  | 4.8   | 3.3       | 2.4             | 3.7  | 7.4   | 3.9       | 3.5           | 2.5  | 1.6   | 2.4       | 3.5        |  |  |
| 4+ AXLE TRUCKS                                                                                | 29              | 114  | 25    | 168       | 19            | 45   | 14    | 78        | 45              | 137  | 47    | 229       | 35            | 96   | 48    | 179       | 654        |  |  |
| % 4+ AXLE TRUCKS                                                                              | 4.9             | 9.8  | 7.8   | 8.1       | 16.8          | 4.9  | 8.5   | 6.5       | 9.1             | 13.9 | 20.5  | 13.4      | 13.7          | 6    | 7.7   | 7.2       | 8.8        |  |  |

| ETIWANDA AVENUE                                            |      |      |       |            | JURUPA AVENUE |      |       |            |  | ETIWANDA AVENUE |      |       |            |  | JURUPA AVENUE |      |       |            |            |
|------------------------------------------------------------|------|------|-------|------------|---------------|------|-------|------------|--|-----------------|------|-------|------------|--|---------------|------|-------|------------|------------|
| Southbound                                                 |      |      |       |            | Westbound     |      |       |            |  | Northbound      |      |       |            |  | Eastbound     |      |       |            |            |
| Start Time                                                 | Left | Thru | Right | App. Total | Left          | Thru | Right | App. Total |  | Left            | Thru | Right | App. Total |  | Left          | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 03:45 PM to 05:30 PM - Peak 1 of 1 |      |      |       |            |               |      |       |            |  |                 |      |       |            |  |               |      |       |            |            |
| Peak Hour for Entire Intersection Begins at 04:15 PM       |      |      |       |            |               |      |       |            |  |                 |      |       |            |  |               |      |       |            |            |
| 04:15 PM                                                   | 84   | 134  | 37    | 255        | 14            | 98   | 21    | 133        |  | 67              | 119  | 34    | 220        |  | 34            | 195  | 71    | 300        | 908        |
| 04:30 PM                                                   | 94   | 172  | 49    | 315        | 15            | 119  | 30    | 164        |  | 78              | 165  | 41    | 284        |  | 39            | 178  | 78    | 295        | 1058       |
| 04:45 PM                                                   | 76   | 147  | 55    | 278        | 11            | 127  | 21    | 159        |  | 67              | 109  | 21    | 197        |  | 47            | 219  | 81    | 347        | 981        |
| 05:00 PM                                                   | 49   | 146  | 39    | 234        | 21            | 140  | 14    | 175        |  | 61              | 110  | 22    | 193        |  | 25            | 234  | 74    | 333        | 935        |
| Total Volume                                               | 303  | 599  | 180   | 1082       | 61            | 484  | 86    | 631        |  | 273             | 503  | 118   | 894        |  | 145           | 826  | 304   | 1275       | 3882       |
| % App. Total                                               | 28   | 55.4 | 16.6  |            | 9.7           | 76.7 | 13.6  |            |  | 30.5            | 56.3 | 13.2  |            |  | 11.4          | 64.8 | 23.8  |            |            |
| PHF                                                        | .806 | .871 | .818  | .859       | .726          | .864 | .717  | .901       |  | .875            | .762 | .720  | .787       |  | .771          | .882 | .938  | .919       | .917       |

# Intersection Turning Movement

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

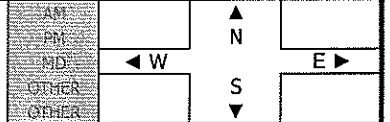
DATE:  
2/10/09  
TUESDAY

LOCATION:  
NORTH & SOUTH:  
EAST & WEST:

FONTANA  
ETIWANDA  
MARLAY

PROJECT #: CA09-0213-1  
LOCATION #: 8  
CONTROL: SIGNAL

NOTES:



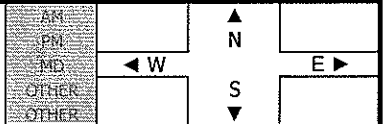
|                | NORTHBOUND<br>ETIWANDA |         |         | SOUTHBOUND<br>ETIWANDA |         |         | EASTBOUND<br>MARLAY |         |         | WESTBOUND<br>MARLAY |         |         | TOTAL |
|----------------|------------------------|---------|---------|------------------------|---------|---------|---------------------|---------|---------|---------------------|---------|---------|-------|
|                | NL<br>1                | NT<br>2 | NR<br>0 | SL<br>1                | ST<br>2 | SR<br>0 | EL<br>1             | ET<br>2 | ER<br>0 | WL<br>1             | WT<br>2 | WR<br>0 |       |
| LANES:         |                        |         |         |                        |         |         |                     |         |         |                     |         |         |       |
| 6:30 AM        |                        |         |         |                        |         |         |                     |         |         |                     |         |         | 0     |
| 6:45 AM        |                        |         |         |                        |         |         |                     |         |         |                     |         |         | 0     |
| 7:00 AM        | 7                      | 107     | 24      | 19                     | 87      | 12      | 3                   | 7       | 5       | 15                  | 14      | 28      | 328   |
| 7:15 AM        | 9                      | 102     | 23      | 12                     | 111     | 8       | 2                   | 8       | 6       | 11                  | 11      | 16      | 319   |
| 7:30 AM        | 13                     | 142     | 26      | 17                     | 125     | 5       | 1                   | 4       | 7       | 16                  | 15      | 18      | 389   |
| 7:45 AM        | 6                      | 138     | 29      | 19                     | 109     | 10      | 4                   | 8       | 9       | 27                  | 15      | 22      | 396   |
| 8:00 AM        | 10                     | 132     | 24      | 17                     | 82      | 5       | 5                   | 4       | 5       | 7                   | 6       | 26      | 323   |
| 8:15 AM        | 9                      | 111     | 16      | 18                     | 75      | 4       | 4                   | 4       | 8       | 14                  | 9       | 17      | 289   |
| 8:30 AM        | 12                     | 121     | 15      | 22                     | 88      | 5       | 3                   | 2       | 6       | 10                  | 11      | 20      | 315   |
| 8:45 AM        | 9                      | 101     | 20      | 16                     | 81      | 6       | 5                   | 8       | 8       | 15                  | 13      | 18      | 300   |
| 9:00 AM        |                        |         |         |                        |         |         |                     |         |         |                     |         |         | 0     |
| 9:15 AM        |                        |         |         |                        |         |         |                     |         |         |                     |         |         | 0     |
| VOLUMES        | 75                     | 954     | 177     | 140                    | 758     | 55      | 27                  | 45      | 54      | 115                 | 94      | 165     | 2,659 |
| APPROACH %     | 6%                     | 79%     | 15%     | 15%                    | 80%     | 6%      | 21%                 | 36%     | 43%     | 31%                 | 25%     | 44%     |       |
| APP/DEPART     | 1,206                  | /       | 1,146   | 953                    | /       | 927     | 126                 | /       | 362     | 374                 | /       | 224     | 0     |
| BEGIN PEAK HR  | 7:00 AM                |         |         |                        |         |         |                     |         |         |                     |         |         |       |
| VOLUMES        | 35                     | 489     | 102     | 67                     | 432     | 35      | 10                  | 27      | 27      | 69                  | 55      | 84      | 1,432 |
| APPROACH %     | 6%                     | 78%     | 16%     | 13%                    | 81%     | 7%      | 16%                 | 42%     | 42%     | 33%                 | 26%     | 40%     |       |
| PEAK HR FACTOR | 0.865                  |         |         | 0.908                  |         |         | 0.762               |         |         | 0.813               |         |         | 0.904 |
| APP/DEPART     | 626                    | /       | 583     | 534                    | /       | 528     | 64                  | /       | 196     | 208                 | /       | 125     | 0     |
| 3:30 PM        |                        |         |         |                        |         |         |                     |         |         |                     |         |         | 0     |
| 3:45 PM        |                        |         |         |                        |         |         |                     |         |         |                     |         |         | 0     |
| 4:00 PM        | 4                      | 123     | 18      | 14                     | 122     | 6       | 7                   | 11      | 18      | 12                  | 9       | 26      | 370   |
| 4:15 PM        | 5                      | 101     | 17      | 19                     | 118     | 10      | 5                   | 10      | 9       | 11                  | 13      | 19      | 337   |
| 4:30 PM        | 6                      | 150     | 20      | 18                     | 107     | 3       | 14                  | 16      | 18      | 14                  | 27      | 31      | 424   |
| 4:45 PM        | 4                      | 128     | 21      | 14                     | 111     | 4       | 7                   | 5       | 10      | 12                  | 13      | 20      | 349   |
| 5:00 PM        | 2                      | 133     | 17      | 7                      | 166     | 3       | 3                   | 11      | 14      | 21                  | 16      | 26      | 419   |
| 5:15 PM        | 4                      | 103     | 11      | 13                     | 176     | 3       | 3                   | 3       | 10      | 16                  | 10      | 21      | 373   |
| 5:30 PM        | 5                      | 123     | 11      | 12                     | 156     | 8       | 5                   | 10      | 10      | 9                   | 16      | 18      | 383   |
| 5:45 PM        | 6                      | 105     | 16      | 9                      | 123     | 5       | 8                   | 9       | 11      | 15                  | 20      | 22      | 349   |
| 6:00 PM        |                        |         |         |                        |         |         |                     |         |         |                     |         |         | 0     |
| 6:15 PM        |                        |         |         |                        |         |         |                     |         |         |                     |         |         | 0     |
| VOLUMES        | 36                     | 966     | 131     | 106                    | 1,079   | 42      | 52                  | 75      | 100     | 110                 | 124     | 183     | 3,004 |
| APPROACH %     | 3%                     | 85%     | 12%     | 9%                     | 88%     | 3%      | 23%                 | 33%     | 44%     | 26%                 | 30%     | 44%     |       |
| APP/DEPART     | 1,133                  | /       | 1,201   | 1,227                  | /       | 1,289   | 227                 | /       | 312     | 417                 | /       | 202     | 0     |
| BEGIN PEAK HR  | 4:30 PM                |         |         |                        |         |         |                     |         |         |                     |         |         |       |
| VOLUMES        | 16                     | 514     | 69      | 52                     | 560     | 13      | 27                  | 35      | 52      | 63                  | 66      | 98      | 1,565 |
| APPROACH %     | 3%                     | 86%     | 12%     | 8%                     | 90%     | 2%      | 24%                 | 31%     | 46%     | 28%                 | 29%     | 43%     |       |
| PEAK HR FACTOR | 0.851                  |         |         | 0.814                  |         |         | 0.594               |         |         | 0.788               |         |         | 0.923 |
| APP/DEPART     | 599                    | /       | 639     | 625                    | /       | 675     | 114                 | /       | 156     | 227                 | /       | 95      | 0     |

## Intersection Turning Movement

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

|                             |                                             |                                     |                                       |                            |
|-----------------------------|---------------------------------------------|-------------------------------------|---------------------------------------|----------------------------|
| DATE:<br>2/10/09<br>TUESDAY | LOCATION:<br>NORTH & SOUTH:<br>EAST & WEST: | FONTANA<br>ETIWANDA<br>PHILADELPHIA | PROJECT #:<br>LOCATION #:<br>CONTROL: | CA09-0213-1<br>9<br>SIGNAL |
|-----------------------------|---------------------------------------------|-------------------------------------|---------------------------------------|----------------------------|

NOTES:



|    | NORTHBOUND<br>ETIWANDA |         |         | SOUTHBOUND<br>ETIWANDA |         |         | EASTBOUND<br>PHILADELPHIA |         |         | WESTBOUND<br>PHILADELPHIA |         |         | TOTAL |       |
|----|------------------------|---------|---------|------------------------|---------|---------|---------------------------|---------|---------|---------------------------|---------|---------|-------|-------|
|    | NL<br>1                | NT<br>2 | NR<br>1 | SL<br>1                | ST<br>2 | SR<br>0 | EL<br>1                   | ET<br>1 | ER<br>0 | WL<br>1                   | WT<br>1 | WR<br>0 |       |       |
| AM | 6:30 AM                |         |         |                        |         |         |                           |         |         |                           |         |         | 0     |       |
|    | 6:45 AM                |         |         |                        |         |         |                           |         |         |                           |         |         | 0     |       |
|    | 7:00 AM                | 14      | 128     | 6                      | 9       | 75      | 16                        | 14      | 0       | 7                         | 1       | 5       | 1     | 276   |
|    | 7:15 AM                | 6       | 110     | 2                      | 5       | 108     | 5                         | 10      | 4       | 8                         | 2       | 0       | 2     | 262   |
|    | 7:30 AM                | 17      | 157     | 2                      | 7       | 136     | 16                        | 14      | 2       | 10                        | 3       | 1       | 2     | 367   |
|    | 7:45 AM                | 17      | 168     | 3                      | 15      | 100     | 26                        | 9       | 3       | 6                         | 2       | 1       | 1     | 351   |
|    | 8:00 AM                | 21      | 145     | 4                      | 5       | 88      | 12                        | 11      | 3       | 10                        | 0       | 0       | 4     | 303   |
|    | 8:15 AM                | 13      | 119     | 6                      | 12      | 75      | 12                        | 11      | 3       | 10                        | 3       | 3       | 5     | 272   |
|    | 8:30 AM                | 18      | 126     | 9                      | 10      | 88      | 10                        | 18      | 5       | 8                         | 2       | 2       | 3     | 299   |
|    | 8:45 AM                | 10      | 109     | 8                      | 9       | 81      | 5                         | 8       | 2       | 9                         | 2       | 1       | 2     | 246   |
|    | 9:00 AM                |         |         |                        |         |         |                           |         |         |                           |         |         |       | 0     |
|    | 9:15 AM                |         |         |                        |         |         |                           |         |         |                           |         |         |       | 0     |
|    | VOLUMES                | 116     | 1,062   | 40                     | 72      | 751     | 102                       | 95      | 22      | 68                        | 15      | 13      | 20    | 2,376 |
|    | APPROACH %             | 10%     | 87%     | 3%                     | 8%      | 81%     | 11%                       | 51%     | 12%     | 37%                       | 31%     | 27%     | 42%   |       |
|    | APP/DEPART             | 1,218   | /       | 1,177                  | 925     | /       | 834                       | 185     | /       | 134                       | 48      | /       | 231   | 0     |
| PM | BEGIN PEAK HR          | 7:30 AM |         |                        |         |         |                           |         |         |                           |         |         |       |       |
|    | VOLUMES                | 68      | 589     | 15                     | 39      | 399     | 66                        | 45      | 11      | 36                        | 8       | 5       | 12    | 1,293 |
|    | APPROACH %             | 10%     | 88%     | 2%                     | 8%      | 79%     | 13%                       | 49%     | 12%     | 39%                       | 32%     | 20%     | 48%   |       |
|    | PEAK HR FACTOR         |         | 0.894   |                        |         | 0.792   |                           |         | 0.885   |                           |         | 0.568   |       | 0.881 |
|    | APP/DEPART             | 672     | /       | 646                    | 504     | /       | 443                       | 92      | /       | 65                        | 25      | /       | 139   | 0     |
|    | 3:30 PM                |         |         |                        |         |         |                           |         |         |                           |         |         |       | 0     |
|    | 3:45 PM                |         |         |                        |         |         |                           |         |         |                           |         |         |       | 0     |
|    | 4:00 PM                | 12      | 105     | 1                      | 1       | 150     | 9                         | 28      | 0       | 18                        | 2       | 1       | 10    | 337   |
|    | 4:15 PM                | 2       | 93      | 1                      | 3       | 123     | 7                         | 18      | 3       | 18                        | 1       | 3       | 18    | 290   |
|    | 4:30 PM                | 12      | 137     | 1                      | 0       | 143     | 7                         | 32      | 0       | 25                        | 4       | 4       | 22    | 387   |
|    | 4:45 PM                | 9       | 114     | 2                      | 0       | 128     | 6                         | 24      | 1       | 19                        | 5       | 0       | 15    | 323   |
|    | 5:00 PM                | 7       | 109     | 1                      | 0       | 181     | 12                        | 23      | 2       | 17                        | 3       | 2       | 8     | 365   |
|    | 5:15 PM                | 8       | 92      | 1                      | 2       | 196     | 12                        | 19      | 0       | 13                        | 3       | 1       | 12    | 359   |
|    | 5:30 PM                | 10      | 102     | 0                      | 2       | 156     | 10                        | 22      | 2       | 20                        | 2       | 2       | 18    | 346   |
|    | 5:45 PM                | 9       | 88      | 2                      | 0       | 131     | 15                        | 16      | 2       | 15                        | 2       | 5       | 16    | 301   |
|    | 6:00 PM                |         |         |                        |         |         |                           |         |         |                           |         |         |       | 0     |
|    | 6:15 PM                |         |         |                        |         |         |                           |         |         |                           |         |         |       | 0     |
|    | VOLUMES                | 69      | 840     | 9                      | 8       | 1,208   | 78                        | 182     | 10      | 145                       | 22      | 18      | 119   | 2,708 |
|    | APPROACH %             | 8%      | 92%     | 1%                     | 1%      | 93%     | 6%                        | 54%     | 3%      | 43%                       | 14%     | 11%     | 75%   |       |
|    | APP/DEPART             | 918     | /       | 1,141                  | 1,294   | /       | 1,375                     | 337     | /       | 27                        | 159     | /       | 165   | 0     |
|    | BEGIN PEAK HR          | 4:30 PM |         |                        |         |         |                           |         |         |                           |         |         |       |       |
|    | VOLUMES                | 36      | 452     | 5                      | 2       | 648     | 37                        | 98      | 3       | 74                        | 15      | 7       | 57    | 1,434 |
|    | APPROACH %             | 7%      | 92%     | 1%                     | 0%      | 94%     | 5%                        | 56%     | 2%      | 42%                       | 19%     | 9%      | 72%   |       |
|    | PEAK HR FACTOR         |         | 0.822   |                        |         | 0.818   |                           |         | 0.768   |                           |         | 0.658   |       | 0.926 |
|    | APP/DEPART             | 493     | /       | 607                    | 687     | /       | 737                       | 175     | /       | 10                        | 79      | /       | 80    | 0     |

# Intersection Turning Movement

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

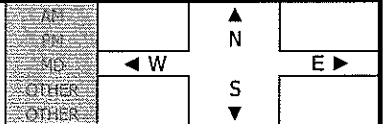
DATE:  
2/10/09  
TUESDAY

LOCATION:  
NORTH & SOUTH:  
EAST & WEST:

FONTANA  
ETIWANDA AVE  
SR-60 WB RAMP

PROJECT #: CA09-0213-1  
LOCATION #: 10  
CONTROL: SIGNAL

NOTES:



|                | NORTHBOUND<br>ETIWANDA AVE |         |         | SOUTHBOUND<br>ETIWANDA AVE |         |         | EASTBOUND<br>SR-60 WB RAMP |         |         | WESTBOUND<br>SR-60 WB RAMP |         |         |       |
|----------------|----------------------------|---------|---------|----------------------------|---------|---------|----------------------------|---------|---------|----------------------------|---------|---------|-------|
| LANES:         | NL<br>1                    | NT<br>2 | NR<br>1 | SL<br>X                    | ST<br>2 | SR<br>X | EL<br>X                    | ET<br>X | ER<br>X | WL<br>1                    | WT<br>X | WR<br>1 | TOTAL |
| 6:30 AM        |                            |         |         |                            |         |         |                            |         |         |                            |         |         | 0     |
| 6:45 AM        |                            |         |         |                            |         |         |                            |         |         |                            |         |         | 0     |
| 7:00 AM        |                            | 162     |         |                            | 94      |         |                            |         |         | 42                         |         | 55      | 353   |
| 7:15 AM        |                            | 165     |         |                            | 89      |         |                            |         |         | 57                         |         | 46      | 357   |
| 7:30 AM        |                            | 189     |         |                            | 114     |         |                            |         |         | 44                         |         | 75      | 422   |
| 7:45 AM        |                            | 219     |         |                            | 108     |         |                            |         |         | 55                         |         | 75      | 457   |
| 8:00 AM        |                            | 159     |         |                            | 112     |         |                            |         |         | 51                         |         | 57      | 379   |
| 8:15 AM        |                            | 146     |         |                            | 97      |         |                            |         |         | 51                         |         | 54      | 348   |
| 8:30 AM        |                            | 135     |         |                            | 102     |         |                            |         |         | 42                         |         | 32      | 311   |
| 8:45 AM        |                            | 113     |         |                            | 101     |         |                            |         |         | 53                         |         | 49      | 316   |
| 9:00 AM        |                            |         |         |                            |         |         |                            |         |         |                            |         |         | 0     |
| 9:15 AM        |                            |         |         |                            |         |         |                            |         |         |                            |         |         | 0     |
| VOLUMES        | 0                          | 1,288   | 0       | 0                          | 817     | 0       | 0                          | 0       | 0       | 395                        | 0       | 443     | 2,943 |
| APPROACH %     | 0%                         | 100%    | 0%      | 0%                         | 100%    | 0%      | 0%                         | 0%      | 0%      | 47%                        | 0%      | 53%     |       |
| APP/DEPART     | 1,288                      | /       | 1,731   | 817                        | /       | 1,212   | 0                          | /       | 0       | 838                        | /       | 0       | 0     |
| BEGIN PEAK HR  | 7:15 AM                    |         |         |                            |         |         |                            |         |         |                            |         |         |       |
| VOLUMES        | 0                          | 732     | 0       | 0                          | 423     | 0       | 0                          | 0       | 0       | 207                        | 0       | 253     | 1,615 |
| APPROACH %     | 0%                         | 100%    | 0%      | 0%                         | 100%    | 0%      | 0%                         | 0%      | 0%      | 45%                        | 0%      | 55%     |       |
| PEAK HR FACTOR |                            | 0.836   |         |                            | 0.928   |         |                            | 0.000   |         |                            | 0.885   |         | 0.883 |
| APP/DEPART     | 732                        | /       | 985     | 423                        | /       | 630     | 0                          | /       | 0       | 460                        | /       | 0       | 0     |
| 3:30 PM        |                            |         |         |                            |         |         |                            |         |         |                            |         |         | 0     |
| 3:45 PM        |                            |         |         |                            |         |         |                            |         |         |                            |         |         | 0     |
| 4:00 PM        |                            | 104     |         |                            | 265     |         |                            |         |         | 22                         |         | 14      | 405   |
| 4:15 PM        |                            | 84      |         |                            | 206     |         |                            |         |         | 27                         |         | 17      | 334   |
| 4:30 PM        |                            | 101     |         |                            | 255     |         |                            |         |         | 61                         |         | 32      | 449   |
| 4:45 PM        |                            | 102     |         |                            | 201     |         |                            |         |         | 65                         |         | 37      | 405   |
| 5:00 PM        |                            | 84      |         |                            | 264     |         |                            |         |         | 46                         |         | 34      | 428   |
| 5:15 PM        |                            | 93      |         |                            | 273     |         |                            |         |         | 44                         |         | 22      | 432   |
| 5:30 PM        |                            | 110     |         |                            | 200     |         |                            |         |         | 58                         |         | 28      | 396   |
| 5:45 PM        |                            | 99      |         |                            | 232     |         |                            |         |         | 43                         |         | 21      | 395   |
| 6:00 PM        |                            |         |         |                            |         |         |                            |         |         |                            |         |         | 0     |
| 6:15 PM        |                            |         |         |                            |         |         |                            |         |         |                            |         |         | 0     |
| VOLUMES        | 0                          | 777     | 0       | 0                          | 1,896   | 0       | 0                          | 0       | 0       | 366                        | 0       | 205     | 3,244 |
| APPROACH %     | 0%                         | 100%    | 0%      | 0%                         | 100%    | 0%      | 0%                         | 0%      | 0%      | 64%                        | 0%      | 36%     |       |
| APP/DEPART     | 777                        | /       | 982     | 1,896                      | /       | 2,262   | 0                          | /       | 0       | 571                        | /       | 0       | 0     |
| BEGIN PEAK HR  | 4:30 PM                    |         |         |                            |         |         |                            |         |         |                            |         |         |       |
| VOLUMES        | 0                          | 380     | 0       | 0                          | 993     | 0       | 0                          | 0       | 0       | 216                        | 0       | 125     | 1,714 |
| APPROACH %     | 0%                         | 100%    | 0%      | 0%                         | 100%    | 0%      | 0%                         | 0%      | 0%      | 63%                        | 0%      | 37%     |       |
| PEAK HR FACTOR |                            | 0.931   |         |                            | 0.909   |         |                            | 0.000   |         |                            | 0.836   |         | 0.954 |
| APP/DEPART     | 380                        | /       | 505     | 993                        | /       | 1,209   | 0                          | /       | 0       | 341                        | /       | 0       | 0     |

# Intersection Turning Movement

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

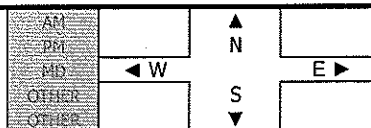
DATE:  
2/10/09  
TUESDAY

LOCATION:  
NORTH & SOUTH:  
EAST & WEST:

FONTANA  
ETIWANDA AVE  
SR-60 EB RAMP

PROJECT #: CA09-0213-1  
LOCATION #: 11  
CONTROL: SIGNAL

NOTES:



|                | NORTHBOUND<br>ETIWANDA AVE |         |         | SOUTHBOUND<br>ETIWANDA AVE |         |         | EASTBOUND<br>SR-60 EB RAMP |         |         | WESTBOUND<br>SR-60 EB RAMP |         |         | TOTAL |
|----------------|----------------------------|---------|---------|----------------------------|---------|---------|----------------------------|---------|---------|----------------------------|---------|---------|-------|
|                | NL<br>X                    | NT<br>2 | NR<br>0 | SL<br>1                    | ST<br>2 | SR<br>X | EL<br>X                    | ET<br>X | ER<br>X | WL<br>X                    | WT<br>X | WR<br>X |       |
| LANES:         |                            |         |         |                            |         |         |                            |         |         |                            |         |         |       |
| 6:30 AM        |                            |         |         |                            |         |         |                            |         |         |                            |         |         | 0     |
| 6:45 AM        |                            |         |         |                            |         |         |                            |         |         |                            |         |         | 0     |
| 7:00 AM        |                            | 159     | 35      | 20                         | 121     |         |                            |         |         |                            |         |         | 335   |
| 7:15 AM        |                            | 168     | 45      | 18                         | 118     |         |                            |         |         |                            |         |         | 349   |
| 7:30 AM        |                            | 195     | 47      | 21                         | 139     |         |                            |         |         |                            |         |         | 402   |
| 7:45 AM        |                            | 220     | 40      | 18                         | 136     |         |                            |         |         |                            |         |         | 414   |
| 8:00 AM        |                            | 169     | 57      | 25                         | 131     |         |                            |         |         |                            |         |         | 382   |
| 8:15 AM        |                            | 133     | 31      | 26                         | 124     |         |                            |         |         |                            |         |         | 314   |
| 8:30 AM        |                            | 135     | 29      | 23                         | 124     |         |                            |         |         |                            |         |         | 311   |
| 8:45 AM        |                            | 108     | 31      | 26                         | 137     |         |                            |         |         |                            |         |         | 302   |
| 9:00 AM        |                            |         |         |                            |         |         |                            |         |         |                            |         |         | 0     |
| 9:15 AM        |                            |         |         |                            |         |         |                            |         |         |                            |         |         | 0     |
| VOLUMES        | 0                          | 1,287   | 315     | 177                        | 1,030   | 0       | 0                          | 0       | 0       | 0                          | 0       | 0       | 2,809 |
| APPROACH %     | 0%                         | 80%     | 20%     | 15%                        | 85%     | 0%      | 0%                         | 0%      | 0%      | 0%                         | 0%      | 0%      |       |
| APP/DEPART     | 1,602                      | /       | 1,287   | 1,207                      | /       | 1,030   | 0                          | /       | 492     | 0                          | /       | 0       | 0     |
| BEGIN PEAK HR  | 7:15 AM                    |         |         |                            |         |         |                            |         |         |                            |         |         |       |
| VOLUMES        | 0                          | 752     | 189     | 82                         | 524     | 0       | 0                          | 0       | 0       | 0                          | 0       | 0       | 1,547 |
| APPROACH %     | 0%                         | 80%     | 20%     | 14%                        | 86%     | 0%      | 0%                         | 0%      | 0%      | 0%                         | 0%      | 0%      |       |
| PEAK HR FACTOR |                            | 0.905   |         |                            | 0.947   |         |                            | 0.000   |         |                            | 0.000   |         | 0.934 |
| APP/DEPART     | 941                        | /       | 752     | 606                        | /       | 524     | 0                          | /       | 271     | 0                          | /       | 0       | 0     |
| 3:30 PM        |                            |         |         |                            |         |         |                            |         |         |                            |         |         | 0     |
| 3:45 PM        |                            |         |         |                            |         |         |                            |         |         |                            |         |         | 0     |
| 4:00 PM        |                            | 103     | 64      | 76                         | 209     |         |                            |         |         |                            |         |         | 452   |
| 4:15 PM        |                            | 83      | 54      | 50                         | 170     |         |                            |         |         |                            |         |         | 357   |
| 4:30 PM        |                            | 98      | 68      | 66                         | 247     |         |                            |         |         |                            |         |         | 479   |
| 4:45 PM        |                            | 98      | 69      | 45                         | 212     |         |                            |         |         |                            |         |         | 424   |
| 5:00 PM        |                            | 84      | 66      | 81                         | 220     |         |                            |         |         |                            |         |         | 451   |
| 5:15 PM        |                            | 95      | 62      | 70                         | 243     |         |                            |         |         |                            |         |         | 470   |
| 5:30 PM        |                            | 104     | 50      | 77                         | 184     |         |                            |         |         |                            |         |         | 415   |
| 5:45 PM        |                            | 97      | 56      | 64                         | 208     |         |                            |         |         |                            |         |         | 425   |
| 6:00 PM        |                            |         |         |                            |         |         |                            |         |         |                            |         |         | 0     |
| 6:15 PM        |                            |         |         |                            |         |         |                            |         |         |                            |         |         | 0     |
| VOLUMES        | 0                          | 762     | 489     | 529                        | 1,693   | 0       | 0                          | 0       | 0       | 0                          | 0       | 0       | 3,473 |
| APPROACH %     | 0%                         | 61%     | 39%     | 24%                        | 76%     | 0%      | 0%                         | 0%      | 0%      | 0%                         | 0%      | 0%      |       |
| APP/DEPART     | 1,251                      | /       | 762     | 2,222                      | /       | 1,693   | 0                          | /       | 1,018   | 0                          | /       | 0       | 0     |
| BEGIN PEAK HR  | 4:30 PM                    |         |         |                            |         |         |                            |         |         |                            |         |         |       |
| VOLUMES        | 0                          | 375     | 265     | 262                        | 922     | 0       | 0                          | 0       | 0       | 0                          | 0       | 0       | 1,824 |
| APPROACH %     | 0%                         | 59%     | 41%     | 22%                        | 78%     | 0%      | 0%                         | 0%      | 0%      | 0%                         | 0%      | 0%      |       |
| PEAK HR FACTOR |                            | 0.958   |         |                            | 0.946   |         |                            | 0.000   |         |                            | 0.000   |         | 0.952 |
| APP/DEPART     | 640                        | /       | 375     | 1,184                      | /       | 922     | 0                          | /       | 527     | 0                          | /       | 0       | 0     |

# Intersection Turning Movement

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

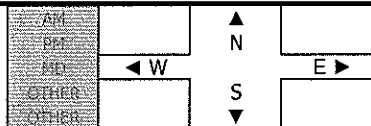
DATE:  
2/24/09  
TUESDAY

LOCATION:  
NORTH & SOUTH:  
EAST & WEST:

FONTANA  
COMMERCE  
VALLEY

PROJECT #: CA09-0213-1  
LOCATION #: 12  
CONTROL: SIGNAL

NOTES:



|        | NORTHBOUND<br>COMMERCE |         |         | SOUTHBOUND<br>COMMERCE |           |           | EASTBOUND<br>VALLEY |         |         | WESTBOUND<br>VALLEY |         |         |       |
|--------|------------------------|---------|---------|------------------------|-----------|-----------|---------------------|---------|---------|---------------------|---------|---------|-------|
| LANES: | NL<br>2                | NT<br>1 | NR<br>1 | SL<br>1                | ST<br>1.5 | SR<br>0.5 | EL<br>1             | ET<br>2 | ER<br>1 | WL<br>2             | WT<br>2 | WR<br>1 | TOTAL |

|                |            |     |     |       |     |     |       |     |       |       |     |     |       |       |
|----------------|------------|-----|-----|-------|-----|-----|-------|-----|-------|-------|-----|-----|-------|-------|
| AM             | 6:30 AM    |     |     |       |     |     |       |     |       |       |     |     |       | 0     |
|                | 6:45 AM    |     |     |       |     |     |       |     |       |       |     |     |       | 0     |
|                | 7:00 AM    | 4   | 22  | 90    | 3   | 6   | 2     | 0   | 13    | 1     | 73  | 35  | 1     | 250   |
|                | 7:15 AM    | 6   | 17  | 103   | 1   | 13  | 3     | 0   | 24    | 2     | 71  | 49  | 0     | 289   |
|                | 7:30 AM    | 6   | 17  | 91    | 3   | 18  | 1     | 1   | 26    | 1     | 52  | 52  | 4     | 272   |
|                | 7:45 AM    | 8   | 21  | 87    | 4   | 11  | 1     | 3   | 21    | 0     | 57  | 57  | 3     | 273   |
|                | 8:00 AM    | 1   | 22  | 73    | 6   | 15  | 5     | 4   | 13    | 2     | 46  | 38  | 3     | 228   |
|                | 8:15 AM    | 5   | 22  | 82    | 3   | 10  | 6     | 0   | 19    | 1     | 49  | 37  | 4     | 238   |
|                | 8:30 AM    | 3   | 17  | 69    | 6   | 18  | 2     | 5   | 21    | 0     | 47  | 39  | 5     | 232   |
|                | 8:45 AM    | 6   | 12  | 43    | 3   | 12  | 7     | 9   | 12    | 0     | 49  | 44  | 5     | 202   |
|                | 9:00 AM    |     |     |       |     |     |       |     |       |       |     |     |       | 0     |
|                | 9:15 AM    |     |     |       |     |     |       |     |       |       |     |     |       | 0     |
|                | VOLUMES    | 39  | 150 | 638   | 29  | 103 | 27    | 22  | 149   | 7     | 444 | 351 | 25    | 1,984 |
|                | APPROACH % | 5%  | 18% | 77%   | 18% | 65% | 17%   | 12% | 84%   | 4%    | 54% | 43% | 3%    |       |
| APP/DEPART     | 827        | /   | 197 | 159   | /   | 554 | 178   | /   | 816   | 820   | /   | 417 | 0     |       |
| BEGIN PEAK HR  | 7:00 AM    |     |     |       |     |     |       |     |       |       |     |     |       |       |
| VOLUMES        | 24         | 77  | 371 | 11    | 48  | 7   | 4     | 84  | 4     | 253   | 193 | 8   | 1,084 |       |
| APPROACH %     | 5%         | 16% | 79% | 17%   | 73% | 11% | 4%    | 91% | 4%    | 56%   | 43% | 2%  |       |       |
| PEAK HR FACTOR | 0.937      |     |     | 0.750 |     |     | 0.821 |     |       | 0.946 |     |     | 0.938 |       |
| APP/DEPART     | 472        | /   | 89  | 66    | /   | 305 | 92    | /   | 466   | 454   | /   | 224 | 0     |       |
| PM             | 3:30 PM    |     |     |       |     |     |       |     |       |       |     |     |       | 0     |
|                | 3:45 PM    |     |     |       |     |     |       |     |       |       |     |     |       | 0     |
|                | 4:00 PM    | 6   | 34  | 143   | 2   | 27  | 3     | 4   | 38    | 2     | 96  | 72  | 5     | 432   |
|                | 4:15 PM    | 3   | 32  | 164   | 7   | 22  | 1     | 2   | 42    | 4     | 80  | 54  | 4     | 415   |
|                | 4:30 PM    | 3   | 33  | 157   | 4   | 19  | 4     | 3   | 51    | 1     | 76  | 52  | 4     | 407   |
|                | 4:45 PM    | 0   | 21  | 140   | 5   | 21  | 4     | 3   | 41    | 1     | 91  | 53  | 1     | 381   |
|                | 5:00 PM    | 0   | 17  | 89    | 3   | 26  | 1     | 0   | 31    | 1     | 96  | 64  | 2     | 330   |
|                | 5:15 PM    | 4   | 21  | 97    | 3   | 18  | 3     | 1   | 33    | 4     | 86  | 45  | 0     | 315   |
|                | 5:30 PM    | 1   | 20  | 91    | 2   | 12  | 2     | 3   | 30    | 1     | 75  | 47  | 2     | 286   |
|                | 5:45 PM    | 5   | 14  | 107   | 3   | 11  | 1     | 0   | 18    | 3     | 52  | 40  | 5     | 259   |
|                | 6:00 PM    |     |     |       |     |     |       |     |       |       |     |     |       | 0     |
|                | 6:15 PM    |     |     |       |     |     |       |     |       |       |     |     |       | 0     |
|                | VOLUMES    | 22  | 192 | 988   | 29  | 156 | 19    | 16  | 284   | 17    | 652 | 427 | 23    | 2,825 |
|                | APPROACH % | 2%  | 16% | 82%   | 14% | 76% | 9%    | 5%  | 90%   | 5%    | 59% | 39% | 2%    |       |
| APP/DEPART     | 1,202      | /   | 231 | 204   | /   | 825 | 317   | /   | 1,301 | 1,102 | /   | 468 | 0     |       |
| BEGIN PEAK HR  | 4:00 PM    |     |     |       |     |     |       |     |       |       |     |     |       |       |
| VOLUMES        | 12         | 120 | 604 | 18    | 89  | 12  | 12    | 172 | 8     | 343   | 231 | 14  | 1,635 |       |
| APPROACH %     | 2%         | 16% | 82% | 15%   | 75% | 10% | 6%    | 90% | 4%    | 58%   | 39% | 2%  |       |       |
| PEAK HR FACTOR | 0.925      |     |     | 0.930 |     |     | 0.873 |     |       | 0.850 |     |     | 0.946 |       |
| APP/DEPART     | 736        | /   | 146 | 119   | /   | 440 | 192   | /   | 794   | 588   | /   | 255 | 0     |       |

## Intersection Turning Movement

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

|                             |                                             |                               |                                       |                             |
|-----------------------------|---------------------------------------------|-------------------------------|---------------------------------------|-----------------------------|
| DATE:<br>2/10/09<br>TUESDAY | LOCATION:<br>NORTH & SOUTH:<br>EAST & WEST: | FONTANA<br>MULBERRY<br>SOLVER | PROJECT #:<br>LOCATION #:<br>CONTROL: | CA09-0213-1<br>13<br>SIGNAL |
|-----------------------------|---------------------------------------------|-------------------------------|---------------------------------------|-----------------------------|

|        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NOTES: | <div style="display: flex; flex-direction: column; align-items: center;"> <div style="display: flex; flex-direction: column; align-items: center;"> <div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">AM</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">PM</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">MD</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">OTHER</div> <div style="border: 1px solid black; padding: 2px;">OTHER</div> </div> <div style="display: flex; flex-direction: column; align-items: center;"> <div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">◀ W</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">S</div> <div style="border: 1px solid black; padding: 2px;">E ▶</div> </div> </div> |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                |            | NORTHBOUND |         |         | SOUTHBOUND |         |         | EASTBOUND |         |         | WESTBOUND |         |         |       |
|----------------|------------|------------|---------|---------|------------|---------|---------|-----------|---------|---------|-----------|---------|---------|-------|
|                |            | MULBERRY   |         |         | MULBERRY   |         |         | SOLVER    |         |         | SOLVER    |         |         |       |
| LANES:         |            | NL<br>1    | NT<br>X | NR<br>1 | SL<br>X    | ST<br>X | SR<br>X | EL<br>X   | ET<br>2 | ER<br>0 | WL<br>1   | WT<br>2 | WR<br>X | TOTAL |
| AM             | 6:30 AM    |            |         |         |            |         |         |           |         |         |           |         |         | 0     |
|                | 6:45 AM    |            |         |         |            |         |         |           |         |         |           |         |         | 0     |
|                | 7:00 AM    | 16         |         | 31      |            |         |         |           | 36      | 16      | 23        | 54      |         | 176   |
|                | 7:15 AM    | 45         |         | 23      |            |         |         |           | 30      | 11      | 32        | 60      |         | 201   |
|                | 7:30 AM    | 32         |         | 34      |            |         |         |           | 44      | 15      | 38        | 90      |         | 253   |
|                | 7:45 AM    | 38         |         | 30      |            |         |         |           | 53      | 21      | 40        | 89      |         | 271   |
|                | 8:00 AM    | 21         |         | 26      |            |         |         |           | 39      | 19      | 29        | 77      |         | 211   |
|                | 8:15 AM    | 32         |         | 20      |            |         |         |           | 35      | 21      | 30        | 42      |         | 180   |
|                | 8:30 AM    | 35         |         | 23      |            |         |         |           | 41      | 15      | 33        | 51      |         | 198   |
|                | 8:45 AM    | 26         |         | 18      |            |         |         |           | 30      | 15      | 25        | 44      |         | 158   |
|                | 9:00 AM    |            |         |         |            |         |         |           |         |         |           |         |         | 0     |
|                | 9:15 AM    |            |         |         |            |         |         |           |         |         |           |         |         | 0     |
|                | VOLUMES    | 245        | 0       | 205     | 0          | 0       | 0       | 0         | 308     | 133     | 250       | 507     | 0       | 1,648 |
|                | APPROACH % | 54%        | 0%      | 46%     | 0%         | 0%      | 0%      | 0%        | 70%     | 30%     | 33%       | 67%     | 0%      |       |
|                | APP/DEPART | 450        | /       | 0       | 0          | /       | 383     | 441       | /       | 513     | 757       | /       | 752     | 0     |
| BEGIN PEAK HR  | 7:15 AM    |            |         |         |            |         |         |           |         |         |           |         |         |       |
| VOLUMES        | 136        | 0          | 113     | 0       | 0          | 0       | 0       | 166       | 66      | 139     | 316       | 0       | 936     |       |
| APPROACH %     | 55%        | 0%         | 45%     | 0%      | 0%         | 0%      | 0%      | 72%       | 28%     | 31%     | 69%       | 0%      |         |       |
| PEAK HR FACTOR | 0.915      |            |         | 0.000   |            |         | 0.784   |           |         | 0.882   |           |         | 0.863   |       |
| APP/DEPART     | 249        | /          | 0       | 0       | /          | 205     | 232     | /         | 279     | 455     | /         | 452     | 0       |       |
| PM             | 3:30 PM    |            |         |         |            |         |         |           |         |         |           |         |         | 0     |
|                | 3:45 PM    |            |         |         |            |         |         |           |         |         |           |         |         | 0     |
|                | 4:00 PM    | 39         |         | 15      |            |         |         |           | 57      | 18      | 31        | 85      |         | 245   |
|                | 4:15 PM    | 37         |         | 15      |            |         |         |           | 60      | 16      | 22        | 78      |         | 228   |
|                | 4:30 PM    | 34         |         | 35      |            |         |         |           | 58      | 10      | 25        | 76      |         | 238   |
|                | 4:45 PM    | 23         |         | 18      |            |         |         |           | 51      | 14      | 31        | 64      |         | 201   |
|                | 5:00 PM    | 35         |         | 16      |            |         |         |           | 47      | 24      | 28        | 120     |         | 270   |
|                | 5:15 PM    | 33         |         | 23      |            |         |         |           | 55      | 18      | 33        | 88      |         | 250   |
|                | 5:30 PM    | 28         |         | 18      |            |         |         |           | 40      | 22      | 15        | 81      |         | 204   |
|                | 5:45 PM    | 22         |         | 15      |            |         |         |           | 42      | 16      | 20        | 70      |         | 185   |
|                | 6:00 PM    |            |         |         |            |         |         |           |         |         |           |         |         | 0     |
|                | 6:15 PM    |            |         |         |            |         |         |           |         |         |           |         |         | 0     |
|                | VOLUMES    | 251        | 0       | 155     | 0          | 0       | 0       | 0         | 410     | 138     | 205       | 662     | 0       | 1,821 |
|                | APPROACH % | 62%        | 0%      | 38%     | 0%         | 0%      | 0%      | 0%        | 75%     | 25%     | 24%       | 76%     | 0%      |       |
|                | APP/DEPART | 406        | /       | 0       | 0          | /       | 343     | 548       | /       | 565     | 867       | /       | 913     | 0     |
| BEGIN PEAK HR  | 4:30 PM    |            |         |         |            |         |         |           |         |         |           |         |         |       |
| VOLUMES        | 125        | 0          | 92      | 0       | 0          | 0       | 0       | 211       | 66      | 117     | 348       | 0       | 959     |       |
| APPROACH %     | 58%        | 0%         | 42%     | 0%      | 0%         | 0%      | 0%      | 76%       | 24%     | 25%     | 75%       | 0%      |         |       |
| PEAK HR FACTOR | 0.786      |            |         | 0.000   |            |         | 0.949   |           |         | 0.785   |           |         | 0.888   |       |
| APP/DEPART     | 217        | /          | 0       | 0       | /          | 183     | 277     | /         | 303     | 465     | /         | 473     | 0       |       |

# Intersection Turning Movement

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

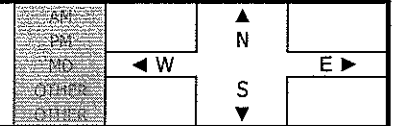
DATE:  
2/10/09  
TUESDAY

LOCATION:  
NORTH & SOUTH:  
EAST & WEST:

FONTANA  
MULBERRY  
SANTA ANA

PROJECT #: CA09-0213-1  
LOCATION #: 14  
CONTROL: SIGNAL

NOTES:



|        | NORTHBOUND<br>MULBERRY |         |         | SOUTHBOUND<br>MULBERRY |         |         | EASTBOUND<br>SANTA ANA |         |         | WESTBOUND<br>SANTA ANA |         |         |       |
|--------|------------------------|---------|---------|------------------------|---------|---------|------------------------|---------|---------|------------------------|---------|---------|-------|
| LANES: | NL<br>1                | NT<br>1 | NR<br>1 | SL<br>1                | ST<br>1 | SR<br>0 | EL<br>0                | ET<br>1 | ER<br>0 | WL<br>0                | WT<br>1 | WR<br>0 | TOTAL |

|                |            |     |     |       |     |     |       |     |     |       |     |     |       |       |
|----------------|------------|-----|-----|-------|-----|-----|-------|-----|-----|-------|-----|-----|-------|-------|
| AM             | 6:30 AM    |     |     |       |     |     |       |     |     |       |     |     |       | 0     |
|                | 6:45 AM    |     |     |       |     |     |       |     |     |       |     |     |       | 0     |
|                | 7:00 AM    | 16  | 38  | 9     | 1   | 27  | 6     | 0   | 1   | 4     | 8   | 1   | 6     | 117   |
|                | 7:15 AM    | 10  | 51  | 17    | 5   | 32  | 4     | 0   | 4   | 6     | 15  | 2   | 13    | 159   |
|                | 7:30 AM    | 13  | 49  | 11    | 7   | 38  | 3     | 0   | 2   | 5     | 10  | 2   | 15    | 155   |
|                | 7:45 AM    | 26  | 57  | 10    | 6   | 45  | 3     | 1   | 3   | 4     | 8   | 3   | 3     | 169   |
|                | 8:00 AM    | 20  | 50  | 6     | 2   | 23  | 4     | 1   | 0   | 6     | 8   | 4   | 3     | 127   |
|                | 8:15 AM    | 8   | 38  | 8     | 2   | 34  | 4     | 3   | 3   | 6     | 4   | 2   | 7     | 119   |
|                | 8:30 AM    | 11  | 41  | 9     | 5   | 28  | 6     | 2   | 2   | 4     | 8   | 0   | 5     | 121   |
|                | 8:45 AM    | 9   | 33  | 5     | 3   | 30  | 2     | 1   | 2   | 5     | 7   | 3   | 8     | 108   |
|                | 9:00 AM    |     |     |       |     |     |       |     |     |       |     |     |       | 0     |
|                | 9:15 AM    |     |     |       |     |     |       |     |     |       |     |     |       | 0     |
|                | VOLUMES    | 113 | 357 | 75    | 31  | 257 | 32    | 8   | 17  | 40    | 68  | 17  | 60    | 1,075 |
|                | APPROACH % | 21% | 66% | 14%   | 10% | 80% | 10%   | 12% | 26% | 62%   | 47% | 12% | 41%   |       |
| APP/DEPART     | 545        | /   | 425 | 320   | /   | 365 | 65    | /   | 123 | 145   | /   | 162 | 0     |       |
| BEGIN PEAK HR  | 7:15 AM    |     |     |       |     |     |       |     |     |       |     |     |       |       |
| VOLUMES        | 69         | 207 | 44  | 20    | 138 | 14  | 2     | 9   | 21  | 41    | 11  | 34  | 610   |       |
| APPROACH %     | 22%        | 65% | 14% | 12%   | 80% | 8%  | 6%    | 28% | 66% | 48%   | 13% | 40% |       |       |
| PEAK HR FACTOR | 0.860      |     |     | 0.796 |     |     | 0.800 |     |     | 0.717 |     |     | 0.902 |       |
| APP/DEPART     | 320        | /   | 243 | 172   | /   | 200 | 32    | /   | 73  | 86    | /   | 94  | 0     |       |
| PM             | 3:30 PM    |     |     |       |     |     |       |     |     |       |     |     |       | 0     |
|                | 3:45 PM    |     |     |       |     |     |       |     |     |       |     |     |       | 0     |
|                | 4:00 PM    | 5   | 32  | 10    | 3   | 46  | 1     | 1   | 4   | 8     | 16  | 1   | 17    | 144   |
|                | 4:15 PM    | 1   | 32  | 2     | 9   | 39  | 3     | 3   | 1   | 14    | 10  | 3   | 16    | 133   |
|                | 4:30 PM    | 0   | 49  | 11    | 4   | 41  | 1     | 3   | 3   | 16    | 14  | 5   | 18    | 165   |
|                | 4:45 PM    | 4   | 27  | 8     | 3   | 42  | 1     | 0   | 2   | 13    | 11  | 1   | 13    | 125   |
|                | 5:00 PM    | 2   | 44  | 9     | 8   | 51  | 2     | 2   | 3   | 18    | 9   | 2   | 20    | 170   |
|                | 5:15 PM    | 1   | 35  | 10    | 8   | 48  | 2     | 2   | 3   | 10    | 15  | 2   | 16    | 152   |
|                | 5:30 PM    | 3   | 28  | 8     | 6   | 33  | 5     | 1   | 2   | 11    | 16  | 3   | 13    | 129   |
|                | 5:45 PM    | 5   | 33  | 15    | 5   | 42  | 2     | 2   | 2   | 13    | 8   | 1   | 11    | 139   |
|                | 6:00 PM    |     |     |       |     |     |       |     |     |       |     |     |       | 0     |
|                | 6:15 PM    |     |     |       |     |     |       |     |     |       |     |     |       | 0     |
|                | VOLUMES    | 21  | 280 | 73    | 46  | 342 | 17    | 14  | 20  | 103   | 99  | 18  | 124   | 1,157 |
|                | APPROACH % | 6%  | 75% | 20%   | 11% | 84% | 4%    | 10% | 15% | 75%   | 41% | 7%  | 51%   |       |
| APP/DEPART     | 374        | /   | 418 | 405   | /   | 544 | 137   | /   | 139 | 241   | /   | 56  | 0     |       |
| BEGIN PEAK HR  | 4:30 PM    |     |     |       |     |     |       |     |     |       |     |     |       |       |
| VOLUMES        | 7          | 155 | 38  | 23    | 182 | 6   | 7     | 11  | 57  | 49    | 10  | 67  | 612   |       |
| APPROACH %     | 4%         | 78% | 19% | 11%   | 86% | 3%  | 9%    | 15% | 76% | 39%   | 8%  | 53% |       |       |
| PEAK HR FACTOR | 0.833      |     |     | 0.865 |     |     | 0.815 |     |     | 0.851 |     |     | 0.900 |       |
| APP/DEPART     | 200        | /   | 229 | 211   | /   | 288 | 75    | /   | 72  | 126   | /   | 23  | 0     |       |



COUNTS UNLIMITED INC  
25424 JACLYN AVENUE  
MORENO VALLEY CA. 92557  
951-247-6716

CITY OF FONTANA  
N/S: MULBERRY AVENUE  
E/W: JURUPA AVENUE  
WEATHER: SUNNY

File Name : FOMUJAM  
Site Code : 0438825  
Start Date : 3/16/2006  
Page No : 1

| Groups Printed- PASSENGER VEHICLES - LARGE 2 AXLE VEHICLES - 3 AXLE VEHICLES - 4+ AXLE TRUCKS |                 |      |       |            |               |      |       |            |                 |      |       |            |               |      |       |            |            |  |
|-----------------------------------------------------------------------------------------------|-----------------|------|-------|------------|---------------|------|-------|------------|-----------------|------|-------|------------|---------------|------|-------|------------|------------|--|
|                                                                                               | MULBERRY AVENUE |      |       |            | JURUPA AVENUE |      |       |            | MULBERRY AVENUE |      |       |            | JURUPA AVENUE |      |       |            |            |  |
|                                                                                               | Southbound      |      |       |            | Westbound     |      |       |            | Northbound      |      |       |            | Eastbound     |      |       |            |            |  |
| Start Time                                                                                    | Left            | Thru | Right | App. Total | Left          | Thru | Right | App. Total | Left            | Thru | Right | App. Total | Left          | Thru | Right | App. Total | Int. Total |  |
| 06:45 AM                                                                                      | 0               | 31   | 13    | 44         | 38            | 157  | 5     | 200        | 97              | 95   | 33    | 225        | 14            | 47   | 13    | 74         | 543        |  |
| Total                                                                                         | 0               | 31   | 13    | 44         | 38            | 157  | 5     | 200        | 97              | 95   | 33    | 225        | 14            | 47   | 13    | 74         | 543        |  |
| 07:00 AM                                                                                      | 3               | 31   | 12    | 46         | 36            | 147  | 5     | 188        | 80              | 62   | 37    | 179        | 26            | 48   | 15    | 89         | 502        |  |
| 07:15 AM                                                                                      | 1               | 40   | 17    | 58         | 44            | 163  | 7     | 214        | 93              | 66   | 56    | 215        | 7             | 56   | 19    | 82         | 569        |  |
| 07:30 AM                                                                                      | 2               | 61   | 9     | 72         | 48            | 159  | 7     | 214        | 88              | 100  | 48    | 236        | 16            | 40   | 15    | 71         | 593        |  |
| 07:45 AM                                                                                      | 1               | 47   | 12    | 60         | 47            | 146  | 11    | 204        | 84              | 85   | 42    | 211        | 23            | 50   | 12    | 85         | 560        |  |
| Total                                                                                         | 7               | 179  | 50    | 236        | 175           | 615  | 30    | 820        | 345             | 313  | 183   | 841        | 72            | 194  | 61    | 327        | 2224       |  |
| 08:00 AM                                                                                      | 2               | 30   | 13    | 45         | 26            | 111  | 5     | 142        | 43              | 61   | 59    | 163        | 10            | 69   | 19    | 98         | 448        |  |
| 08:15 AM                                                                                      | 2               | 44   | 10    | 56         | 37            | 81   | 4     | 122        | 49              | 53   | 31    | 133        | 22            | 63   | 13    | 98         | 409        |  |
| 08:30 AM                                                                                      | 3               | 39   | 10    | 52         | 26            | 84   | 5     | 115        | 45              | 52   | 42    | 139        | 8             | 70   | 10    | 88         | 394        |  |
| 08:45 AM                                                                                      | 1               | 38   | 8     | 47         | 26            | 92   | 8     | 126        | 21              | 53   | 50    | 124        | 11            | 49   | 12    | 72         | 369        |  |
| Total                                                                                         | 8               | 151  | 41    | 200        | 115           | 368  | 22    | 505        | 158             | 219  | 182   | 559        | 51            | 251  | 54    | 356        | 1620       |  |
| Grand Total                                                                                   | 15              | 361  | 104   | 480        | 328           | 1140 | 57    | 1525       | 600             | 627  | 398   | 1625       | 137           | 492  | 128   | 757        | 4387       |  |
| Apprch %                                                                                      | 3.1             | 75.2 | 21.7  |            | 21.5          | 74.8 | 3.7   |            | 36.9            | 38.6 | 24.5  |            | 18.1          | 65   | 16.9  |            |            |  |
| Total %                                                                                       | 0.3             | 8.2  | 2.4   | 10.9       | 7.5           | 26   | 1.3   | 34.8       | 13.7            | 14.3 | 9.1   | 37         | 3.1           | 11.2 | 2.9   | 17.3       |            |  |
| PASSENGER VEHICLES                                                                            | 12              | 197  | 48    | 257        | 220           | 1005 | 53    | 1278       | 571             | 497  | 328   | 1396       | 74            | 402  | 109   | 585        | 3516       |  |
| PASSENGER VEHICLES                                                                            | 80              | 54.6 | 46.2  | 53.5       | 67.1          | 88.2 | 93    | 83.8       | 95.2            | 79.3 | 82.4  | 85.9       | 54            | 81.7 | 85.2  | 77.3       | 80.1       |  |
| LARGE 2 AXLE VEHICLES                                                                         | 2               | 55   | 10    | 67         | 27            | 29   | 1     | 57         | 15              | 47   | 28    | 90         | 16            | 32   | 3     | 51         | 265        |  |
| LARGE 2 AXLE VEHICLES                                                                         | 13.3            | 15.2 | 9.6   | 14         | 8.2           | 2.5  | 1.8   | 3.7        | 2.5             | 7.5  | 7     | 5.5        | 11.7          | 6.5  | 2.3   | 6.7        | 6          |  |
| 3 AXLE VEHICLES                                                                               | 1               | 21   | 21    | 43         | 23            | 35   | 3     | 61         | 3               | 36   | 11    | 50         | 10            | 20   | 3     | 33         | 187        |  |
| % 3 AXLE VEHICLES                                                                             | 6.7             | 5.8  | 20.2  | 9          | 7             | 3.1  | 5.3   | 4          | 0.5             | 5.7  | 2.8   | 3.1        | 7.3           | 4.1  | 2.3   | 4.4        | 4.3        |  |
| 4+ AXLE TRUCKS                                                                                | 0               | 88   | 25    | 113        | 58            | 71   | 0     | 129        | 11              | 47   | 31    | 89         | 37            | 38   | 13    | 88         | 419        |  |
| % 4+ AXLE TRUCKS                                                                              | 0               | 24.4 | 24    | 23.5       | 17.7          | 6.2  | 0     | 8.5        | 1.8             | 7.5  | 7.8   | 5.5        | 27            | 7.7  | 10.2  | 11.6       | 9.6        |  |

| MULBERRY AVENUE                                            |      |      |       |            | JURUPA AVENUE |      |       |            |  | MULBERRY AVENUE |      |       |            |  | JURUPA AVENUE |      |       |            |            |
|------------------------------------------------------------|------|------|-------|------------|---------------|------|-------|------------|--|-----------------|------|-------|------------|--|---------------|------|-------|------------|------------|
| Southbound                                                 |      |      |       |            | Westbound     |      |       |            |  | Northbound      |      |       |            |  | Eastbound     |      |       |            |            |
| Start Time                                                 | Left | Thru | Right | App. Total | Left          | Thru | Right | App. Total |  | Left            | Thru | Right | App. Total |  | Left          | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 06:45 AM to 08:45 AM - Peak 1 of 1 |      |      |       |            |               |      |       |            |  |                 |      |       |            |  |               |      |       |            |            |
| Peak Hour for Entire Intersection Begins at 07:00 AM       |      |      |       |            |               |      |       |            |  |                 |      |       |            |  |               |      |       |            |            |
| 07:00 AM                                                   |      | 31   | 12    | 46         | 36            | 147  | 5     | 188        |  | 80              | 62   | 37    | 179        |  | 179           | 48   | 15    | 15         | 502        |
| 07:15 AM                                                   | 1    | 40   | 40    | 58         | 44            | 44   | 7     | 7          |  | 7               | 66   | 66    | 215        |  | 7             | 7    | 7     | 82         | 569        |
| 07:30 AM                                                   | 2    | 2    | 9     | 9          | 9             | 159  | 7     | 214        |  | 88              | 88   | 48    | 48         |  | 16            | 40   | 15    | 71         | 71         |
| 07:45 AM                                                   | 1    | 47   | 12    | 60         | 47            | 146  | 146   | 204        |  | 84              | 85   | 42    | 211        |  | 23            | 50   | 12    | 85         | 560        |
| Total Volume                                               | 7    | 179  | 50    | 236        | 175           | 615  | 30    | 820        |  | 345             | 313  | 183   | 841        |  | 72            | 194  | 61    | 327        | 2224       |
| % App. Total                                               | 3    | 75.8 | 21.2  |            | 21.3          | 75   | 3.7   |            |  | 41              | 37.2 | 21.8  |            |  | 22            | 59.3 | 18.7  |            |            |
| PHF                                                        | .583 | .734 | .735  | .819       | .911          | .943 | .682  | .958       |  | .927            | .783 | .817  | .891       |  | .692          | .866 | .803  | .919       | .938       |

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CITY OF FONTANA  
N/S: MULBERRY AVENUE  
E/W: JURUPA AVENUE  
WEATHER: SUNNY

File Name : FOMUJUPM  
Site Code : 0438859  
Start Date : 4/20/2006  
Page No : 1

| Groups Printed- PASSENGER VEHICLES - LARGE 2 AXLE VEHICLES - 3 AXLE VEHICLES - 4+ AXLE TRUCKS |                 |      |       |            |               |      |       |            |                 |      |       |            |               |      |       |            |            |  |
|-----------------------------------------------------------------------------------------------|-----------------|------|-------|------------|---------------|------|-------|------------|-----------------|------|-------|------------|---------------|------|-------|------------|------------|--|
|                                                                                               | MULBERRY AVENUE |      |       |            | JURUPA AVENUE |      |       |            | MULBERRY AVENUE |      |       |            | JURUPA AVENUE |      |       |            |            |  |
|                                                                                               | Southbound      |      |       |            | Westbound     |      |       |            | Northbound      |      |       |            | Eastbound     |      |       |            |            |  |
| Start Time                                                                                    | Left            | Thru | Right | App. Total | Left          | Thru | Right | App. Total | Left            | Thru | Right | App. Total | Left          | Thru | Right | App. Total | Int. Total |  |
| 03:45 PM                                                                                      | 9               | 83   | 25    | 117        | 60            | 149  | 10    | 219        | 25              | 59   | 57    | 141        | 19            | 268  | 93    | 380        | 857        |  |
| Total                                                                                         | 9               | 83   | 25    | 117        | 60            | 149  | 10    | 219        | 25              | 59   | 57    | 141        | 19            | 268  | 93    | 380        | 857        |  |
| 04:00 PM                                                                                      | 15              | 89   | 50    | 154        | 63            | 151  | 2     | 216        | 18              | 54   | 49    | 121        | 32            | 196  | 82    | 310        | 801        |  |
| 04:15 PM                                                                                      | 10              | 87   | 40    | 137        | 74            | 144  | 19    | 237        | 27              | 35   | 69    | 131        | 14            | 219  | 96    | 329        | 834        |  |
| 04:30 PM                                                                                      | 12              | 89   | 35    | 136        | 73            | 164  | 10    | 247        | 18              | 61   | 117   | 196        | 46            | 225  | 83    | 354        | 933        |  |
| 04:45 PM                                                                                      | 10              | 97   | 40    | 147        | 85            | 165  | 10    | 260        | 26              | 86   | 61    | 173        | 21            | 305  | 76    | 402        | 982        |  |
| Total                                                                                         | 47              | 362  | 165   | 574        | 295           | 624  | 41    | 960        | 89              | 236  | 296   | 621        | 113           | 945  | 337   | 1395       | 3550       |  |
| 05:00 PM                                                                                      | 11              | 97   | 42    | 150        | 95            | 183  | 16    | 294        | 29              | 48   | 54    | 131        | 30            | 258  | 99    | 387        | 962        |  |
| 05:15 PM                                                                                      | 13              | 68   | 37    | 118        | 76            | 133  | 6     | 215        | 34              | 35   | 48    | 117        | 30            | 265  | 98    | 393        | 843        |  |
| 05:30 PM                                                                                      | 6               | 80   | 14    | 100        | 42            | 97   | 3     | 142        | 35              | 50   | 53    | 138        | 10            | 263  | 99    | 372        | 752        |  |
| Grand Total                                                                                   | 86              | 690  | 283   | 1059       | 568           | 1186 | 76    | 1830       | 212             | 428  | 508   | 1148       | 202           | 1999 | 726   | 2927       | 6964       |  |
| Apprch %                                                                                      | 8.1             | 65.2 | 26.7  |            | 31            | 64.8 | 4.2   |            | 18.5            | 37.3 | 44.3  |            | 6.9           | 68.3 | 24.8  |            |            |  |
| Total %                                                                                       | 1.2             | 9.9  | 4.1   | 15.2       | 8.2           | 17   | 1.1   | 26.3       | 3               | 6.1  | 7.3   | 16.5       | 2.9           | 28.7 | 10.4  | 42         |            |  |
| PASSENGER VEHICLES                                                                            | 75              | 570  | 136   | 781        | 468           | 1005 | 56    | 1529       | 192             | 268  | 344   | 804        | 58            | 1716 | 687   | 2461       | 5575       |  |
| LARGE 2 AXLE VEHICLES                                                                         | 87.2            | 82.6 | 48.1  | 73.7       | 82.4          | 84.7 | 73.7  | 83.6       | 90.6            | 62.6 | 67.7  | 70         | 28.7          | 85.8 | 94.6  | 84.1       | 80.1       |  |
| 3 AXLE VEHICLES                                                                               | 5               | 43   | 66    | 114        | 26            | 44   | 1     | 71         | 11              | 37   | 43    | 91         | 27            | 90   | 21    | 138        | 414        |  |
| 4+ AXLE TRUCKS                                                                                | 5.8             | 6.2  | 23.3  | 10.8       | 4.6           | 3.7  | 1.3   | 3.9        | 5.2             | 8.6  | 8.5   | 7.9        | 13.4          | 4.5  | 2.9   | 4.7        | 5.9        |  |
| 3 AXLE VEHICLES                                                                               | 2               | 12   | 14    | 28         | 16            | 46   | 14    | 76         | 1               | 28   | 19    | 48         | 24            | 80   | 5     | 109        | 261        |  |
| % 3 AXLE VEHICLES                                                                             | 2.3             | 1.7  | 4.9   | 2.6        | 2.8           | 3.9  | 18.4  | 4.2        | 0.5             | 6.5  | 3.7   | 4.2        | 11.9          | 4    | 0.7   | 3.7        | 3.7        |  |
| 4+ AXLE TRUCKS                                                                                | 4               | 65   | 67    | 136        | 58            | 91   | 5     | 154        | 8               | 95   | 102   | 205        | 93            | 113  | 13    | 219        | 714        |  |
| % 4+ AXLE TRUCKS                                                                              | 4.7             | 9.4  | 23.7  | 12.8       | 10.2          | 7.7  | 6.6   | 8.4        | 3.8             | 22.2 | 20.1  | 17.9       | 46            | 5.7  | 1.8   | 7.5        | 10.3       |  |

|                                                            | MULBERRY AVENUE |      |       |            | JURUPA AVENUE |      |       |            | MULBERRY AVENUE |      |       |            | JURUPA AVENUE |      |       |            |            |  |
|------------------------------------------------------------|-----------------|------|-------|------------|---------------|------|-------|------------|-----------------|------|-------|------------|---------------|------|-------|------------|------------|--|
|                                                            | Southbound      |      |       |            | Westbound     |      |       |            | Northbound      |      |       |            | Eastbound     |      |       |            |            |  |
| Start Time                                                 | Left            | Thru | Right | App. Total | Left          | Thru | Right | App. Total | Left            | Thru | Right | App. Total | Left          | Thru | Right | App. Total | Int. Total |  |
| Peak Hour Analysis From 03:45 PM to 05:30 PM - Peak 1 of 1 |                 |      |       |            |               |      |       |            |                 |      |       |            |               |      |       |            |            |  |
| Peak Hour for Entire Intersection Begins at 04:30 PM       |                 |      |       |            |               |      |       |            |                 |      |       |            |               |      |       |            |            |  |
| 04:30 PM                                                   | 12              | 89   | 35    | 136        | 73            | 164  | 10    | 247        | 18              | 61   | 117   | 196        | 46            | 225  | 83    | 354        | 933        |  |
| 04:45 PM                                                   | 10              | 97   | 40    | 147        | 85            | 165  | 10    | 260        | 26              | 86   | 61    | 173        | 21            | 305  | 76    | 402        | 982        |  |
| 05:00 PM                                                   | 11              | 97   | 42    | 150        | 95            | 183  | 16    | 294        | 29              | 48   | 54    | 131        | 30            | 258  | 99    | 387        | 962        |  |
| 05:15 PM                                                   | 13              | 68   | 37    | 118        | 76            | 133  | 6     | 215        | 34              | 35   | 48    | 117        | 30            | 265  | 98    | 393        | 843        |  |
| Total Volume                                               | 46              | 351  | 154   | 551        | 329           | 645  | 42    | 1016       | 107             | 230  | 280   | 617        | 127           | 1053 | 356   | 1536       | 3720       |  |
| % App. Total                                               | 8.3             | 63.7 | 27.9  |            | 32.4          | 63.5 | 4.1   |            | 17.3            | 37.3 | 45.4  |            | 8.3           | 68.6 | 23.2  |            |            |  |
| PHF                                                        | .885            | .905 | .917  | .918       | .866          | .881 | .656  | .864       | .787            | .669 | .598  | .787       | .690          | .863 | .899  | .955       | .947       |  |

# Intersection Turning Movement

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:  
2/10/09  
TUESDAY

LOCATION:  
NORTH & SOUTH:  
EAST & WEST:

FONTANA  
MULBERRY  
MARLAY

PROJECT #: CA09-0213-1  
LOCATION #: 16  
CONTROL: SIGNAL

|        |  |  |  |  |  |  |  |  |  |                                                                                          |  |                                        |                                        |                           |
|--------|--|--|--|--|--|--|--|--|--|------------------------------------------------------------------------------------------|--|----------------------------------------|----------------------------------------|---------------------------|
| NOTES: |  |  |  |  |  |  |  |  |  | <div> <div>AM</div> <div>PM</div> <div>MD</div> <div>OTHER</div> <div>OTHER</div> </div> |  | <div> <div>W</div> <div>S</div> </div> | <div> <div>N</div> <div>S</div> </div> | <div> <div>E</div> </div> |
|--------|--|--|--|--|--|--|--|--|--|------------------------------------------------------------------------------------------|--|----------------------------------------|----------------------------------------|---------------------------|

|        | NORTHBOUND<br>MULBERRY |         |         | SOUTHBOUND<br>MULBERRY |         |         | EASTBOUND<br>MARLAY |         |         | WESTBOUND<br>MARLAY |         |         |       |
|--------|------------------------|---------|---------|------------------------|---------|---------|---------------------|---------|---------|---------------------|---------|---------|-------|
| LANES: | NL<br>1                | NT<br>2 | NR<br>0 | SL<br>1                | ST<br>2 | SR<br>0 | EL<br>1             | ET<br>1 | ER<br>1 | WL<br>1             | WT<br>1 | WR<br>0 | TOTAL |

|                |               |         |     |       |       |       |       |     |     |       |     |     |       |       |  |
|----------------|---------------|---------|-----|-------|-------|-------|-------|-----|-----|-------|-----|-----|-------|-------|--|
| AM             | 6:30 AM       |         |     |       |       |       |       |     |     |       |     |     |       | 0     |  |
|                | 6:45 AM       |         |     |       |       |       |       |     |     |       |     |     |       | 0     |  |
|                | 7:00 AM       | 16      | 109 | 7     | 5     | 58    | 19    | 9   | 4   | 9     | 9   | 18  | 12    | 275   |  |
|                | 7:15 AM       | 18      | 117 | 9     | 1     | 60    | 10    | 8   | 3   | 8     | 15  | 11  | 13    | 273   |  |
|                | 7:30 AM       | 9       | 91  | 7     | 0     | 56    | 7     | 10  | 3   | 11    | 6   | 7   | 11    | 218   |  |
|                | 7:45 AM       | 10      | 82  | 6     | 0     | 61    | 9     | 8   | 2   | 8     | 5   | 8   | 8     | 207   |  |
|                | 8:00 AM       | 12      | 73  | 7     | 1     | 60    | 10    | 5   | 4   | 10    | 9   | 5   | 4     | 200   |  |
|                | 8:15 AM       | 9       | 72  | 5     | 6     | 47    | 10    | 4   | 1   | 6     | 2   | 5   | 8     | 175   |  |
|                | 8:30 AM       | 10      | 80  | 6     | 1     | 52    | 9     | 6   | 3   | 7     | 4   | 3   | 6     | 187   |  |
|                | 8:45 AM       | 11      | 77  | 4     | 2     | 57    | 7     | 8   | 2   | 8     | 5   | 4   | 5     | 190   |  |
|                | 9:00 AM       |         |     |       |       |       |       |     |     |       |     |     |       | 0     |  |
|                | 9:15 AM       |         |     |       |       |       |       |     |     |       |     |     |       | 0     |  |
|                | VOLUMES       | 95      | 701 | 51    | 16    | 451   | 81    | 58  | 22  | 67    | 55  | 61  | 67    | 1,725 |  |
|                | APPROACH %    | 11%     | 83% | 6%    | 3%    | 82%   | 15%   | 39% | 15% | 46%   | 30% | 33% | 37%   |       |  |
| APP/DEPART     | 847           | /       | 826 | 548   | /     | 573   | 147   | /   | 89  | 183   | /   | 237 | 0     |       |  |
| BEGIN PEAK HR  | 7:00 AM       |         |     |       |       |       |       |     |     |       |     |     |       |       |  |
| VOLUMES        | 53            | 399     | 29  | 6     | 235   | 45    | 35    | 12  | 36  | 35    | 44  | 44  | 973   |       |  |
| APPROACH %     | 11%           | 83%     | 6%  | 2%    | 82%   | 16%   | 42%   | 14% | 43% | 28%   | 36% | 36% |       |       |  |
| PEAK HR FACTOR | 0.835         |         |     | 0.872 |       |       | 0.865 |     |     | 0.788 |     |     | 0.885 |       |  |
| APP/DEPART     | 481           | /       | 478 | 286   | /     | 306   | 83    | /   | 47  | 123   | /   | 142 | 0     |       |  |
| PM             | 3:30 PM       |         |     |       |       |       |       |     |     |       |     |     |       | 0     |  |
|                | 3:45 PM       |         |     |       |       |       |       |     |     |       |     |     |       | 0     |  |
|                | 4:00 PM       | 6       | 82  | 12    | 10    | 148   | 7     | 18  | 12  | 22    | 7   | 0   | 2     | 326   |  |
|                | 4:15 PM       | 9       | 67  | 14    | 5     | 121   | 8     | 12  | 19  | 24    | 11  | 5   | 1     | 296   |  |
|                | 4:30 PM       | 11      | 78  | 12    | 7     | 155   | 4     | 33  | 38  | 46    | 13  | 0   | 6     | 403   |  |
|                | 4:45 PM       | 6       | 77  | 17    | 10    | 113   | 14    | 10  | 20  | 19    | 9   | 3   | 5     | 303   |  |
|                | 5:00 PM       | 7       | 78  | 11    | 10    | 170   | 3     | 14  | 26  | 27    | 14  | 7   | 4     | 371   |  |
|                | 5:15 PM       | 10      | 88  | 20    | 13    | 145   | 10    | 22  | 22  | 28    | 19  | 8   | 6     | 391   |  |
|                | 5:30 PM       | 9       | 70  | 15    | 9     | 138   | 8     | 16  | 22  | 31    | 11  | 8   | 6     | 343   |  |
|                | 5:45 PM       | 8       | 65  | 9     | 11    | 117   | 5     | 11  | 15  | 20    | 10  | 5   | 4     | 280   |  |
|                | 6:00 PM       |         |     |       |       |       |       |     |     |       |     |     |       | 0     |  |
|                | 6:15 PM       |         |     |       |       |       |       |     |     |       |     |     |       | 0     |  |
|                | VOLUMES       | 66      | 605 | 110   | 75    | 1,107 | 59    | 136 | 174 | 217   | 94  | 36  | 34    | 2,713 |  |
|                | APPROACH %    | 8%      | 77% | 14%   | 6%    | 89%   | 5%    | 26% | 33% | 41%   | 57% | 22% | 21%   |       |  |
|                | APP/DEPART    | 781     | /   | 775   | 1,241 | /     | 1,418 | 527 | /   | 359   | 164 | /   | 161   | 0     |  |
|                | BEGIN PEAK HR | 4:30 PM |     |       |       |       |       |     |     |       |     |     |       |       |  |
|                | VOLUMES       | 34      | 321 | 60    | 40    | 583   | 31    | 79  | 106 | 120   | 55  | 18  | 21    | 1,468 |  |
| APPROACH %     | 8%            | 77%     | 14% | 6%    | 89%   | 5%    | 26%   | 35% | 39% | 59%   | 19% | 22% |       |       |  |
| PEAK HR FACTOR | 0.879         |         |     | 0.893 |       |       | 0.652 |     |     | 0.712 |     |     | 0.911 |       |  |
| APP/DEPART     | 415           | /       | 421 | 654   | /     | 758   | 305   | /   | 206 | 94    | /   | 83  | 0     |       |  |

# **Intersection Turning Movement**

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

|                             |                                             |                                     |                                       |                             |
|-----------------------------|---------------------------------------------|-------------------------------------|---------------------------------------|-----------------------------|
| DATE:<br>2/10/09<br>TUESDAY | LOCATION:<br>NORTH & SOUTH:<br>EAST & WEST: | FONTANA<br>MULBERRY<br>PHILADELPHIA | PROJECT #:<br>LOCATION #:<br>CONTROL: | CA09-0213-1<br>17<br>SIGNAL |
|-----------------------------|---------------------------------------------|-------------------------------------|---------------------------------------|-----------------------------|

|        |                                                                                                                                                                    |
|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NOTES: | <div> <div>AM</div> <div>PM</div> <div>MD</div> <div>OTHER</div> <div>SIGNAL</div> </div> <div> <div>▲ N</div> <div>◀ W</div> <div>▶ E</div> <div>▼ S</div> </div> |
|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|        | NORTHBOUND<br>MULBERRY |         |         | SOUTHBOUND<br>MULBERRY |         |         | EASTBOUND<br>PHILADELPHIA |         |         | WESTBOUND<br>PHILADELPHIA |         |         |       |
|--------|------------------------|---------|---------|------------------------|---------|---------|---------------------------|---------|---------|---------------------------|---------|---------|-------|
| LANES: | NL<br>1                | NT<br>2 | NR<br>1 | SL<br>1                | ST<br>2 | SR<br>1 | EL<br>1                   | ET<br>1 | ER<br>1 | WL<br>1                   | WT<br>1 | WR<br>0 | TOTAL |

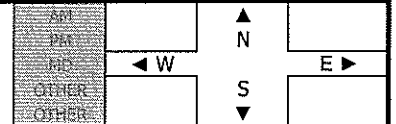
|    |                |         |       |       |       |       |       |     |       |     |     |       |       |
|----|----------------|---------|-------|-------|-------|-------|-------|-----|-------|-----|-----|-------|-------|
| AM | 6:30 AM        |         |       |       |       |       |       |     |       |     |     |       | 0     |
|    | 6:45 AM        |         |       |       |       |       |       |     |       |     |     |       | 0     |
|    | 7:00 AM        | 13      | 166   | 8     | 3     | 151   | 6     | 5   | 0     | 8   | 14  | 0     | 377   |
|    | 7:15 AM        | 17      | 170   | 10    | 2     | 189   | 3     | 4   | 1     | 10  | 19  | 1     | 428   |
|    | 7:30 AM        | 17      | 183   | 0     | 3     | 254   | 7     | 8   | 0     | 9   | 13  | 3     | 501   |
|    | 7:45 AM        | 19      | 205   | 2     | 2     | 221   | 13    | 8   | 0     | 12  | 13  | 0     | 500   |
|    | 8:00 AM        | 31      | 194   | 5     | 2     | 193   | 6     | 0   | 0     | 6   | 13  | 0     | 455   |
|    | 8:15 AM        | 7       | 140   | 11    | 2     | 152   | 3     | 6   | 0     | 4   | 11  | 2     | 340   |
|    | 8:30 AM        | 11      | 151   | 8     | 5     | 141   | 5     | 7   | 0     | 4   | 8   | 0     | 343   |
|    | 8:45 AM        | 6       | 128   | 5     | 0     | 130   | 2     | 11  | 1     | 4   | 10  | 0     | 300   |
|    | 9:00 AM        |         |       |       |       |       |       |     |       |     |     |       | 0     |
|    | 9:15 AM        |         |       |       |       |       |       |     |       |     |     |       | 0     |
|    | VOLUMES        | 121     | 1,337 | 49    | 19    | 1,431 | 45    | 49  | 2     | 57  | 101 | 6     | 2,244 |
|    | APPROACH %     | 8%      | 89%   | 3%    | 1%    | 96%   | 3%    | 45% | 2%    | 53% | 75% | 4%    | 20%   |
|    | APP/DEPART     | 1,507   | /     | 1,413 | 1,495 | /     | 1,589 | 108 | /     | 70  | 134 | /     | 172   |
| PM | BEGIN PEAK HR  | 7:15 AM |       |       |       |       |       |     |       |     |     |       |       |
|    | VOLUMES        | 84      | 752   | 17    | 9     | 857   | 29    | 20  | 1     | 37  | 58  | 4     | 1,884 |
|    | APPROACH %     | 10%     | 88%   | 2%    | 1%    | 96%   | 3%    | 34% | 2%    | 64% | 74% | 5%    | 21%   |
|    | PEAK HR FACTOR |         | 0.927 |       |       | 0.848 |       |     | 0.725 |     |     | 0.886 | 0.940 |
|    | APP/DEPART     | 853     | /     | 788   | 895   | /     | 952   | 58  | /     | 27  | 78  | /     | 117   |
|    | 3:30 PM        |         |       |       |       |       |       |     |       |     |     |       | 0     |
|    | 3:45 PM        |         |       |       |       |       |       |     |       |     |     |       | 0     |
|    | 4:00 PM        | 4       | 196   | 13    | 3     | 243   | 9     | 6   | 5     | 24  | 8   | 0     | 511   |
|    | 4:15 PM        | 4       | 211   | 12    | 6     | 207   | 7     | 6   | 3     | 8   | 11  | 1     | 481   |
|    | 4:30 PM        | 9       | 188   | 9     | 3     | 242   | 7     | 8   | 1     | 30  | 14  | 3     | 518   |
|    | 4:45 PM        | 9       | 227   | 18    | 2     | 227   | 6     | 8   | 1     | 6   | 10  | 6     | 522   |
|    | 5:00 PM        | 4       | 218   | 19    | 3     | 244   | 7     | 11  | 3     | 20  | 11  | 1     | 542   |
|    | 5:15 PM        | 8       | 226   | 13    | 6     | 211   | 11    | 11  | 5     | 18  | 13  | 3     | 528   |
|    | 5:30 PM        | 5       | 227   | 15    | 5     | 218   | 13    | 15  | 4     | 15  | 8   | 3     | 530   |
|    | 5:45 PM        | 4       | 209   | 19    | 5     | 206   | 8     | 8   | 2     | 9   | 8   | 1     | 480   |
|    | 6:00 PM        |         |       |       |       |       |       |     |       |     |     |       | 0     |
|    | 6:15 PM        |         |       |       |       |       |       |     |       |     |     |       | 0     |
|    | VOLUMES        | 47      | 1,702 | 118   | 33    | 1,798 | 68    | 73  | 24    | 130 | 83  | 18    | 4,112 |
|    | APPROACH %     | 3%      | 91%   | 6%    | 2%    | 95%   | 4%    | 32% | 11%   | 57% | 70% | 15%   | 15%   |
|    | APP/DEPART     | 1,867   | /     | 1,793 | 1,899 | /     | 2,011 | 227 | /     | 175 | 119 | /     | 133   |
|    | BEGIN PEAK HR  | 4:45 PM |       |       |       |       |       |     |       |     |     |       |       |
|    | VOLUMES        | 26      | 898   | 65    | 16    | 900   | 37    | 45  | 13    | 59  | 42  | 13    | 2,122 |
|    | APPROACH %     | 3%      | 91%   | 7%    | 2%    | 94%   | 4%    | 38% | 11%   | 50% | 67% | 21%   | 13%   |
|    | PEAK HR FACTOR |         | 0.973 |       |       | 0.938 |       |     | 0.860 |     |     | 0.829 | 0.979 |
|    | APP/DEPART     | 989     | /     | 951   | 953   | /     | 1,001 | 117 | /     | 94  | 63  | /     | 76    |

## Intersection Turning Movement

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

|                             |                                             |                                          |                                       |                             |
|-----------------------------|---------------------------------------------|------------------------------------------|---------------------------------------|-----------------------------|
| DATE:<br>2/10/09<br>TUESDAY | LOCATION:<br>NORTH & SOUTH:<br>EAST & WEST: | FONTANA<br>MULBERRY AVE<br>SR-60 WB RAMP | PROJECT #:<br>LOCATION #:<br>CONTROL: | CA09-0213-1<br>18<br>SIGNAL |
|-----------------------------|---------------------------------------------|------------------------------------------|---------------------------------------|-----------------------------|

NOTES:



|                |            | NORTHBOUND<br>MULBERRY AVE |         |         | SOUTHBOUND<br>MULBERRY AVE |         |         | EASTBOUND<br>SR-60 WB RAMP |         |         | WESTBOUND<br>SR-60 WB RAMP |           |         |       |
|----------------|------------|----------------------------|---------|---------|----------------------------|---------|---------|----------------------------|---------|---------|----------------------------|-----------|---------|-------|
| LANES:         |            | NL<br>1                    | NT<br>2 | NR<br>X | SL<br>X                    | ST<br>2 | SR<br>1 | EL<br>X                    | ET<br>X | ER<br>X | WL<br>0.5                  | WT<br>0.5 | WR<br>1 | TOTAL |
| AM             | 6:30 AM    |                            |         |         |                            |         |         |                            |         |         |                            |           |         | 0     |
|                | 6:45 AM    |                            |         |         |                            |         |         |                            |         |         |                            |           |         | 0     |
|                | 7:00 AM    | 55                         | 130     |         |                            | 85      | 141     |                            |         |         | 15                         | 0         | 37      | 463   |
|                | 7:15 AM    | 51                         | 141     |         |                            | 96      | 173     |                            |         |         | 27                         | 1         | 57      | 546   |
|                | 7:30 AM    | 50                         | 145     |         |                            | 108     | 194     |                            |         |         | 23                         | 0         | 48      | 568   |
|                | 7:45 AM    | 67                         | 186     |         |                            | 105     | 168     |                            |         |         | 33                         | 0         | 67      | 626   |
|                | 8:00 AM    | 38                         | 149     |         |                            | 122     | 140     |                            |         |         | 25                         | 0         | 42      | 516   |
|                | 8:15 AM    | 59                         | 134     |         |                            | 74      | 115     |                            |         |         | 23                         | 0         | 47      | 452   |
|                | 8:30 AM    | 58                         | 122     |         |                            | 112     | 121     |                            |         |         | 25                         | 1         | 48      | 487   |
|                | 8:45 AM    | 67                         | 129     |         |                            | 84      | 93      |                            |         |         | 18                         | 0         | 35      | 426   |
|                | 9:00 AM    |                            |         |         |                            |         |         |                            |         |         |                            |           |         | 0     |
|                | 9:15 AM    |                            |         |         |                            |         |         |                            |         |         |                            |           |         | 0     |
|                | VOLUMES    | 445                        | 1,136   | 0       | 0                          | 786     | 1,145   | 0                          | 0       | 0       | 189                        | 2         | 381     | 4,084 |
|                | APPROACH % | 28%                        | 72%     | 0%      | 0%                         | 41%     | 59%     | 0%                         | 0%      | 0%      | 33%                        | 0%        | 67%     |       |
|                | APP/DEPART | 1,581                      | /       | 1,517   | 1,931                      | /       | 975     | 0                          | /       | 0       | 572                        | /         | 1,592   | 0     |
| BEGIN PEAK HR  | 7:15 AM    |                            |         |         |                            |         |         |                            |         |         |                            |           |         |       |
| VOLUMES        | 206        | 621                        | 0       | 0       | 431                        | 675     | 0       | 0                          | 0       | 108     | 1                          | 214       | 2,256   |       |
| APPROACH %     | 25%        | 75%                        | 0%      | 0%      | 39%                        | 61%     | 0%      | 0%                         | 0%      | 33%     | 0%                         | 66%       |         |       |
| PEAK HR FACTOR | 0.817      |                            |         |         | 0.916                      |         | 0.000   |                            |         | 0.808   |                            |           | 0.901   |       |
| APP/DEPART     | 827        | /                          | 835     | 1,106   | /                          | 539     | 0       | /                          | 0       | 323     | /                          | 882       | 0       |       |
| PM             | 3:30 PM    |                            |         |         |                            |         |         |                            |         |         |                            |           |         | 0     |
|                | 3:45 PM    |                            |         |         |                            |         |         |                            |         |         |                            |           |         | 0     |
|                | 4:00 PM    | 90                         | 229     |         |                            | 136     | 127     |                            |         |         | 8                          | 0         | 21      | 611   |
|                | 4:15 PM    | 61                         | 243     |         |                            | 131     | 97      |                            |         |         | 8                          | 0         | 29      | 569   |
|                | 4:30 PM    | 65                         | 216     |         |                            | 146     | 119     |                            |         |         | 36                         | 0         | 67      | 649   |
|                | 4:45 PM    | 74                         | 218     |         |                            | 125     | 112     |                            |         |         | 27                         | 1         | 51      | 608   |
|                | 5:00 PM    | 83                         | 220     |         |                            | 127     | 137     |                            |         |         | 27                         | 0         | 45      | 639   |
|                | 5:15 PM    | 77                         | 264     |         |                            | 133     | 128     |                            |         |         | 18                         | 0         | 59      | 679   |
|                | 5:30 PM    | 48                         | 261     |         |                            | 121     | 109     |                            |         |         | 24                         | 0         | 57      | 620   |
|                | 5:45 PM    | 50                         | 256     |         |                            | 120     | 105     |                            |         |         | 28                         | 1         | 43      | 603   |
|                | 6:00 PM    |                            |         |         |                            |         |         |                            |         |         |                            |           |         | 0     |
|                | 6:15 PM    |                            |         |         |                            |         |         |                            |         |         |                            |           |         | 0     |
|                | VOLUMES    | 548                        | 1,907   | 0       | 0                          | 1,039   | 934     | 0                          | 0       | 0       | 176                        | 2         | 372     | 4,978 |
|                | APPROACH % | 22%                        | 78%     | 0%      | 0%                         | 53%     | 47%     | 0%                         | 0%      | 0%      | 32%                        | 0%        | 68%     |       |
|                | APP/DEPART | 2,455                      | /       | 2,279   | 1,973                      | /       | 1,215   | 0                          | /       | 0       | 550                        | /         | 1,484   | 0     |
| BEGIN PEAK HR  | 4:30 PM    |                            |         |         |                            |         |         |                            |         |         |                            |           |         |       |
| VOLUMES        | 299        | 918                        | 0       | 0       | 531                        | 496     | 0       | 0                          | 0       | 108     | 1                          | 222       | 2,575   |       |
| APPROACH %     | 25%        | 75%                        | 0%      | 0%      | 52%                        | 48%     | 0%      | 0%                         | 0%      | 33%     | 0%                         | 67%       |         |       |
| PEAK HR FACTOR | 0.892      |                            |         |         | 0.969                      |         | 0.000   |                            |         | 0.803   |                            |           | 0.948   |       |
| APP/DEPART     | 1,217      | /                          | 1,140   | 1,027   | /                          | 639     | 0       | /                          | 0       | 331     | /                          | 796       | 0       |       |

# **Intersection Turning Movement**

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

|                             |                                             |                                    |                                                                                                                      |                                          |
|-----------------------------|---------------------------------------------|------------------------------------|----------------------------------------------------------------------------------------------------------------------|------------------------------------------|
| DATE:<br>2/10/09<br>TUESDAY | LOCATION:<br>NORTH & SOUTH:<br>EAST & WEST: | FONTANA<br>MISSION<br>I-60 EB RAMP | PROJECT #:<br>LOCATION #:<br>CONTROL:                                                                                | CA09-0213-1<br>19<br>SIGNAL              |
| NOTES: TURNING COUNTS ONLY  |                                             |                                    | <div> <div>AM<br/>PM<br/>MD<br/>OTHER<br/>OTHER</div> <div> <div>◀ W</div> <div>S</div> <div>E ▶</div> </div> </div> | <div> <div>▲ N</div> <div>▼</div> </div> |

|        | NORTHBOUND |         |         | SOUTHBOUND |         |         | EASTBOUND    |         |         | WESTBOUND    |         |         |       |
|--------|------------|---------|---------|------------|---------|---------|--------------|---------|---------|--------------|---------|---------|-------|
|        | MISSION    |         |         | MISSION    |         |         | I-60 EB RAMP |         |         | I-60 EB RAMP |         |         |       |
| LANES: | NL<br>X    | NT<br>2 | NR<br>0 | SL<br>1    | ST<br>2 | SR<br>X | EL<br>1      | ET<br>0 | ER<br>1 | WL<br>X      | WT<br>X | WR<br>X | TOTAL |

|                |               |         |       |       |       |       |       |       |     |       |    |    |       |       |
|----------------|---------------|---------|-------|-------|-------|-------|-------|-------|-----|-------|----|----|-------|-------|
| AM             | 6:30 AM       |         |       |       |       |       |       |       |     |       |    |    |       | 0     |
|                | 6:45 AM       |         |       |       |       |       |       |       |     |       |    |    |       | 0     |
|                | 7:00 AM       |         | 105   | 25    | 36    | 69    |       | 88    | 0   | 45    |    |    |       | 368   |
|                | 7:15 AM       |         | 106   | 23    | 38    | 75    |       | 83    | 0   | 56    |    |    |       | 381   |
|                | 7:30 AM       |         | 107   | 20    | 44    | 95    |       | 85    | 1   | 50    |    |    |       | 402   |
|                | 7:45 AM       |         | 126   | 20    | 44    | 95    |       | 122   | 1   | 67    |    |    |       | 475   |
|                | 8:00 AM       |         | 108   | 18    | 38    | 103   |       | 85    | 0   | 50    |    |    |       | 402   |
|                | 8:15 AM       |         | 123   | 17    | 34    | 68    |       | 62    | 1   | 72    |    |    |       | 377   |
|                | 8:30 AM       |         | 124   | 27    | 28    | 107   |       | 63    | 1   | 65    |    |    |       | 415   |
|                | 8:45 AM       |         | 128   | 16    | 32    | 78    |       | 60    | 0   | 68    |    |    |       | 382   |
|                | 9:00 AM       |         |       |       |       |       |       |       |     |       |    |    |       | 0     |
|                | 9:15 AM       |         |       |       |       |       |       |       |     |       |    |    |       | 0     |
|                | VOLUMES       | 0       | 927   | 166   | 294   | 690   | 0     | 648   | 4   | 473   | 0  | 0  | 0     | 3,202 |
| APPROACH %     | 0%            | 85%     | 15%   | 30%   | 70%   | 0%    | 58%   | 0%    | 42% | 0%    | 0% | 0% |       |       |
| APP/DEPART     | 1,093         | /       | 1,575 | 984   | /     | 1,163 | 1,125 | /     | 464 | 0     | /  | 0  | 0     |       |
| BEGIN PEAK HR  | 7:45 AM       |         |       |       |       |       |       |       |     |       |    |    |       |       |
| VOLUMES        | 0             | 481     | 82    | 144   | 373   | 0     | 332   | 3     | 254 | 0     | 0  | 0  | 1,669 |       |
| APPROACH %     | 0%            | 85%     | 15%   | 28%   | 72%   | 0%    | 56%   | 1%    | 43% | 0%    | 0% | 0% |       |       |
| PEAK HR FACTOR | 0.932         |         |       | 0.917 |       |       | 0.775 |       |     | 0.000 |    |    | 0.878 |       |
| APP/DEPART     | 563           | /       | 813   | 517   | /     | 627   | 589   | /     | 229 | 0     | /  | 0  | 0     |       |
| PM             | 3:30 PM       |         |       |       |       |       |       |       |     |       |    |    |       | 0     |
|                | 3:45 PM       |         |       |       |       |       |       |       |     |       |    |    |       | 0     |
|                | 4:00 PM       |         | 150   | 37    | 47    | 94    |       | 161   | 0   | 70    |    |    |       | 559   |
|                | 4:15 PM       |         | 126   | 37    | 57    | 84    |       | 183   | 1   | 57    |    |    |       | 545   |
|                | 4:30 PM       |         | 121   | 31    | 57    | 124   |       | 169   | 0   | 68    |    |    |       | 570   |
|                | 4:45 PM       |         | 149   | 33    | 49    | 109   |       | 153   | 0   | 69    |    |    |       | 562   |
|                | 5:00 PM       |         | 138   | 40    | 53    | 94    |       | 155   | 0   | 65    |    |    |       | 545   |
|                | 5:15 PM       |         | 148   | 34    | 47    | 108   |       | 177   | 0   | 76    |    |    |       | 590   |
|                | 5:30 PM       |         | 151   | 41    | 41    | 105   |       | 156   | 0   | 65    |    |    |       | 559   |
|                | 5:45 PM       |         | 164   | 32    | 40    | 96    |       | 131   | 0   | 60    |    |    |       | 523   |
|                | 6:00 PM       |         |       |       |       |       |       |       |     |       |    |    |       | 0     |
|                | 6:15 PM       |         |       |       |       |       |       |       |     |       |    |    |       | 0     |
|                | VOLUMES       | 0       | 1,147 | 285   | 391   | 814   | 0     | 1,285 | 1   | 530   | 0  | 0  | 0     | 4,453 |
|                | APPROACH %    | 0%      | 80%   | 20%   | 32%   | 68%   | 0%    | 71%   | 0%  | 29%   | 0% | 0% | 0%    |       |
|                | APP/DEPART    | 1,432   | /     | 2,432 | 1,205 | /     | 1,344 | 1,816 | /   | 677   | 0  | /  | 0     | 0     |
|                | BEGIN PEAK HR | 4:30 PM |       |       |       |       |       |       |     |       |    |    |       |       |
|                | VOLUMES       | 0       | 556   | 138   | 206   | 435   | 0     | 654   | 0   | 278   | 0  | 0  | 0     | 2,267 |
| APPROACH %     | 0%            | 80%     | 20%   | 32%   | 68%   | 0%    | 70%   | 0%    | 30% | 0%    | 0% | 0% |       |       |
| PEAK HR FACTOR | 0.953         |         |       | 0.885 |       |       | 0.921 |       |     | 0.000 |    |    | 0.961 |       |
| APP/DEPART     | 694           | /       | 1,210 | 641   | /     | 713   | 932   | /     | 344 | 0     | /  | 0  | 0     |       |

# Intersection Turning Movement

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

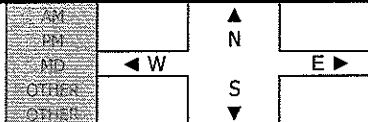
DATE:  
2/24/09  
TUESDAY

LOCATION:  
NORTH & SOUTH:  
EAST & WEST:

FONTANA  
BANANA  
SAN BERNARDINO

PROJECT #: CA09-0213-1  
LOCATION #: 20  
CONTROL: 1-WAY STOP: NB

NOTES:



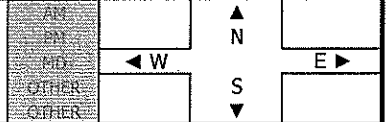
|    | NORTHBOUND<br>BANANA |         |           | SOUTHBOUND<br>BANANA |         |         | EASTBOUND<br>SAN BERNARDINO |         |         | WESTBOUND<br>SAN BERNARDINO |         |         | TOTAL |
|----|----------------------|---------|-----------|----------------------|---------|---------|-----------------------------|---------|---------|-----------------------------|---------|---------|-------|
|    | NL<br>0.5            | NT<br>X | NR<br>0.5 | SL<br>X              | ST<br>X | SR<br>X | EL<br>X                     | ET<br>2 | ER<br>0 | WL<br>1                     | WT<br>2 | WR<br>X |       |
| AM | 6:30 AM              |         |           |                      |         |         |                             |         |         |                             |         |         | 0     |
|    | 6:45 AM              |         |           |                      |         |         |                             |         |         |                             |         |         | 0     |
|    | 7:00 AM              | 0       |           | 8                    |         |         |                             | 40      | 3       | 2                           | 62      |         | 115   |
|    | 7:15 AM              | 1       |           | 7                    |         |         |                             | 38      | 1       | 5                           | 68      |         | 120   |
|    | 7:30 AM              | 0       |           | 7                    |         |         |                             | 51      | 3       | 4                           | 65      |         | 130   |
|    | 7:45 AM              | 2       |           | 8                    |         |         |                             | 61      | 0       | 6                           | 68      |         | 145   |
|    | 8:00 AM              | 3       |           | 9                    |         |         |                             | 58      | 0       | 5                           | 56      |         | 131   |
|    | 8:15 AM              | 6       |           | 8                    |         |         |                             | 42      | 0       | 2                           | 49      |         | 107   |
|    | 8:30 AM              | 0       |           | 9                    |         |         |                             | 53      | 2       | 4                           | 64      |         | 132   |
|    | 8:45 AM              | 0       |           | 9                    |         |         |                             | 39      | 3       | 2                           | 52      |         | 105   |
|    | 9:00 AM              |         |           |                      |         |         |                             |         |         |                             |         |         | 0     |
|    | 9:15 AM              |         |           |                      |         |         |                             |         |         |                             |         |         | 0     |
|    | VOLUMES              | 12      | 0         | 65                   | 0       | 0       | 0                           | 382     | 12      | 30                          | 484     | 0       | 985   |
|    | APPROACH %           | 16%     | 0%        | 84%                  | 0%      | 0%      | 0%                          | 97%     | 3%      | 6%                          | 94%     | 0%      |       |
|    | APP/DEPART           | 77      | /         | 0                    | 0       | /       | 42                          | 394     | /       | 447                         | 514     | /       | 496   |
| PM | BEGIN PEAK HR        | 7:15 AM |           |                      |         |         |                             |         |         |                             |         |         |       |
|    | VOLUMES              | 6       | 0         | 31                   | 0       | 0       | 0                           | 208     | 4       | 20                          | 257     | 0       | 526   |
|    | APPROACH %           | 16%     | 0%        | 84%                  | 0%      | 0%      | 0%                          | 98%     | 2%      | 7%                          | 93%     | 0%      |       |
|    | PEAK HR FACTOR       | 0.771   |           |                      | 0.000   |         |                             | 0.869   |         |                             | 0.936   |         |       |
|    | APP/DEPART           | 37      | /         | 0                    | 0       | /       | 24                          | 212     | /       | 239                         | 277     | /       | 263   |
|    | 3:30 PM              |         |           |                      |         |         |                             |         |         |                             |         |         | 0     |
|    | 3:45 PM              |         |           |                      |         |         |                             |         |         |                             |         |         | 0     |
|    | 4:00 PM              | 1       |           | 7                    |         |         |                             | 159     | 4       | 1                           | 58      |         | 230   |
|    | 4:15 PM              | 1       |           | 8                    |         |         |                             | 136     | 3       | 1                           | 59      |         | 208   |
|    | 4:30 PM              | 2       |           | 9                    |         |         |                             | 139     | 5       | 0                           | 59      |         | 214   |
|    | 4:45 PM              | 1       |           | 9                    |         |         |                             | 143     | 1       | 1                           | 62      |         | 217   |
|    | 5:00 PM              | 2       |           | 10                   |         |         |                             | 128     | 1       | 3                           | 80      |         | 224   |
|    | 5:15 PM              | 0       |           | 8                    |         |         |                             | 145     | 3       | 3                           | 69      |         | 228   |
|    | 5:30 PM              | 0       |           | 5                    |         |         |                             | 127     | 2       | 0                           | 56      |         | 190   |
|    | 5:45 PM              | 0       |           | 7                    |         |         |                             | 104     | 1       | 1                           | 48      |         | 161   |
|    | 6:00 PM              |         |           |                      |         |         |                             |         |         |                             |         |         | 0     |
|    | 6:15 PM              |         |           |                      |         |         |                             |         |         |                             |         |         | 0     |
|    | VOLUMES              | 7       | 0         | 63                   | 0       | 0       | 0                           | 1,081   | 20      | 10                          | 491     | 0       | 1,672 |
|    | APPROACH %           | 10%     | 0%        | 90%                  | 0%      | 0%      | 0%                          | 98%     | 2%      | 2%                          | 98%     | 0%      |       |
|    | APP/DEPART           | 70      | /         | 0                    | 0       | /       | 30                          | 1,101   | /       | 1,144                       | 501     | /       | 498   |
|    | BEGIN PEAK HR        | 4:30 PM |           |                      |         |         |                             |         |         |                             |         |         |       |
|    | VOLUMES              | 5       | 0         | 36                   | 0       | 0       | 0                           | 555     | 10      | 7                           | 270     | 0       | 883   |
|    | APPROACH %           | 12%     | 0%        | 88%                  | 0%      | 0%      | 0%                          | 98%     | 2%      | 3%                          | 97%     | 0%      |       |
|    | PEAK HR FACTOR       | 0.854   |           |                      | 0.000   |         |                             | 0.954   |         |                             | 0.834   |         |       |
|    | APP/DEPART           | 41      | /         | 0                    | 0       | /       | 17                          | 565     | /       | 591                         | 277     | /       | 275   |

## Intersection Turning Movement

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

|                                    |                                                    |                                    |                                                            |                                           |
|------------------------------------|----------------------------------------------------|------------------------------------|------------------------------------------------------------|-------------------------------------------|
| <b>DATE:</b><br>2/24/09<br>TUESDAY | <b>LOCATION:</b><br>NORTH & SOUTH:<br>EAST & WEST: | <b>FONTANA</b><br>BANANA<br>VALLEY | <b>PROJECT #:</b><br><b>LOCATION #:</b><br><b>CONTROL:</b> | <b>CA09-0213-1</b><br>21<br>2 WAY STOP NS |
|------------------------------------|----------------------------------------------------|------------------------------------|------------------------------------------------------------|-------------------------------------------|

NOTES:



|                | NORTHBOUND<br>BANANA |         |         | SOUTHBOUND<br>BANANA |         |         | EASTBOUND<br>VALLEY |         |         | WESTBOUND<br>VALLEY |         |         | TOTAL |
|----------------|----------------------|---------|---------|----------------------|---------|---------|---------------------|---------|---------|---------------------|---------|---------|-------|
|                | NL<br>0              | NT<br>1 | NR<br>0 | SL<br>0              | ST<br>1 | SR<br>1 | EL<br>1             | ET<br>2 | ER<br>1 | WL<br>1             | WT<br>2 | WR<br>0 |       |
| LANES:         |                      |         |         |                      |         |         |                     |         |         |                     |         |         |       |
| 6:30 AM        |                      |         |         |                      |         |         |                     |         |         |                     |         |         | 0     |
| 6:45 AM        |                      |         |         |                      |         |         |                     |         |         |                     |         |         | 0     |
| 7:00 AM        | 0                    | 0       | 0       | 1                    | 0       | 8       | 6                   | 75      | 4       | 2                   | 113     | 3       | 212   |
| 7:15 AM        | 0                    | 0       | 0       | 5                    | 0       | 2       | 12                  | 83      | 2       | 3                   | 120     | 5       | 232   |
| 7:30 AM        | 0                    | 0       | 0       | 1                    | 0       | 5       | 9                   | 69      | 5       | 1                   | 118     | 11      | 219   |
| 7:45 AM        | 3                    | 0       | 1       | 3                    | 0       | 2       | 10                  | 87      | 2       | 3                   | 117     | 12      | 240   |
| 8:00 AM        | 0                    | 0       | 1       | 4                    | 0       | 3       | 10                  | 85      | 2       | 0                   | 89      | 5       | 199   |
| 8:15 AM        | 0                    | 0       | 0       | 1                    | 0       | 3       | 3                   | 82      | 0       | 1                   | 98      | 4       | 192   |
| 8:30 AM        | 1                    | 0       | 0       | 6                    | 0       | 7       | 9                   | 92      | 1       | 1                   | 114     | 5       | 236   |
| 8:45 AM        | 0                    | 0       | 2       | 4                    | 0       | 9       | 4                   | 76      | 1       | 1                   | 105     | 5       | 207   |
| 9:00 AM        |                      |         |         |                      |         |         |                     |         |         |                     |         |         | 0     |
| 9:15 AM        |                      |         |         |                      |         |         |                     |         |         |                     |         |         | 0     |
| VOLUMES        | 4                    | 0       | 4       | 25                   | 0       | 39      | 63                  | 649     | 17      | 12                  | 874     | 50      | 1,737 |
| APPROACH %     | 50%                  | 0%      | 50%     | 39%                  | 0%      | 61%     | 9%                  | 89%     | 2%      | 1%                  | 93%     | 5%      |       |
| APP/DEPART     | 8                    | /       | 113     | 64                   | /       | 29      | 729                 | /       | 678     | 936                 | /       | 917     | 0     |
| BEGIN PEAK HR  | 7:00 AM              |         |         |                      |         |         |                     |         |         |                     |         |         |       |
| VOLUMES        | 3                    | 0       | 1       | 10                   | 0       | 17      | 37                  | 314     | 13      | 9                   | 468     | 31      | 903   |
| APPROACH %     | 75%                  | 0%      | 25%     | 37%                  | 0%      | 63%     | 10%                 | 86%     | 4%      | 2%                  | 92%     | 6%      |       |
| PEAK HR FACTOR | 0.250                |         |         | 0.750                |         |         | 0.919               |         |         | 0.962               |         |         | 0.941 |
| APP/DEPART     | 4                    | /       | 68      | 27                   | /       | 22      | 364                 | /       | 325     | 508                 | /       | 488     | 0     |
| 3:30 PM        |                      |         |         |                      |         |         |                     |         |         |                     |         |         | 0     |
| 3:45 PM        |                      |         |         |                      |         |         |                     |         |         |                     |         |         | 0     |
| 4:00 PM        | 3                    | 0       | 3       | 3                    | 0       | 7       | 13                  | 217     | 2       | 1                   | 119     | 9       | 377   |
| 4:15 PM        | 1                    | 0       | 0       | 6                    | 0       | 5       | 10                  | 156     | 0       | 0                   | 102     | 7       | 287   |
| 4:30 PM        | 4                    | 0       | 5       | 6                    | 0       | 11      | 11                  | 186     | 4       | 3                   | 109     | 5       | 344   |
| 4:45 PM        | 4                    | 0       | 5       | 5                    | 0       | 3       | 3                   | 198     | 3       | 2                   | 113     | 7       | 343   |
| 5:00 PM        | 1                    | 0       | 0       | 5                    | 0       | 3       | 2                   | 153     | 1       | 1                   | 137     | 10      | 312   |
| 5:15 PM        | 0                    | 0       | 0       | 2                    | 0       | 6       | 2                   | 126     | 0       | 0                   | 99      | 6       | 241   |
| 5:30 PM        | 1                    | 0       | 0       | 6                    | 0       | 2       | 3                   | 129     | 0       | 1                   | 99      | 3       | 244   |
| 5:45 PM        | 0                    | 0       | 0       | 4                    | 0       | 3       | 7                   | 112     | 0       | 3                   | 73      | 6       | 208   |
| 6:00 PM        |                      |         |         |                      |         |         |                     |         |         |                     |         |         | 0     |
| 6:15 PM        |                      |         |         |                      |         |         |                     |         |         |                     |         |         | 0     |
| VOLUMES        | 13                   | 0       | 13      | 37                   | 0       | 40      | 51                  | 1,277   | 10      | 11                  | 851     | 53      | 2,356 |
| APPROACH %     | 50%                  | 0%      | 50%     | 48%                  | 0%      | 52%     | 4%                  | 95%     | 1%      | 1%                  | 93%     | 6%      |       |
| APP/DEPART     | 26                   | /       | 104     | 77                   | /       | 21      | 1,338               | /       | 1,327   | 915                 | /       | 904     | 0     |
| BEGIN PEAK HR  | 4:00 PM              |         |         |                      |         |         |                     |         |         |                     |         |         |       |
| VOLUMES        | 12                   | 0       | 13      | 20                   | 0       | 26      | 37                  | 757     | 9       | 6                   | 443     | 28      | 1,351 |
| APPROACH %     | 48%                  | 0%      | 52%     | 43%                  | 0%      | 57%     | 5%                  | 94%     | 1%      | 1%                  | 93%     | 6%      |       |
| PEAK HR FACTOR | 0.694                |         |         | 0.676                |         |         | 0.865               |         |         | 0.924               |         |         | 0.896 |
| APP/DEPART     | 25                   | /       | 65      | 46                   | /       | 15      | 803                 | /       | 790     | 477                 | /       | 481     | 0     |

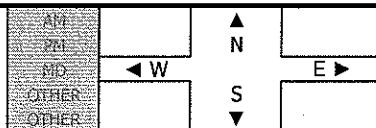


## Intersection Turning Movement

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

|                             |                                             |                                     |                                       |                             |
|-----------------------------|---------------------------------------------|-------------------------------------|---------------------------------------|-----------------------------|
| DATE:<br>2/24/09<br>TUESDAY | LOCATION:<br>NORTH & SOUTH:<br>EAST & WEST: | FONTANA<br>CHERRY<br>SAN BARNARDINO | PROJECT #:<br>LOCATION #:<br>CONTROL: | CA09-0213-1<br>22<br>SIGNAL |
|-----------------------------|---------------------------------------------|-------------------------------------|---------------------------------------|-----------------------------|

NOTES:



|                | NORTHBOUND<br>CHERRY |         |         | SOUTHBOUND<br>CHERRY |         |         | EASTBOUND<br>SAN BARNARDINO |         |         | WESTBOUND<br>SAN BARNARDINO |         |         | TOTAL |
|----------------|----------------------|---------|---------|----------------------|---------|---------|-----------------------------|---------|---------|-----------------------------|---------|---------|-------|
|                | NL<br>1              | NT<br>3 | NR<br>0 | SL<br>1              | ST<br>3 | SR<br>1 | EL<br>1                     | ET<br>2 | ER<br>1 | WL<br>1                     | WT<br>2 | WR<br>0 |       |
| LANES:         |                      |         |         |                      |         |         |                             |         |         |                             |         |         |       |
| 6:30 AM        |                      |         |         |                      |         |         |                             |         |         |                             |         |         | 0     |
| 6:45 AM        |                      |         |         |                      |         |         |                             |         |         |                             |         |         | 0     |
| 7:00 AM        | 8                    | 111     | 17      | 12                   | 140     | 23      | 19                          | 10      | 4       | 38                          | 18      | 18      | 418   |
| 7:15 AM        | 11                   | 129     | 18      | 14                   | 161     | 27      | 25                          | 11      | 12      | 47                          | 25      | 11      | 491   |
| 7:30 AM        | 6                    | 139     | 19      | 10                   | 196     | 39      | 28                          | 12      | 8       | 29                          | 31      | 13      | 530   |
| 7:45 AM        | 11                   | 158     | 11      | 19                   | 174     | 33      | 37                          | 12      | 14      | 35                          | 27      | 17      | 548   |
| 8:00 AM        | 13                   | 119     | 14      | 16                   | 171     | 33      | 27                          | 16      | 17      | 23                          | 17      | 9       | 475   |
| 8:15 AM        | 10                   | 110     | 9       | 18                   | 160     | 23      | 24                          | 15      | 11      | 22                          | 23      | 9       | 434   |
| 8:30 AM        | 8                    | 100     | 18      | 14                   | 146     | 29      | 28                          | 11      | 16      | 31                          | 15      | 6       | 422   |
| 8:45 AM        | 7                    | 129     | 14      | 20                   | 138     | 27      | 28                          | 8       | 12      | 20                          | 21      | 10      | 434   |
| 9:00 AM        |                      |         |         |                      |         |         |                             |         |         |                             |         |         | 0     |
| 9:15 AM        |                      |         |         |                      |         |         |                             |         |         |                             |         |         | 0     |
| VOLUMES        | 74                   | 995     | 120     | 123                  | 1,286   | 234     | 216                         | 95      | 94      | 245                         | 177     | 93      | 3,752 |
| APPROACH %     | 6%                   | 84%     | 10%     | 7%                   | 78%     | 14%     | 53%                         | 23%     | 23%     | 48%                         | 34%     | 18%     |       |
| APP/DEPART     | 1,189                | /       | 1,304   | 1,643                | /       | 1,625   | 405                         | /       | 338     | 515                         | /       | 485     | 0     |
| BEGIN PEAK HR  | 7:15 AM              |         |         |                      |         |         |                             |         |         |                             |         |         |       |
| VOLUMES        | 41                   | 545     | 62      | 59                   | 702     | 132     | 117                         | 51      | 51      | 134                         | 100     | 50      | 2,044 |
| APPROACH %     | 6%                   | 84%     | 10%     | 7%                   | 79%     | 15%     | 53%                         | 23%     | 23%     | 47%                         | 35%     | 18%     |       |
| PEAK HR FACTOR |                      | 0.900   |         |                      | 0.911   |         |                             | 0.869   |         |                             | 0.855   |         | 0.932 |
| APP/DEPART     | 648                  | /       | 712     | 893                  | /       | 887     | 219                         | /       | 172     | 284                         | /       | 273     | 0     |
| 3:30 PM        |                      |         |         |                      |         |         |                             |         |         |                             |         |         | 0     |
| 3:45 PM        |                      |         |         |                      |         |         |                             |         |         |                             |         |         | 0     |
| 4:00 PM        | 4                    | 169     | 18      | 12                   | 177     | 37      | 74                          | 105     | 20      | 24                          | 34      | 10      | 684   |
| 4:15 PM        | 2                    | 186     | 20      | 17                   | 188     | 41      | 64                          | 82      | 18      | 28                          | 34      | 12      | 692   |
| 4:30 PM        | 7                    | 195     | 15      | 6                    | 152     | 21      | 65                          | 94      | 21      | 19                          | 31      | 8       | 634   |
| 4:45 PM        | 4                    | 213     | 27      | 19                   | 165     | 34      | 65                          | 82      | 16      | 21                          | 23      | 7       | 676   |
| 5:00 PM        | 4                    | 175     | 24      | 16                   | 184     | 46      | 69                          | 85      | 14      | 24                          | 33      | 8       | 682   |
| 5:15 PM        | 4                    | 203     | 34      | 15                   | 168     | 44      | 63                          | 82      | 17      | 15                          | 23      | 14      | 682   |
| 5:30 PM        | 6                    | 188     | 25      | 16                   | 154     | 36      | 57                          | 75      | 10      | 19                          | 27      | 8       | 621   |
| 5:45 PM        | 7                    | 168     | 24      | 18                   | 106     | 34      | 48                          | 71      | 6       | 23                          | 15      | 7       | 527   |
| 6:00 PM        |                      |         |         |                      |         |         |                             |         |         |                             |         |         | 0     |
| 6:15 PM        |                      |         |         |                      |         |         |                             |         |         |                             |         |         | 0     |
| VOLUMES        | 38                   | 1,497   | 187     | 119                  | 1,294   | 293     | 505                         | 676     | 122     | 173                         | 220     | 74      | 5,198 |
| APPROACH %     | 2%                   | 87%     | 11%     | 7%                   | 76%     | 17%     | 39%                         | 52%     | 9%      | 37%                         | 47%     | 16%     |       |
| APP/DEPART     | 1,722                | /       | 2,076   | 1,706                | /       | 1,589   | 1,303                       | /       | 982     | 467                         | /       | 551     | 0     |
| BEGIN PEAK HR  | 4:00 PM              |         |         |                      |         |         |                             |         |         |                             |         |         |       |
| VOLUMES        | 17                   | 763     | 80      | 54                   | 682     | 133     | 268                         | 363     | 75      | 92                          | 122     | 37      | 2,686 |
| APPROACH %     | 2%                   | 89%     | 9%      | 6%                   | 78%     | 15%     | 38%                         | 51%     | 11%     | 37%                         | 49%     | 15%     |       |
| PEAK HR FACTOR |                      | 0.881   |         |                      | 0.883   |         |                             | 0.887   |         |                             | 0.848   |         | 0.970 |
| APP/DEPART     | 860                  | /       | 1,068   | 869                  | /       | 849     | 706                         | /       | 497     | 251                         | /       | 272     | 0     |

Counts Unlimited, Inc.  
25424 Jaclyn Avenue  
Moreno Valley, CA 92557  
951-247-6716

CITY OF FONTANA  
N/S: CHERRY AVENUE  
E/W: VALLEY BOULEVARD  
WEATHER: PARTLY SUNNY

File Name : FOCHVAAM  
Site Code : 438801  
Start Date : 4/26/2006  
Page No : 1

Groups Printed- PASSENGER VEHICLES - LARGE 2 AXLE VEHICLES - 3 AXLE VEHICLES - 4+ AXLE TRUCKS

|                         | CHERRY AVENUE<br>Southbound |      |       |            | VALLEY BOULEVARD<br>Westbound |      |       |            | CHERRY AVENUE<br>Northbound |      |       |            | VALLEY BOULEVARD<br>Eastbound |      |       |            |      |       |
|-------------------------|-----------------------------|------|-------|------------|-------------------------------|------|-------|------------|-----------------------------|------|-------|------------|-------------------------------|------|-------|------------|------|-------|
| Start Time              | Left                        | Thru | Right | App. Total | Left                          | Thru | Right | App. Total | Left                        | Thru | Right | App. Total | Left                          | Thru | Right | App. Total | Int. | Total |
| 06:45 AM                | 13                          | 156  | 24    | 193        | 80                            | 121  | 25    | 226        | 41                          | 111  | 40    | 192        | 15                            | 35   | 28    | 78         |      | 689   |
| Total                   | 13                          | 156  | 24    | 193        | 80                            | 121  | 25    | 226        | 41                          | 111  | 40    | 192        | 15                            | 35   | 28    | 78         |      | 689   |
| 07:00 AM                | 25                          | 177  | 29    | 231        | 70                            | 162  | 20    | 252        | 30                          | 123  | 54    | 207        | 6                             | 33   | 31    | 70         |      | 760   |
| 07:15 AM                | 19                          | 167  | 34    | 220        | 49                            | 104  | 11    | 164        | 34                          | 148  | 56    | 238        | 19                            | 32   | 28    | 79         |      | 701   |
| 07:30 AM                | 27                          | 136  | 28    | 191        | 68                            | 132  | 22    | 222        | 30                          | 163  | 56    | 249        | 22                            | 40   | 22    | 84         |      | 746   |
| 07:45 AM                | 29                          | 124  | 25    | 178        | 59                            | 81   | 14    | 154        | 41                          | 142  | 46    | 229        | 24                            | 54   | 28    | 106        |      | 667   |
| Total                   | 100                         | 604  | 116   | 820        | 246                           | 479  | 67    | 792        | 135                         | 576  | 212   | 923        | 71                            | 159  | 109   | 339        |      | 2874  |
| 08:00 AM                | 26                          | 125  | 32    | 183        | 48                            | 89   | 13    | 150        | 36                          | 149  | 54    | 239        | 22                            | 44   | 27    | 93         |      | 665   |
| 08:15 AM                | 21                          | 122  | 28    | 171        | 70                            | 75   | 11    | 156        | 36                          | 102  | 34    | 172        | 17                            | 46   | 19    | 82         |      | 581   |
| 08:30 AM                | 26                          | 120  | 20    | 166        | 54                            | 70   | 13    | 137        | 30                          | 117  | 42    | 189        | 20                            | 31   | 33    | 84         |      | 576   |
| Grand Total             | 186                         | 1127 | 220   | 1533       | 498                           | 834  | 129   | 1461       | 278                         | 1055 | 382   | 1715       | 145                           | 315  | 216   | 676        |      | 5385  |
| Apprch %                | 12.1                        | 73.5 | 14.4  |            | 34.1                          | 57.1 | 8.8   |            | 16.2                        | 61.5 | 22.3  |            | 21.4                          | 46.6 | 32    |            |      |       |
| Total %                 | 3.5                         | 20.9 | 4.1   | 28.5       | 9.2                           | 15.5 | 2.4   | 27.1       | 5.2                         | 19.6 | 7.1   | 31.8       | 2.7                           | 5.8  | 4     | 12.6       |      |       |
| PASSENGER VEHICLES      | 155                         | 914  | 162   | 1231       | 449                           | 776  | 105   | 1330       | 208                         | 891  | 329   | 1428       | 116                           | 271  | 136   | 523        |      | 4512  |
| % PASSENGER VEHICLES    | 83.3                        | 81.1 | 73.6  | 80.3       | 90.2                          | 93   | 81.4  | 91         | 74.8                        | 84.5 | 86.1  | 83.3       | 80                            | 86   | 63    | 77.4       |      | 83.8  |
| LARGE 2 AXLE VEHICLES   | 14                          | 64   | 15    | 93         | 14                            | 18   | 12    | 44         | 15                          | 53   | 16    | 84         | 9                             | 12   | 13    | 34         |      | 255   |
| % LARGE 2 AXLE VEHICLES | 7.5                         | 5.7  | 6.8   | 6.1        | 2.8                           | 2.2  | 9.3   | 3          | 5.4                         | 5    | 4.2   | 4.9        | 6.2                           | 3.8  | 6     | 5          |      | 4.7   |
| 3 AXLE VEHICLES         | 6                           | 37   | 12    | 55         | 9                             | 10   | 3     | 22         | 18                          | 31   | 12    | 61         | 5                             | 8    | 22    | 35         |      | 173   |
| % 3 AXLE VEHICLES       | 3.2                         | 3.3  | 5.5   | 3.6        | 1.8                           | 1.2  | 2.3   | 1.5        | 6.5                         | 2.9  | 3.1   | 3.6        | 3.4                           | 2.5  | 10.2  | 5.2        |      | 3.2   |
| 4+ AXLE TRUCKS          | 11                          | 112  | 31    | 154        | 26                            | 30   | 9     | 65         | 37                          | 80   | 25    | 142        | 15                            | 24   | 45    | 84         |      | 445   |
| % 4+ AXLE TRUCKS        | 5.9                         | 9.9  | 14.1  | 10         | 5.2                           | 3.6  | 7     | 4.4        | 13.3                        | 7.6  | 6.5   | 8.3        | 10.3                          | 7.6  | 20.8  | 12.4       |      | 8.3   |

|                                                            | CHERRY AVENUE<br>Southbound |      |       |            | VALLEY BOULEVARD<br>Westbound |      |       |            | CHERRY AVENUE<br>Northbound |      |       |            | VALLEY BOULEVARD<br>Eastbound |      |       |            |      |       |
|------------------------------------------------------------|-----------------------------|------|-------|------------|-------------------------------|------|-------|------------|-----------------------------|------|-------|------------|-------------------------------|------|-------|------------|------|-------|
| Start Time                                                 | Left                        | Thru | Right | App. Total | Left                          | Thru | Right | App. Total | Left                        | Thru | Right | App. Total | Left                          | Thru | Right | App. Total | Int. | Total |
| Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1 |                             |      |       |            |                               |      |       |            |                             |      |       |            |                               |      |       |            |      |       |
| Peak Hour for Entire Intersection Begins at 06:45 AM       |                             |      |       |            |                               |      |       |            |                             |      |       |            |                               |      |       |            |      |       |
| 06:45 AM                                                   | 13                          | 156  | 24    | 193        | 80                            | 121  | 25    | 226        | 41                          | 111  | 40    | 192        | 15                            | 35   | 28    | 78         |      | 689   |
| 07:00 AM                                                   | 25                          | 177  | 29    | 231        | 70                            | 162  | 20    | 252        | 30                          | 123  | 54    | 207        | 6                             | 33   | 31    | 70         |      | 760   |
| 07:15 AM                                                   | 19                          | 167  | 34    | 220        | 49                            | 104  | 11    | 164        | 34                          | 148  | 56    | 238        | 19                            | 32   | 28    | 79         |      | 701   |
| 07:30 AM                                                   | 27                          | 136  | 28    | 191        | 68                            | 132  | 22    | 222        | 30                          | 163  | 56    | 249        | 22                            | 40   | 22    | 84         |      | 746   |
| Total Volume                                               | 84                          | 636  | 115   | 835        | 267                           | 519  | 78    | 864        | 135                         | 545  | 206   | 886        | 62                            | 140  | 109   | 311        |      | 2896  |
| % App. Total                                               | 10.1                        | 76.2 | 13.8  |            | 30.9                          | 60.1 | 9     |            | 15.2                        | 61.5 | 23.3  |            | 19.9                          | 45   | 35    |            |      |       |
| PHF                                                        | .778                        | .898 | .846  | .904       | .834                          | .801 | .780  | .857       | .823                        | .836 | .920  | .890       | .705                          | .875 | .879  | .926       |      | .953  |

Counts Unlimited, Inc.  
25424 Jaclyn Avenue  
Moreno Valley, CA 92557  
951-247-6716

CITY OF FONTANA  
N/S: CHERRY AVENUE  
E/W: VALLEY BOULEVARD  
WEATHER: PARTLY SUNNY

File Name : FOCHVAPM  
Site Code : 438801  
Start Date : 4/26/2006  
Page No : 1

Groups Printed- PASSENGER VEHICLES - LARGE 2 AXLE VEHICLES - 3 AXLE VEHICLES - 4+ AXLE TRUCKS

|                         | CHERRY AVENUE<br>Southbound |      |       |            | VALLEY BOULEVARD<br>Westbound |      |       |            | CHERRY AVENUE<br>Northbound |      |       |            | VALLEY BOULEVARD<br>Eastbound |      |       |            |            |
|-------------------------|-----------------------------|------|-------|------------|-------------------------------|------|-------|------------|-----------------------------|------|-------|------------|-------------------------------|------|-------|------------|------------|
| Start Time              | Left                        | Thru | Right | App. Total | Left                          | Thru | Right | App. Total | Left                        | Thru | Right | App. Total | Left                          | Thru | Right | App. Total | Int. Total |
| 04:00 PM                | 36                          | 129  | 24    | 189        | 56                            | 75   | 13    | 144        | 32                          | 132  | 54    | 218        | 34                            | 102  | 34    | 170        | 721        |
| 04:15 PM                | 34                          | 128  | 41    | 203        | 42                            | 88   | 18    | 148        | 33                          | 139  | 62    | 234        | 36                            | 112  | 33    | 181        | 766        |
| 04:30 PM                | 33                          | 160  | 25    | 218        | 46                            | 72   | 10    | 128        | 29                          | 107  | 79    | 215        | 27                            | 107  | 34    | 168        | 729        |
| 04:45 PM                | 31                          | 151  | 27    | 209        | 55                            | 78   | 11    | 144        | 29                          | 109  | 50    | 188        | 18                            | 115  | 39    | 172        | 713        |
| Total                   | 134                         | 568  | 117   | 819        | 199                           | 313  | 52    | 564        | 123                         | 487  | 245   | 855        | 115                           | 436  | 140   | 691        | 2929       |
| 05:00 PM                | 36                          | 129  | 25    | 190        | 41                            | 69   | 14    | 124        | 25                          | 112  | 56    | 193        | 25                            | 159  | 30    | 214        | 721        |
| 05:15 PM                | 26                          | 132  | 38    | 196        | 58                            | 77   | 11    | 146        | 22                          | 144  | 87    | 253        | 19                            | 121  | 39    | 179        | 774        |
| 05:30 PM                | 31                          | 90   | 31    | 152        | 55                            | 63   | 22    | 140        | 29                          | 145  | 64    | 238        | 18                            | 135  | 34    | 187        | 717        |
| 05:45 PM                | 29                          | 99   | 37    | 165        | 49                            | 72   | 13    | 134        | 24                          | 151  | 70    | 245        | 28                            | 86   | 46    | 160        | 704        |
| Total                   | 122                         | 450  | 131   | 703        | 203                           | 281  | 60    | 544        | 100                         | 552  | 277   | 929        | 90                            | 501  | 149   | 740        | 2916       |
| Grand Total             | 256                         | 1018 | 248   | 1522       | 402                           | 594  | 112   | 1108       | 223                         | 1039 | 522   | 1784       | 205                           | 937  | 289   | 1431       | 5845       |
| Apprch %                | 16.8                        | 66.9 | 16.3  |            | 36.3                          | 53.6 | 10.1  |            | 12.5                        | 58.2 | 29.3  |            | 14.3                          | 65.5 | 20.2  |            |            |
| Total %                 | 4.4                         | 17.4 | 4.2   | 26         | 6.9                           | 10.2 | 1.9   | 19         | 3.8                         | 17.8 | 8.9   | 30.5       | 3.5                           | 16   | 4.9   | 24.5       |            |
| PASSENGER VEHICLES      | 229                         | 874  | 198   | 1301       | 335                           | 543  | 100   | 978        | 127                         | 939  | 463   | 1529       | 176                           | 862  | 223   | 1261       | 5069       |
| % PASSENGER VEHICLES    | 89.5                        | 85.9 | 79.8  | 85.5       | 83.3                          | 91.4 | 89.3  | 88.3       | 57                          | 90.4 | 88.7  | 85.7       | 85.9                          | 92   | 77.2  | 88.1       | 86.7       |
| LARGE 2 AXLE VEHICLES   | 8                           | 40   | 10    | 58         | 17                            | 12   | 2     | 31         | 12                          | 33   | 7     | 52         | 6                             | 17   | 13    | 36         | 177        |
| % LARGE 2 AXLE VEHICLES | 3.1                         | 3.9  | 4     | 3.8        | 4.2                           | 2    | 1.8   | 2.8        | 5.4                         | 3.2  | 1.3   | 2.9        | 2.9                           | 1.8  | 4.5   | 2.5        | 3          |
| 3 AXLE VEHICLES         | 10                          | 28   | 7     | 45         | 18                            | 22   | 7     | 47         | 26                          | 22   | 19    | 67         | 7                             | 22   | 11    | 40         | 199        |
| % 3 AXLE VEHICLES       | 3.9                         | 2.8  | 2.8   | 3          | 4.5                           | 3.7  | 6.2   | 4.2        | 11.7                        | 2.1  | 3.6   | 3.8        | 3.4                           | 2.3  | 3.8   | 2.8        | 3.4        |
| 4+ AXLE TRUCKS          | 9                           | 76   | 33    | 118        | 32                            | 17   | 3     | 52         | 58                          | 45   | 33    | 136        | 16                            | 36   | 42    | 94         | 400        |
| % 4+ AXLE TRUCKS        | 3.5                         | 7.5  | 13.3  | 7.8        | 8                             | 2.9  | 2.7   | 4.7        | 26                          | 4.3  | 6.3   | 7.6        | 7.8                           | 3.8  | 14.5  | 6.6        | 6.8        |

|                                                            | CHERRY AVENUE<br>Southbound |      |       |            | VALLEY BOULEVARD<br>Westbound |      |       |            | CHERRY AVENUE<br>Northbound |      |       |            | VALLEY BOULEVARD<br>Eastbound |      |       |            |            |
|------------------------------------------------------------|-----------------------------|------|-------|------------|-------------------------------|------|-------|------------|-----------------------------|------|-------|------------|-------------------------------|------|-------|------------|------------|
| Start Time                                                 | Left                        | Thru | Right | App. Total | Left                          | Thru | Right | App. Total | Left                        | Thru | Right | App. Total | Left                          | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 |                             |      |       |            |                               |      |       |            |                             |      |       |            |                               |      |       |            |            |
| Peak Hour for Entire Intersection Begins at 04:30 PM       |                             |      |       |            |                               |      |       |            |                             |      |       |            |                               |      |       |            |            |
| 04:30 PM                                                   | 33                          | 160  | 25    | 218        | 46                            | 72   | 10    | 128        | 29                          | 107  | 79    | 215        | 27                            | 107  | 34    | 168        | 729        |
| 04:45 PM                                                   | 31                          | 151  | 27    | 209        | 55                            | 78   | 11    | 144        | 29                          | 109  | 50    | 188        | 18                            | 115  | 39    | 172        | 713        |
| 05:00 PM                                                   | 36                          | 129  | 25    | 190        | 41                            | 69   | 14    | 124        | 25                          | 112  | 56    | 193        | 25                            | 159  | 30    | 214        | 721        |
| 05:15 PM                                                   | 26                          | 132  | 38    | 196        | 58                            | 77   | 11    | 146        | 22                          | 144  | 87    | 253        | 19                            | 121  | 39    | 179        | 774        |
| Total Volume                                               | 126                         | 572  | 115   | 813        | 200                           | 296  | 46    | 542        | 105                         | 472  | 272   | 849        | 89                            | 502  | 142   | 733        | 2937       |
| % App. Total                                               | 15.5                        | 70.4 | 14.1  |            | 36.9                          | 54.6 | 8.5   |            | 12.4                        | 55.6 | 32    |            | 12.1                          | 68.5 | 19.4  |            |            |
| PHF                                                        | .875                        | .894 | .757  | .932       | .862                          | .949 | .821  | .928       | .905                        | .819 | .782  | .839       | .824                          | .789 | .910  | .856       | .949       |

# Intersection Turning Movement

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

|                             |                                             |                                   |                                       |                             |
|-----------------------------|---------------------------------------------|-----------------------------------|---------------------------------------|-----------------------------|
| DATE:<br>2/10/09<br>TUESDAY | LOCATION:<br>NORTH & SOUTH:<br>EAST & WEST: | FONTANA<br>CHERRY<br>I-10 WB RAMP | PROJECT #:<br>LOCATION #:<br>CONTROL: | CA09-0213-1<br>24<br>SIGNAL |
|-----------------------------|---------------------------------------------|-----------------------------------|---------------------------------------|-----------------------------|

|        |                     |                                  |             |        |
|--------|---------------------|----------------------------------|-------------|--------|
| NOTES: | TURNING COUNTS ONLY | AM<br>PM<br>MD<br>OTHER<br>OTHER | W<br>S<br>E | N<br>S |
|--------|---------------------|----------------------------------|-------------|--------|

|        | NORTHBOUND<br>CHERRY |         |         | SOUTHBOUND<br>CHERRY |         |         | EASTBOUND<br>I-10 WB RAMP |         |         | WESTBOUND<br>I-10 WB RAMP |           |         |       |
|--------|----------------------|---------|---------|----------------------|---------|---------|---------------------------|---------|---------|---------------------------|-----------|---------|-------|
| LANES: | NL<br>1              | NT<br>2 | NR<br>X | SL<br>X              | ST<br>2 | SR<br>1 | EL<br>X                   | ET<br>X | ER<br>X | WL<br>0.5                 | WT<br>0.5 | WR<br>1 | TOTAL |

|    |                |         |       |       |       |       |       |       |    |    |       |     |       |       |
|----|----------------|---------|-------|-------|-------|-------|-------|-------|----|----|-------|-----|-------|-------|
| AM | 6:30 AM        |         |       |       |       |       |       |       |    |    |       |     | 0     |       |
|    | 6:45 AM        |         |       |       |       |       |       |       |    |    |       |     | 0     |       |
|    | 7:00 AM        | 68      | 135   |       | 185   | 148   |       |       |    | 66 |       | 88  | 690   |       |
|    | 7:15 AM        | 80      | 133   |       | 199   | 184   |       |       |    | 76 |       | 126 | 798   |       |
|    | 7:30 AM        | 45      | 168   |       | 177   | 203   |       |       |    | 69 |       | 108 | 770   |       |
|    | 7:45 AM        | 62      | 151   |       | 185   | 111   |       |       |    | 73 |       | 98  | 680   |       |
|    | 8:00 AM        | 61      | 145   |       | 156   | 134   |       |       |    | 61 |       | 55  | 612   |       |
|    | 8:15 AM        | 83      | 129   |       | 145   | 158   |       |       |    | 83 |       | 61  | 659   |       |
|    | 8:30 AM        | 60      | 128   |       | 131   | 123   |       |       |    | 48 |       | 72  | 562   |       |
|    | 8:45 AM        | 62      | 119   |       | 128   | 127   |       |       |    | 46 |       | 77  | 559   |       |
|    | 9:00 AM        |         |       |       |       |       |       |       |    |    |       |     | 0     |       |
|    | 9:15 AM        |         |       |       |       |       |       |       |    |    |       |     | 0     |       |
|    | VOLUMES        | 521     | 1,108 | 0     | 0     | 1,306 | 1,188 | 0     | 0  | 0  | 522   | 0   | 685   | 5,330 |
|    | APPROACH %     | 32%     | 68%   | 0%    | 0%    | 52%   | 48%   | 0%    | 0% | 0% | 43%   | 0%  | 57%   |       |
|    | APP/DEPART     | 1,629   | /     | 1,793 | 2,494 | /     | 1,828 | 0     | /  | 0  | 1,207 | /   | 1,709 | 0     |
| PM | BEGIN PEAK HR  | 7:00 AM |       |       |       |       |       |       |    |    |       |     |       |       |
|    | VOLUMES        | 255     | 587   | 0     | 0     | 746   | 646   | 0     | 0  | 0  | 284   | 0   | 420   | 2,938 |
|    | APPROACH %     | 30%     | 70%   | 0%    | 0%    | 54%   | 46%   | 0%    | 0% | 0% | 40%   | 0%  | 60%   |       |
|    | PEAK HR FACTOR | 0.988   |       |       | 0.909 |       |       | 0.000 |    |    | 0.871 |     |       | 0.920 |
|    | APP/DEPART     | 842     | /     | 1,007 | 1,392 | /     | 1,030 | 0     | /  | 0  | 704   | /   | 901   | 0     |
|    | 3:30 PM        |         |       |       |       |       |       |       |    |    |       |     |       | 0     |
|    | 3:45 PM        |         |       |       |       |       |       |       |    |    |       |     |       | 0     |
|    | 4:00 PM        | 76      | 128   |       | 179   | 203   |       |       |    | 63 |       | 106 | 755   |       |
|    | 4:15 PM        | 69      | 166   |       | 188   | 168   |       |       |    | 61 |       | 71  | 723   |       |
|    | 4:30 PM        | 66      | 175   |       | 195   | 115   |       |       |    | 59 |       | 76  | 686   |       |
|    | 4:45 PM        | 58      | 179   |       | 182   | 110   |       |       |    | 65 |       | 72  | 666   |       |
|    | 5:00 PM        | 53      | 201   |       | 167   | 138   |       |       |    | 64 |       | 99  | 722   |       |
|    | 5:15 PM        | 59      | 177   |       | 193   | 111   |       |       |    | 52 |       | 79  | 671   |       |
|    | 5:30 PM        | 39      | 152   |       | 172   | 61    |       |       |    | 49 |       | 61  | 534   |       |
|    | 5:45 PM        | 69      | 119   |       | 126   | 141   |       |       |    | 81 |       | 70  | 606   |       |
|    | 6:00 PM        |         |       |       |       |       |       |       |    |    |       |     | 0     |       |
|    | 6:15 PM        |         |       |       |       |       |       |       |    |    |       |     | 0     |       |
|    | VOLUMES        | 489     | 1,297 | 0     | 0     | 1,402 | 1,047 | 0     | 0  | 0  | 494   | 0   | 634   | 5,363 |
|    | APPROACH %     | 27%     | 73%   | 0%    | 0%    | 57%   | 43%   | 0%    | 0% | 0% | 44%   | 0%  | 56%   |       |
|    | APP/DEPART     | 1,786   | /     | 1,931 | 2,449 | /     | 1,896 | 0     | /  | 0  | 1,128 | /   | 1,536 | 0     |
|    | BEGIN PEAK HR  | 4:00 PM |       |       |       |       |       |       |    |    |       |     |       |       |
|    | VOLUMES        | 269     | 648   | 0     | 0     | 744   | 596   | 0     | 0  | 0  | 248   | 0   | 325   | 2,830 |
|    | APPROACH %     | 29%     | 71%   | 0%    | 0%    | 56%   | 44%   | 0%    | 0% | 0% | 43%   | 0%  | 57%   |       |
|    | PEAK HR FACTOR | 0.951   |       |       | 0.877 |       |       | 0.000 |    |    | 0.848 |     |       | 0.937 |
|    | APP/DEPART     | 917     | /     | 973   | 1,340 | /     | 992   | 0     | /  | 0  | 573   | /   | 865   | 0     |

# **Intersection Turning Movement**

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

|                             |                                             |                                    |                                       |                             |
|-----------------------------|---------------------------------------------|------------------------------------|---------------------------------------|-----------------------------|
| DATE:<br>2/10/09<br>TUESDAY | LOCATION:<br>NORTH & SOUTH:<br>EAST & WEST: | FONTANA<br>CHERRY<br>I-10 EB RMAPS | PROJECT #:<br>LOCATION #:<br>CONTROL: | CA09-0213-1<br>25<br>SIGNAL |
|-----------------------------|---------------------------------------------|------------------------------------|---------------------------------------|-----------------------------|

|        |       |     |     |     |
|--------|-------|-----|-----|-----|
| NOTES: | AM    |     | ▲ N |     |
|        | PM    |     |     |     |
|        | MD    | ◀ W |     | ▶ E |
|        | OTHER |     | ▼ S |     |
|        | OTHER |     |     |     |

|                | NORTHBOUND<br>CHERRY |         |         | SOUTHBOUND<br>CHERRY |         |         | EASTBOUND<br>I-10 EB RMAPS |           |         | WESTBOUND<br>I-10 EB RMAPS |         |         |       |
|----------------|----------------------|---------|---------|----------------------|---------|---------|----------------------------|-----------|---------|----------------------------|---------|---------|-------|
| LANES:         | NL<br>X              | NT<br>2 | NR<br>0 | SL<br>1              | ST<br>2 | SR<br>X | EL<br>0.5                  | ET<br>0.5 | ER<br>1 | WL<br>X                    | WT<br>X | WR<br>X | TOTAL |
| AM             |                      |         |         |                      |         |         |                            |           |         |                            |         |         |       |
| 6:30 AM        |                      |         |         |                      |         |         |                            |           |         |                            |         |         | 0     |
| 6:45 AM        |                      |         |         |                      |         |         |                            |           |         |                            |         |         | 0     |
| 7:00 AM        |                      | 138     | 49      | 66                   | 190     |         | 74                         | 0         | 99      |                            |         |         | 616   |
| 7:15 AM        |                      | 142     | 48      | 58                   | 206     |         | 67                         | 0         | 86      |                            |         |         | 607   |
| 7:30 AM        |                      | 152     | 28      | 85                   | 170     |         | 53                         | 0         | 75      |                            |         |         | 563   |
| 7:45 AM        |                      | 127     | 52      | 72                   | 191     |         | 75                         | 0         | 97      |                            |         |         | 614   |
| 8:00 AM        |                      | 129     | 48      | 61                   | 150     |         | 83                         | 0         | 94      |                            |         |         | 565   |
| 8:15 AM        |                      | 135     | 41      | 64                   | 157     |         | 81                         | 0         | 75      |                            |         |         | 553   |
| 8:30 AM        |                      | 119     | 40      | 64                   | 124     |         | 70                         | 0         | 75      |                            |         |         | 492   |
| 8:45 AM        |                      | 114     | 33      | 48                   | 120     |         | 73                         | 0         | 77      |                            |         |         | 465   |
| 9:00 AM        |                      |         |         |                      |         |         |                            |           |         |                            |         |         | 0     |
| 9:15 AM        |                      |         |         |                      |         |         |                            |           |         |                            |         |         | 0     |
| VOLUMES        | 0                    | 1,056   | 339     | 518                  | 1,308   | 0       | 576                        | 0         | 678     | 0                          | 0       | 0       | 4,475 |
| APPROACH %     | 0%                   | 76%     | 24%     | 28%                  | 72%     | 0%      | 46%                        | 0%        | 54%     | 0%                         | 0%      | 0%      |       |
| APP/DEPART     | 1,395                | /       | 1,632   | 1,826                | /       | 1,986   | 1,254                      | /         | 857     | 0                          | /       | 0       | 0     |
| BEGIN PEAK HR  | 7:00 AM              |         |         |                      |         |         |                            |           |         |                            |         |         |       |
| VOLUMES        | 0                    | 559     | 177     | 281                  | 757     | 0       | 269                        | 0         | 357     | 0                          | 0       | 0       | 2,400 |
| APPROACH %     | 0%                   | 76%     | 24%     | 27%                  | 73%     | 0%      | 43%                        | 0%        | 57%     | 0%                         | 0%      | 0%      |       |
| PEAK HR FACTOR |                      | 0.968   |         |                      | 0.983   |         |                            | 0.905     |         |                            | 0.000   |         | 0.974 |
| APP/DEPART     | 736                  | /       | 828     | 1,038                | /       | 1,114   | 626                        | /         | 458     | 0                          | /       | 0       | 0     |
| PM             |                      |         |         |                      |         |         |                            |           |         |                            |         |         |       |
| 3:30 PM        |                      |         |         |                      |         |         |                            |           |         |                            |         |         | 0     |
| 3:45 PM        |                      |         |         |                      |         |         |                            |           |         |                            |         |         | 0     |
| 4:00 PM        |                      | 119     | 81      | 106                  | 140     |         | 82                         | 0         | 86      |                            |         |         | 614   |
| 4:15 PM        |                      | 139     | 78      | 103                  | 139     |         | 83                         | 0         | 92      |                            |         |         | 634   |
| 4:30 PM        |                      | 158     | 70      | 90                   | 152     |         | 88                         | 0         | 91      |                            |         |         | 649   |
| 4:45 PM        |                      | 155     | 66      | 93                   | 149     |         | 86                         | 0         | 82      |                            |         |         | 631   |
| 5:00 PM        |                      | 150     | 58      | 87                   | 155     |         | 95                         | 0         | 79      |                            |         |         | 624   |
| 5:15 PM        |                      | 139     | 56      | 90                   | 145     |         | 88                         | 0         | 83      |                            |         |         | 601   |
| 5:30 PM        |                      | 125     | 52      | 88                   | 136     |         | 79                         | 0         | 77      |                            |         |         | 557   |
| 5:45 PM        |                      | 118     | 49      | 81                   | 131     |         | 75                         | 0         | 71      |                            |         |         | 525   |
| 6:00 PM        |                      |         |         |                      |         |         |                            |           |         |                            |         |         | 0     |
| 6:15 PM        |                      |         |         |                      |         |         |                            |           |         |                            |         |         | 0     |
| VOLUMES        | 0                    | 1,103   | 510     | 738                  | 1,147   | 0       | 676                        | 0         | 661     | 0                          | 0       | 0       | 4,835 |
| APPROACH %     | 0%                   | 68%     | 32%     | 39%                  | 61%     | 0%      | 51%                        | 0%        | 49%     | 0%                         | 0%      | 0%      |       |
| APP/DEPART     | 1,613                | /       | 1,779   | 1,885                | /       | 1,808   | 1,337                      | /         | 1,248   | 0                          | /       | 0       | 0     |
| BEGIN PEAK HR  | 4:15 PM              |         |         |                      |         |         |                            |           |         |                            |         |         |       |
| VOLUMES        | 0                    | 602     | 272     | 373                  | 595     | 0       | 352                        | 0         | 344     | 0                          | 0       | 0       | 2,538 |
| APPROACH %     | 0%                   | 69%     | 31%     | 39%                  | 61%     | 0%      | 51%                        | 0%        | 49%     | 0%                         | 0%      | 0%      |       |
| PEAK HR FACTOR |                      | 0.958   |         |                      | 1.000   |         |                            | 0.972     |         |                            | 0.000   |         | 0.978 |
| APP/DEPART     | 874                  | /       | 954     | 968                  | /       | 939     | 696                        | /         | 645     | 0                          | /       | 0       | 0     |

Counts Unlimited, Inc.  
25424 Jaclyn Avenue  
Moreno Valley, CA 92557  
951-247-6716

CITY OF FONTANA  
N/S: CHERRY AVENUE  
E/W: SLOVER AVENUE  
WEATHER: SUNNY

File Name : FOCHSLAM  
Site Code : 438801  
Start Date : 4/20/2006  
Page No : 1

Groups Printed- PASSENGER VEHICLES - LARGE 2 AXLE VEHICLES - 3 AXLE VEHICLES - 4+ AXLE TRUCKS

| CHERRY AVENUE<br>Southbound |      |      |       |            | SLOVER AVENUE<br>Westbound |      |       |            | CHERRY AVENUE<br>Northbound |      |       |            | SLOVER AVENUE<br>Eastbound |      |       |            |      | Int. | Total |
|-----------------------------|------|------|-------|------------|----------------------------|------|-------|------------|-----------------------------|------|-------|------------|----------------------------|------|-------|------------|------|------|-------|
| Start Time                  | Left | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                        | Thru | Right | App. Total | Left                       | Thru | Right | App. Total |      |      |       |
| 06:45 AM                    | 89   | 80   | 159   | 328        | 4                          | 56   | 47    | 107        | 6                           | 94   | 4     | 104        | 41                         | 23   | 2     | 66         | 605  |      |       |
| Total                       | 89   | 80   | 159   | 328        | 4                          | 56   | 47    | 107        | 6                           | 94   | 4     | 104        | 41                         | 23   | 2     | 66         | 605  |      |       |
| 07:00 AM                    | 88   | 79   | 77    | 244        | 6                          | 59   | 51    | 116        | 5                           | 124  | 3     | 132        | 35                         | 26   | 6     | 67         | 559  |      |       |
| 07:15 AM                    | 73   | 61   | 106   | 240        | 7                          | 74   | 51    | 132        | 5                           | 97   | 1     | 103        | 46                         | 29   | 1     | 76         | 551  |      |       |
| 07:30 AM                    | 101  | 70   | 125   | 296        | 10                         | 78   | 44    | 132        | 8                           | 92   | 6     | 106        | 41                         | 37   | 1     | 79         | 613  |      |       |
| 07:45 AM                    | 109  | 68   | 105   | 282        | 9                          | 58   | 41    | 108        | 3                           | 104  | 3     | 110        | 46                         | 26   | 2     | 74         | 574  |      |       |
| Total                       | 371  | 278  | 413   | 1062       | 32                         | 269  | 187   | 488        | 21                          | 417  | 13    | 451        | 168                        | 118  | 10    | 296        | 2297 |      |       |
| 08:00 AM                    | 100  | 82   | 82    | 264        | 9                          | 50   | 51    | 110        | 6                           | 74   | 4     | 84         | 44                         | 36   | 5     | 85         | 543  |      |       |
| 08:15 AM                    | 81   | 78   | 87    | 246        | 9                          | 46   | 49    | 104        | 8                           | 95   | 5     | 108        | 45                         | 42   | 3     | 90         | 548  |      |       |
| 08:30 AM                    | 79   | 54   | 55    | 188        | 9                          | 60   | 53    | 122        | 9                           | 83   | 4     | 96         | 53                         | 42   | 6     | 101        | 507  |      |       |
| Grand Total                 | 720  | 572  | 796   | 2088       | 63                         | 481  | 387   | 931        | 50                          | 763  | 30    | 843        | 351                        | 261  | 26    | 638        | 4500 |      |       |
| Apprch %                    | 34.5 | 27.4 | 38.1  |            | 6.8                        | 51.7 | 41.6  |            | 5.9                         | 90.5 | 3.6   |            | 55                         | 40.9 | 4.1   |            |      |      |       |
| Total %                     | 16   | 12.7 | 17.7  | 46.4       | 1.4                        | 10.7 | 8.6   | 20.7       | 1.1                         | 17   | 0.7   | 18.7       | 7.8                        | 5.8  | 0.6   | 14.2       |      |      |       |
| PASSENGER VEHICLES          | 606  | 497  | 665   | 1768       | 56                         | 385  | 283   | 724        | 37                          | 663  | 23    | 723        | 209                        | 182  | 17    | 408        | 3623 |      |       |
| PASSENGER VEHICLES          | 84.2 | 86.9 | 83.5  | 84.7       | 88.9                       | 80   | 73.1  | 77.8       | 74                          | 86.9 | 76.7  | 85.8       | 59.5                       | 69.7 | 65.4  | 63.9       | 80.5 |      |       |
| LARGE 2 AXLE VEHICLES       | 38   | 29   | 28    | 95         | 5                          | 24   | 22    | 51         | 2                           | 48   | 2     | 52         | 27                         | 26   | 3     | 56         | 254  |      |       |
| LARGE 2 AXLE VEHICLES       | 5.3  | 5.1  | 3.5   | 4.5        | 7.9                        | 5    | 5.7   | 5.5        | 4                           | 6.3  | 6.7   | 6.2        | 7.7                        | 10   | 11.5  | 8.8        | 5.6  |      |       |
| 3 AXLE VEHICLES             | 22   | 8    | 31    | 61         | 1                          | 38   | 11    | 50         | 3                           | 12   | 1     | 16         | 31                         | 17   | 0     | 48         | 175  |      |       |
| % 3 AXLE VEHICLES           | 3.1  | 1.4  | 3.9   | 2.9        | 1.6                        | 7.9  | 2.8   | 5.4        | 6                           | 1.6  | 3.3   | 1.9        | 8.8                        | 6.5  | 0     | 7.5        | 3.9  |      |       |
| 4+ AXLE TRUCKS              | 54   | 38   | 72    | 164        | 1                          | 34   | 71    | 106        | 8                           | 40   | 4     | 52         | 84                         | 36   | 6     | 126        | 448  |      |       |
| % 4+ AXLE TRUCKS            | 7.5  | 6.6  | 9     | 7.9        | 1.6                        | 7.1  | 18.3  | 11.4       | 16                          | 5.2  | 13.3  | 6.2        | 23.9                       | 13.8 | 23.1  | 19.7       | 10   |      |       |

| CHERRY AVENUE                                              |      |      |       |            | SLOVER AVENUE |      |       |            | CHERRY AVENUE |      |       |            | SLOVER AVENUE |      |       |            | Int. Total |
|------------------------------------------------------------|------|------|-------|------------|---------------|------|-------|------------|---------------|------|-------|------------|---------------|------|-------|------------|------------|
| Southbound                                                 |      |      |       |            | Westbound     |      |       |            | Northbound    |      |       |            | Eastbound     |      |       |            |            |
| Start Time                                                 | Left | Thru | Right | App. Total | Left          | Thru | Right | App. Total | Left          | Thru | Right | App. Total | Left          | Thru | Right | App. Total |            |
| Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1 |      |      |       |            |               |      |       |            |               |      |       |            |               |      |       |            |            |
| Peak Hour for Entire Intersection Begins at 06:45 AM       |      |      |       |            |               |      |       |            |               |      |       |            |               |      |       |            |            |
| 06:45 AM                                                   | 89   | 80   | 159   | 328        | 4             | 56   | 47    | 107        | 6             | 94   | 4     | 104        | 41            | 23   | 2     | 66         | 605        |
| 07:00 AM                                                   | 88   | 79   | 77    | 244        | 6             | 59   | 51    | 116        | 5             | 124  | 3     | 132        | 35            | 26   | 6     | 67         | 559        |
| 07:15 AM                                                   | 73   | 61   | 106   | 240        | 7             | 74   | 51    | 132        | 5             | 97   | 1     | 103        | 46            | 29   | 1     | 76         | 551        |
| 07:30 AM                                                   | 101  | 70   | 125   | 296        | 10            | 78   | 44    | 132        | 8             | 92   | 6     | 106        | 41            | 37   | 1     | 79         | 613        |
| Total Volume                                               | 351  | 290  | 467   | 1108       | 27            | 267  | 193   | 487        | 24            | 407  | 14    | 445        | 163           | 115  | 10    | 288        | 2328       |
| % App. Total                                               | 31.7 | 26.2 | 42.1  |            | 5.5           | 54.8 | 39.6  |            | 5.4           | 91.5 | 3.1   |            | 56.6          | 39.9 | 3.5   |            |            |
| PHF                                                        | .869 | .906 | .734  | .845       | .675          | .856 | .946  | .922       | .750          | .821 | .583  | .843       | .886          | .777 | .417  | .911       | .949       |

Counts Unlimited, Inc.  
25424 Jaclyn Avenue  
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951-247-6716

CITY OF FONTANA  
N/S: CHERRY AVENUE  
E/W: SLOVER AVENUE  
WEATHER: SUNNY

File Name : FOCHSLPM  
Site Code : 438801  
Start Date : 4/20/2006  
Page No : 1

Groups Printed- PASSENGER VEHICLES - LARGE 2 AXLE VEHICLES - 3 AXLE VEHICLES - 4+ AXLE TRUCKS

| Start Time              | CHERRY AVENUE<br>Southbound |      |       |            | SLOVER AVENUE<br>Westbound |      |       |            | CHERRY AVENUE<br>Northbound |      |       |            | SLOVER AVENUE<br>Eastbound |      |       |            | Int. Total |
|-------------------------|-----------------------------|------|-------|------------|----------------------------|------|-------|------------|-----------------------------|------|-------|------------|----------------------------|------|-------|------------|------------|
|                         | Left                        | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                        | Thru | Right | App. Total | Left                       | Thru | Right | App. Total |            |
| 04:00 PM                | 49                          | 86   | 81    | 216        | 19                         | 48   | 47    | 114        | 10                          | 76   | 3     | 89         | 40                         | 119  | 14    | 173        | 592        |
| 04:15 PM                | 46                          | 77   | 73    | 196        | 6                          | 84   | 46    | 136        | 7                           | 42   | 10    | 59         | 56                         | 127  | 5     | 188        | 579        |
| 04:30 PM                | 54                          | 88   | 72    | 214        | 18                         | 97   | 65    | 180        | 8                           | 67   | 8     | 83         | 29                         | 101  | 14    | 144        | 621        |
| 04:45 PM                | 38                          | 89   | 71    | 198        | 8                          | 57   | 54    | 119        | 9                           | 83   | 7     | 99         | 53                         | 109  | 10    | 172        | 588        |
| Total                   | 187                         | 340  | 297   | 824        | 51                         | 286  | 212   | 549        | 34                          | 268  | 28    | 330        | 178                        | 456  | 43    | 677        | 2380       |
| 05:00 PM                | 44                          | 77   | 75    | 196        | 6                          | 48   | 78    | 132        | 8                           | 61   | 7     | 76         | 53                         | 128  | 7     | 188        | 592        |
| 05:15 PM                | 50                          | 68   | 66    | 184        | 13                         | 76   | 62    | 151        | 9                           | 66   | 7     | 82         | 72                         | 162  | 10    | 244        | 661        |
| 05:30 PM                | 58                          | 94   | 49    | 201        | 14                         | 63   | 52    | 129        | 9                           | 108  | 3     | 120        | 50                         | 126  | 9     | 185        | 635        |
| 05:45 PM                | 53                          | 89   | 64    | 206        | 4                          | 46   | 53    | 103        | 3                           | 112  | 2     | 117        | 62                         | 143  | 14    | 219        | 645        |
| Total                   | 205                         | 328  | 254   | 787        | 37                         | 233  | 245   | 515        | 29                          | 347  | 19    | 395        | 237                        | 559  | 40    | 836        | 2533       |
| Grand Total             | 392                         | 668  | 551   | 1611       | 88                         | 519  | 457   | 1064       | 63                          | 615  | 47    | 725        | 415                        | 1015 | 83    | 1513       | 4913       |
| Apprch %                | 24.3                        | 41.5 | 34.2  |            | 8.3                        | 48.8 | 43    |            | 8.7                         | 84.8 | 6.5   |            | 27.4                       | 67.1 | 5.5   |            |            |
| Total %                 | 8                           | 13.6 | 11.2  | 32.8       | 1.8                        | 10.6 | 9.3   | 21.7       | 1.3                         | 12.5 | 1     | 14.8       | 8.4                        | 20.7 | 1.7   | 30.8       |            |
| PASSENGER VEHICLES      | 298                         | 627  | 393   | 1318       | 82                         | 421  | 405   | 908        | 49                          | 575  | 44    | 668        | 358                        | 890  | 62    | 1310       | 4204       |
| % PASSENGER VEHICLES    | 76                          | 93.9 | 71.3  | 81.8       | 93.2                       | 81.1 | 88.6  | 85.3       | 77.8                        | 93.5 | 93.6  | 92.1       | 86.3                       | 87.7 | 74.7  | 86.6       | 85.6       |
| LARGE 2 AXLE VEHICLES   | 16                          | 11   | 24    | 51         | 3                          | 33   | 10    | 46         | 4                           | 13   | 1     | 18         | 11                         | 28   | 4     | 43         | 158        |
| % LARGE 2 AXLE VEHICLES | 4.1                         | 1.6  | 4.4   | 3.2        | 3.4                        | 6.4  | 2.2   | 4.3        | 6.3                         | 2.1  | 2.1   | 2.5        | 2.7                        | 2.8  | 4.8   | 2.8        | 3.2        |
| 3 AXLE VEHICLES         | 32                          | 8    | 40    | 80         | 1                          | 28   | 12    | 41         | 3                           | 5    | 1     | 9          | 18                         | 35   | 4     | 57         | 187        |
| % 3 AXLE VEHICLES       | 8.2                         | 1.2  | 7.3   | 5          | 1.1                        | 5.4  | 2.6   | 3.9        | 4.8                         | 0.8  | 2.1   | 1.2        | 4.3                        | 3.4  | 4.8   | 3.8        | 3.8        |
| 4+ AXLE TRUCKS          | 46                          | 22   | 94    | 162        | 2                          | 37   | 30    | 69         | 7                           | 22   | 1     | 30         | 28                         | 62   | 13    | 103        | 364        |
| % 4+ AXLE TRUCKS        | 11.7                        | 3.3  | 17.1  | 10.1       | 2.3                        | 7.1  | 6.6   | 6.5        | 11.1                        | 3.6  | 2.1   | 4.1        | 6.7                        | 6.1  | 15.7  | 6.8        | 7.4        |

| CHERRY AVENUE<br>Southbound                                |      |      |       |            | SLOVER AVENUE<br>Westbound |      |       |            | CHERRY AVENUE<br>Northbound * |      |       |            | SLOVER AVENUE<br>Eastbound |      |       |            |      | Int. Total |
|------------------------------------------------------------|------|------|-------|------------|----------------------------|------|-------|------------|-------------------------------|------|-------|------------|----------------------------|------|-------|------------|------|------------|
| Start Time                                                 | Left | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                          | Thru | Right | App. Total | Left                       | Thru | Right | App. Total |      |            |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 |      |      |       |            |                            |      |       |            |                               |      |       |            |                            |      |       |            |      |            |
| Peak Hour for Entire Intersection Begins at 05:00 PM       |      |      |       |            |                            |      |       |            |                               |      |       |            |                            |      |       |            |      |            |
| 05:00 PM                                                   | 44   | 77   | 75    | 196        | 6                          | 48   | 78    | 132        | 8                             | 61   | 7     | 76         | 53                         | 128  | 7     | 188        | 592  |            |
| 05:15 PM                                                   | 50   | 68   | 66    | 184        | 13                         | 76   | 62    | 151        | 9                             | 66   | 7     | 82         | 72                         | 162  | 10    | 244        | 661  |            |
| 05:30 PM                                                   | 58   | 94   | 49    | 201        | 14                         | 63   | 52    | 129        | 9                             | 108  | 3     | 120        | 50                         | 126  | 9     | 185        | 635  |            |
| 05:45 PM                                                   | 53   | 89   | 64    | 206        | 4                          | 46   | 53    | 103        | 3                             | 112  | 2     | 117        | 62                         | 143  | 14    | 219        | 645  |            |
| Total Volume                                               | 205  | 328  | 254   | 787        | 37                         | 233  | 245   | 515        | 29                            | 347  | 19    | 395        | 237                        | 559  | 40    | 836        | 2533 |            |
| % App. Total                                               | 26   | 41.7 | 32.3  |            | 7.2                        | 45.2 | 47.6  |            | 7.3                           | 87.8 | 4.8   |            | 28.3                       | 66.9 | 4.8   |            |      |            |
| PHF                                                        | .884 | .872 | .847  | .955       | .661                       | .766 | .785  | .853       | .806                          | .775 | .679  | .823       | .823                       | .863 | .714  | .857       | .958 |            |

## Intersection Turning Movement

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

|                             |                                             |                                |                                       |                                 |
|-----------------------------|---------------------------------------------|--------------------------------|---------------------------------------|---------------------------------|
| DATE:<br>2/10/09<br>TUESDAY | LOCATION:<br>NORTH & SOUTH:<br>EAST & WEST: | FONTANA<br>CHERRY<br>SANTA ANA | PROJECT #:<br>LOCATION #:<br>CONTROL: | CA09-0213-1<br>27<br>4-WAY STOP |
|-----------------------------|---------------------------------------------|--------------------------------|---------------------------------------|---------------------------------|

|        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NOTES: | <div style="display: flex; align-items: center;"> <div style="border: 1px solid black; padding: 2px; margin-right: 5px;"> AM<br/>PM<br/>MD<br/>OTHER </div> <div style="display: flex; flex-direction: column; align-items: center;"> <div style="display: flex; justify-content: space-around; width: 100px;"> <span>◀ W</span> <span>E ▶</span> </div> <div style="display: flex; justify-content: space-around; width: 100px;"> <span>▲ N</span> <span>S ▼</span> </div> </div> </div> |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|        | NORTHBOUND<br>CHERRY |         |         | SOUTHBOUND<br>CHERRY |         |         | EASTBOUND<br>SANTA ANA |         |         | WESTBOUND<br>SANTA ANA |         |         |       |
|--------|----------------------|---------|---------|----------------------|---------|---------|------------------------|---------|---------|------------------------|---------|---------|-------|
| LANES: | NL<br>0              | NT<br>1 | NR<br>0 | SL<br>0              | ST<br>1 | SR<br>0 | EL<br>0                | ET<br>1 | ER<br>0 | WL<br>0                | WT<br>1 | WR<br>0 | TOTAL |

|                |            |     |     |     |       |     |     |     |     |     |     |     |       |       |
|----------------|------------|-----|-----|-----|-------|-----|-----|-----|-----|-----|-----|-----|-------|-------|
| AM             | 6:30 AM    |     |     |     |       |     |     |     |     |     |     |     |       | 0     |
|                | 6:45 AM    |     |     |     |       |     |     |     |     |     |     |     |       | 0     |
|                | 7:00 AM    | 2   | 84  | 1   | 7     | 97  | 48  | 53  | 5   | 9   | 3   | 15  | 2     | 326   |
|                | 7:15 AM    | 5   | 92  | 5   | 7     | 80  | 49  | 53  | 14  | 25  | 3   | 16  | 4     | 353   |
|                | 7:30 AM    | 6   | 125 | 1   | 13    | 73  | 29  | 62  | 9   | 18  | 1   | 10  | 7     | 354   |
|                | 7:45 AM    | 2   | 101 | 2   | 8     | 59  | 14  | 9   | 6   | 1   | 0   | 7   | 3     | 212   |
|                | 8:00 AM    | 3   | 85  | 1   | 9     | 74  | 18  | 9   | 1   | 1   | 1   | 2   | 9     | 213   |
|                | 8:15 AM    | 5   | 77  | 2   | 11    | 58  | 12  | 16  | 6   | 2   | 0   | 7   | 5     | 201   |
|                | 8:30 AM    | 3   | 87  | 5   | 5     | 58  | 7   | 16  | 5   | 0   | 3   | 4   | 7     | 200   |
|                | 8:45 AM    | 2   | 73  | 1   | 3     | 63  | 11  | 14  | 5   | 1   | 4   | 4   | 3     | 184   |
|                | 9:00 AM    |     |     |     |       |     |     |     |     |     |     |     |       | 0     |
|                | 9:15 AM    |     |     |     |       |     |     |     |     |     |     |     |       | 0     |
|                | VOLUMES    | 28  | 724 | 18  | 63    | 562 | 188 | 232 | 51  | 57  | 15  | 65  | 40    | 2,043 |
|                | APPROACH % | 4%  | 94% | 2%  | 8%    | 69% | 23% | 68% | 15% | 17% | 13% | 54% | 33%   |       |
|                | APP/DEPART | 770 | /   | 996 | 813   | /   | 634 | 340 | /   | 132 | 120 | /   | 281   | 0     |
| BEGIN PEAK HR  | 7:00 AM    |     |     |     |       |     |     |     |     |     |     |     |       |       |
| VOLUMES        | 15         | 402 | 9   | 35  | 309   | 140 | 177 | 34  | 53  | 7   | 48  | 16  | 1,245 |       |
| APPROACH %     | 4%         | 94% | 2%  | 7%  | 64%   | 29% | 67% | 13% | 20% | 10% | 68% | 23% |       |       |
| PEAK HR FACTOR | 0.807      |     |     |     |       |     |     |     |     |     |     |     |       |       |
| APP/DEPART     | 426        | /   | 595 | 484 | /     | 369 | 264 | /   | 78  | 71  | /   | 203 | 0     |       |
| PM             | 3:30 PM    |     |     |     |       |     |     |     |     |     |     |     |       | 0     |
|                | 3:45 PM    |     |     |     |       |     |     |     |     |     |     |     |       | 0     |
|                | 4:00 PM    | 0   | 91  | 2   | 5     | 102 | 7   | 26  | 7   | 1   | 3   | 7   | 7     | 258   |
|                | 4:15 PM    | 2   | 73  | 4   | 3     | 104 | 15  | 30  | 5   | 2   | 0   | 13  | 5     | 256   |
|                | 4:30 PM    | 3   | 86  | 0   | 2     | 116 | 15  | 22  | 6   | 3   | 2   | 4   | 8     | 267   |
|                | 4:45 PM    | 1   | 74  | 3   | 3     | 124 | 18  | 17  | 8   | 0   | 1   | 3   | 8     | 260   |
|                | 5:00 PM    | 5   | 102 | 1   | 6     | 126 | 10  | 34  | 4   | 2   | 1   | 4   | 7     | 302   |
|                | 5:15 PM    | 2   | 91  | 1   | 4     | 130 | 8   | 20  | 5   | 1   | 2   | 6   | 6     | 276   |
|                | 5:30 PM    | 1   | 93  | 1   | 5     | 118 | 7   | 18  | 2   | 1   | 0   | 1   | 5     | 252   |
|                | 5:45 PM    | 2   | 92  | 0   | 2     | 129 | 7   | 9   | 7   | 4   | 1   | 1   | 8     | 262   |
|                | 6:00 PM    |     |     |     |       |     |     |     |     |     |     |     |       | 0     |
|                | 6:15 PM    |     |     |     |       |     |     |     |     |     |     |     |       | 0     |
|                | VOLUMES    | 16  | 702 | 12  | 30    | 949 | 87  | 176 | 44  | 14  | 10  | 39  | 54    | 2,133 |
|                | APPROACH % | 2%  | 96% | 2%  | 3%    | 89% | 8%  | 75% | 19% | 6%  | 10% | 38% | 52%   |       |
|                | APP/DEPART | 730 | /   | 932 | 1,066 | /   | 973 | 234 | /   | 86  | 103 | /   | 142   | 0     |
| BEGIN PEAK HR  | 4:30 PM    |     |     |     |       |     |     |     |     |     |     |     |       |       |
| VOLUMES        | 11         | 353 | 5   | 15  | 496   | 51  | 93  | 23  | 6   | 6   | 17  | 29  | 1,105 |       |
| APPROACH %     | 3%         | 96% | 1%  | 3%  | 88%   | 9%  | 76% | 19% | 5%  | 12% | 33% | 56% |       |       |
| PEAK HR FACTOR | 0.854      |     |     |     |       |     |     |     |     |     |     |     |       |       |
| APP/DEPART     | 369        | /   | 475 | 562 | /     | 508 | 122 | /   | 43  | 52  | /   | 79  | 0     |       |



CITY OF FONTANA  
N/S: CHERRY AVENUE  
E/W: JURUPA AVENUE  
WEATHER: SUNNY

Counts Unlimited Inc.  
25424 Jaclyn Ave  
Moreno Valley, CA 92557  
909-247-6716

File Name : FOCHJUAM  
Site Code : 00422251  
Start Date : 04/03/2003  
Page No : 1

Groups Printed- PASSENGER VEHICLES - LARGE 2 AXLE TRUCKS - 3 AXLE VEHICLES - 4+ AXLE TRUCKS

| Start Time  | CHERRY AVENUE<br>Southbound |      |       |               | JURUPA AVENUE<br>Westbound |      |       |               | CHERRY AVENUE<br>Northbound |      |       |               | JURUPA AVENUE<br>Eastbound |      |       |               | Int.<br>Total |
|-------------|-----------------------------|------|-------|---------------|----------------------------|------|-------|---------------|-----------------------------|------|-------|---------------|----------------------------|------|-------|---------------|---------------|
|             | Left                        | Thru | Right | App.<br>Total | Left                       | Thru | Right | App.<br>Total | Left                        | Thru | Right | App.<br>Total | Left                       | Thru | Right | App.<br>Total |               |
| Factor      | 1.0                         | 1.0  | 1.0   |               | 1.0                        | 1.0  | 1.0   |               | 1.0                         | 1.0  | 1.0   |               | 1.0                        | 1.0  | 1.0   |               |               |
| 06:00 AM    | 11                          | 19   | 15    | 45            | 0                          | 89   | 14    | 103           | 23                          | 38   | 5     | 66            | 15                         | 35   | 9     | 59            | 273           |
| 06:15 AM    | 7                           | 20   | 24    | 51            | 0                          | 106  | 19    | 125           | 26                          | 61   | 5     | 92            | 22                         | 47   | 12    | 81            | 349           |
| 06:30 AM    | 6                           | 25   | 27    | 58            | 5                          | 107  | 20    | 132           | 39                          | 68   | 4     | 111           | 26                         | 57   | 18    | 101           | 402           |
| 06:45 AM    | 14                          | 29   | 21    | 64            | 1                          | 134  | 19    | 154           | 54                          | 58   | 12    | 124           | 25                         | 66   | 20    | 111           | 453           |
| Total       | 38                          | 93   | 87    | 218           | 6                          | 436  | 72    | 514           | 142                         | 225  | 26    | 393           | 88                         | 205  | 59    | 352           | 1477          |
| 07:00 AM    | 21                          | 58   | 42    | 121           | 16                         | 161  | 14    | 191           | 87                          | 75   | 11    | 173           | 17                         | 71   | 48    | 136           | 621           |
| 07:15 AM    | 63                          | 119  | 47    | 229           | 27                         | 257  | 33    | 317           | 130                         | 94   | 21    | 245           | 51                         | 103  | 57    | 211           | 1002          |
| 07:30 AM    | 23                          | 100  | 26    | 149           | 17                         | 224  | 29    | 270           | 67                          | 100  | 13    | 180           | 40                         | 137  | 75    | 252           | 851           |
| 07:45 AM    | 17                          | 53   | 28    | 98            | 12                         | 137  | 27    | 176           | 41                          | 70   | 13    | 124           | 30                         | 115  | 12    | 157           | 555           |
| Total       | 124                         | 330  | 143   | 597           | 72                         | 779  | 103   | 954           | 325                         | 339  | 58    | 722           | 138                        | 426  | 192   | 756           | 3029          |
| 08:00 AM    | 19                          | 43   | 21    | 83            | 12                         | 143  | 27    | 182           | 29                          | 46   | 8     | 83            | 20                         | 82   | 10    | 112           | 460           |
| 08:15 AM    | 7                           | 37   | 25    | 69            | 8                          | 109  | 22    | 139           | 28                          | 42   | 11    | 81            | 21                         | 88   | 8     | 117           | 406           |
| 08:30 AM    | 21                          | 28   | 20    | 69            | 4                          | 103  | 11    | 118           | 25                          | 36   | 5     | 66            | 16                         | 76   | 13    | 105           | 358           |
| 08:45 AM    | 16                          | 28   | 14    | 58            | 5                          | 82   | 18    | 105           | 19                          | 46   | 12    | 77            | 29                         | 54   | 9     | 92            | 332           |
| Total       | 63                          | 136  | 80    | 279           | 29                         | 437  | 78    | 544           | 101                         | 170  | 36    | 307           | 88                         | 300  | 40    | 426           | 1556          |
| Grand Total | 225                         | 559  | 310   | 1094          | 107                        | 1652 | 253   | 2012          | 568                         | 734  | 120   | 1422          | 312                        | 931  | 291   | 1534          | 6062          |
| Apprch %    | 20.6                        | 51.1 | 28.3  |               | 5.3                        | 82.1 | 12.6  |               | 39.9                        | 51.6 | 8.4   |               | 20.3                       | 60.7 | 19.0  |               |               |
| Total %     | 3.7                         | 9.2  | 5.1   | 18.0          | 1.8                        | 27.3 | 4.2   | 33.2          | 9.4                         | 12.1 | 2.0   | 23.5          | 5.1                        | 15.4 | 4.8   | 25.3          |               |

|                                                   | CHERRY AVENUE<br>Southbound |      |       |            | JURUPA AVENUE<br>Westbound |      |       |            | CHERRY AVENUE<br>Northbound |      |       |            | JURUPA AVENUE<br>Eastbound |      |       |            |            |
|---------------------------------------------------|-----------------------------|------|-------|------------|----------------------------|------|-------|------------|-----------------------------|------|-------|------------|----------------------------|------|-------|------------|------------|
| Start Time                                        | Left                        | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                        | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Int. Total |
| Peak Hour From 06:00 AM to 08:45 AM - Peak 1 of 1 |                             |      |       |            |                            |      |       |            |                             |      |       |            |                            |      |       |            |            |
| Intersection                                      | 07:00 AM                    |      |       |            |                            |      |       |            |                             |      |       |            |                            |      |       |            |            |
| Volume                                            | 124                         | 330  | 143   | 597        | 72                         | 779  | 103   | 954        | 325                         | 339  | 58    | 722        | 138                        | 426  | 192   | 756        | 3029       |
| Percent                                           | 20.8                        | 55.3 | 24.0  |            | 7.5                        | 81.7 | 10.8  |            | 45.0                        | 47.0 | 8.0   |            | 18.3                       | 56.3 | 25.4  |            |            |
| 07:15                                             |                             |      |       |            |                            |      |       |            |                             |      |       |            |                            |      |       |            |            |
| Volume                                            | 63                          | 119  | 47    | 229        | 27                         | 257  | 33    | 317        | 130                         | 94   | 21    | 245        | 51                         | 103  | 57    | 211        | 1002       |
| Peak Factor                                       |                             |      |       |            |                            |      |       |            |                             |      |       |            |                            |      |       |            | 0.756      |
| High Int.                                         | 07:15 AM                    |      |       |            | 07:15 AM                   |      |       |            | 07:15 AM                    |      |       |            | 07:30 AM                   |      |       |            |            |
| Volume                                            | 63                          | 119  | 47    | 229        | 27                         | 257  | 33    | 317        | 130                         | 94   | 21    | 245        | 40                         | 137  | 75    | 252        |            |
| Peak Factor                                       |                             |      |       |            |                            |      |       |            |                             |      |       |            |                            |      |       |            |            |
|                                                   | 0.652                       |      |       |            | 0.752                      |      |       |            | 0.737                       |      |       |            | 0.750                      |      |       |            |            |

Counts Unlimited Inc.  
25424 Jaclyn Ave  
Moreno Valley, CA 92557  
909-247-6716

CITY OF FONTANA  
N/S: CHERRY AVENUE  
EW: JURUPA AVENUE  
WEATHER: SUNNY

File Name : FOCHJUPM  
Site Code : 00422251  
Start Date : 04/02/2003  
Page No : 1

Groups Printed- PASSENGER VEHICLES - LARGE 2 AXLE TRUCKS - 3 AXLE TRUCKS - 4+ AXLE TRUCKS

| Start Time  | CHERRY AVENUE<br>Southbound |      |       |            | JURUPA AVENUE<br>Westbound |      |       |            | CHERRY AVENUE<br>Northbound |      |       |            | JURUPA AVENUE<br>Eastbound |      |       |            | Int. Total |
|-------------|-----------------------------|------|-------|------------|----------------------------|------|-------|------------|-----------------------------|------|-------|------------|----------------------------|------|-------|------------|------------|
|             | Left                        | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                        | Thru | Right | App. Total | Left                       | Thru | Right | App. Total |            |
| Factor      | 1.0                         | 1.0  | 1.0   |            | 1.0                        | 1.0  | 1.0   |            | 1.0                         | 1.0  | 1.0   |            | 1.0                        | 1.0  | 1.0   |            |            |
| 03:00 PM    | 24                          | 79   | 13    | 116        | 14                         | 98   | 8     | 120        | 68                          | 47   | 10    | 125        | 27                         | 152  | 49    | 228        | 589        |
| 03:15 PM    | 21                          | 84   | 33    | 138        | 19                         | 166  | 17    | 202        | 31                          | 71   | 10    | 112        | 22                         | 143  | 45    | 210        | 662        |
| 03:30 PM    | 31                          | 82   | 20    | 133        | 18                         | 155  | 9     | 182        | 40                          | 50   | 7     | 97         | 34                         | 181  | 53    | 268        | 680        |
| 03:45 PM    | 21                          | 72   | 18    | 111        | 9                          | 159  | 15    | 183        | 52                          | 38   | 6     | 96         | 23                         | 177  | 41    | 241        | 631        |
| Total       | 97                          | 317  | 84    | 498        | 60                         | 578  | 49    | 687        | 191                         | 206  | 33    | 430        | 106                        | 653  | 188   | 947        | 2562       |
| 04:00 PM    | 28                          | 109  | 16    | 153        | 27                         | 141  | 17    | 185        | 31                          | 60   | 10    | 101        | 40                         | 197  | 44    | 281        | 720        |
| 04:15 PM    | 38                          | 101  | 30    | 169        | 13                         | 139  | 9     | 161        | 36                          | 41   | 12    | 89         | 20                         | 161  | 38    | 219        | 638        |
| 04:30 PM    | 25                          | 91   | 16    | 132        | 15                         | 144  | 12    | 171        | 28                          | 57   | 6     | 91         | 28                         | 163  | 41    | 232        | 626        |
| 04:45 PM    | 30                          | 108  | 22    | 160        | 23                         | 97   | 13    | 133        | 24                          | 44   | 5     | 73         | 27                         | 186  | 30    | 243        | 609        |
| Total       | 121                         | 409  | 84    | 614        | 78                         | 521  | 51    | 650        | 119                         | 202  | 33    | 354        | 115                        | 707  | 153   | 975        | 2593       |
| 05:00 PM    | 18                          | 72   | 21    | 111        | 28                         | 126  | 14    | 168        | 30                          | 40   | 8     | 78         | 27                         | 198  | 61    | 286        | 643        |
| 05:15 PM    | 25                          | 93   | 16    | 134        | 14                         | 85   | 5     | 104        | 36                          | 55   | 6     | 97         | 16                         | 136  | 49    | 201        | 536        |
| 05:30 PM    | 17                          | 93   | 17    | 127        | 9                          | 97   | 6     | 112        | 35                          | 55   | 4     | 94         | 16                         | 164  | 55    | 235        | 568        |
| 05:45 PM    | 34                          | 104  | 29    | 167        | 15                         | 98   | 12    | 125        | 30                          | 43   | 13    | 86         | 29                         | 161  | 63    | 253        | 631        |
| Total       | 94                          | 362  | 83    | 539        | 66                         | 406  | 37    | 509        | 131                         | 193  | 31    | 355        | 88                         | 659  | 228   | 975        | 2378       |
| Grand Total | 312                         | 1088 | 251   | 1651       | 204                        | 1505 | 137   | 1846       | 441                         | 601  | 97    | 1139       | 309                        | 2019 | 569   | 2897       | 7533       |
| Apprch %    | 18.9                        | 65.9 | 15.2  |            | 11.1                       | 81.5 | 7.4   |            | 38.7                        | 52.8 | 8.5   |            | 10.7                       | 69.7 | 19.6  |            |            |
| Total %     | 4.1                         | 14.4 | 3.3   | 21.9       | 2.7                        | 20.0 | 1.8   | 24.5       | 5.9                         | 8.0  | 1.3   | 15.1       | 4.1                        | 26.8 | 7.6   | 38.5       |            |

|                                                   | CHERRY AVENUE<br>Southbound |      |       |            | JURUPA AVENUE<br>Westbound |      |       |            | CHERRY AVENUE<br>Northbound |      |       |            | JURUPA AVENUE<br>Eastbound |      |       |            |            |
|---------------------------------------------------|-----------------------------|------|-------|------------|----------------------------|------|-------|------------|-----------------------------|------|-------|------------|----------------------------|------|-------|------------|------------|
| Start Time                                        | Left                        | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                        | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Int. Total |
| Peak Hour From 03:00 PM to 05:45 PM - Peak 1 of 1 |                             |      |       |            |                            |      |       |            |                             |      |       |            |                            |      |       |            |            |
| Intersection                                      | 03:15 PM                    |      |       |            |                            |      |       |            |                             |      |       |            |                            |      |       |            |            |
| Volume                                            | 101                         | 347  | 87    | 535        | 73                         | 621  | 58    | 752        | 154                         | 219  | 33    | 406        | 119                        | 698  | 183   | 1000       | 2693       |
| Percent                                           | 18.9                        | 64.9 | 16.3  |            | 9.7                        | 82.6 | 7.7   |            | 37.9                        | 53.9 | 8.1   |            | 11.9                       | 69.8 | 18.3  |            |            |
| 04:00                                             | 28                          | 109  | 16    | 153        | 27                         | 141  | 17    | 185        | 31                          | 60   | 10    | 101        | 40                         | 197  | 44    | 281        | 720        |
| Volume                                            |                             |      |       |            |                            |      |       |            |                             |      |       |            |                            |      |       |            |            |
| Peak Factor                                       |                             |      |       |            |                            |      |       |            |                             |      |       |            |                            |      |       |            | 0.935      |
| High Int.                                         | 04:00 PM                    |      |       |            | 03:15 PM                   |      |       |            | 03:15 PM                    |      |       |            | 04:00 PM                   |      |       |            |            |
| Volume                                            | 28                          | 109  | 16    | 153        | 19                         | 166  | 17    | 202        | 31                          | 71   | 10    | 112        | 40                         | 197  | 44    | 281        |            |
| Peak Factor                                       |                             |      |       | 0.874      |                            |      |       | 0.931      |                             |      |       | 0.906      |                            |      |       | 0.890      |            |

## Intersection Turning Movement

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

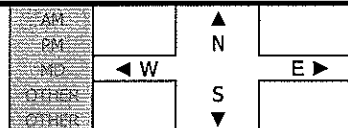
DATE:  
2/10/09  
TUESDAY

LOCATION:  
NORTH & SOUTH:  
EAST & WEST:

FONTANA  
HEMLOCK  
VALLEY

PROJECT #: CA09-0213-1  
LOCATION #: 29A  
CONTROL: SIGNAL

NOTES: FIVE WAY INTERSECTION. SEE LOCATION 29B FOR FIFTH LEG.  
SL1 = LEFT TURN TO EASTBOUND VALLEY  
SL2 = LEFT TURN TO NORTHBOUND FONTANA



|    | NORTHBOUND<br>HEMLOCK |         |         | SOUTHBOUND<br>HEMLOCK |          |         |         | EASTBOUND<br>VALLEY |         |         | WESTBOUND<br>VALLEY |         |         | TOTAL |
|----|-----------------------|---------|---------|-----------------------|----------|---------|---------|---------------------|---------|---------|---------------------|---------|---------|-------|
|    | NL<br>0               | NT<br>1 | NR<br>0 | SL1<br>0              | SL2<br>0 | ST<br>1 | SR<br>0 | EL<br>1             | ET<br>2 | ER<br>0 | WL<br>1             | WT<br>2 | WR<br>0 |       |
| AM | 6:30 AM               |         |         |                       |          |         |         |                     |         |         |                     |         |         | 0     |
|    | 6:45 AM               |         |         |                       |          |         |         |                     |         |         |                     |         |         | 0     |
|    | 7:00 AM               | 3       | 1       | 3                     | 17       | 0       | 0       | 12                  | 11      | 38      | 3                   | 1       | 62      | 159   |
|    | 7:15 AM               | 7       | 7       | 1                     | 21       | 0       | 5       | 14                  | 8       | 35      | 0                   | 1       | 67      | 189   |
|    | 7:30 AM               | 2       | 1       | 0                     | 9        | 0       | 0       | 11                  | 7       | 54      | 3                   | 0       | 79      | 171   |
|    | 7:45 AM               | 6       | 5       | 2                     | 18       | 0       | 2       | 19                  | 9       | 56      | 5                   | 0       | 81      | 213   |
|    | 8:00 AM               | 5       | 2       | 2                     | 19       | 0       | 0       | 16                  | 15      | 66      | 0                   | 0       | 72      | 208   |
|    | 8:15 AM               | 9       | 2       | 3                     | 22       | 0       | 0       | 22                  | 18      | 58      | 0                   | 1       | 68      | 218   |
|    | 8:30 AM               | 3       | 3       | 2                     | 11       | 1       | 2       | 16                  | 11      | 65      | 1                   | 2       | 72      | 199   |
|    | 8:45 AM               | 2       | 1       | 3                     | 13       | 0       | 3       | 11                  | 9       | 49      | 3                   | 1       | 77      | 183   |
|    | 9:00 AM               |         |         |                       |          |         |         |                     |         |         |                     |         |         | 0     |
|    | 9:15 AM               |         |         |                       |          |         |         |                     |         |         |                     |         |         | 0     |
|    | VOLUMES               | 37      | 22      | 16                    | 130      | 1       | 12      | 121                 | 88      | 421     | 15                  | 6       | 578     | 93    |
|    | APPROACH %            | 49%     | 29%     | 21%                   | 49%      | 0%      | 5%      | 46%                 | 17%     | 80%     | 3%                  | 1%      | 85%     | 14%   |
|    | APP/DEPART            | 75      | /       | 203                   | 264      | /       | 33      | 524                 | /       | 568     | 677                 | /       | 736     | 0     |
| PM | BEGIN PEAK HR         | 7:45 AM |         |                       |          |         |         |                     |         |         |                     |         |         |       |
|    | VOLUMES               | 23      | 12      | 9                     | 70       | 1       | 4       | 73                  | 53      | 245     | 6                   | 3       | 293     | 46    |
|    | APPROACH %            | 52%     | 27%     | 20%                   | 47%      | 1%      | 3%      | 49%                 | 17%     | 81%     | 2%                  | 1%      | 86%     | 13%   |
|    | PEAK HR FACTOR        | 0.786   |         |                       | 0.841    |         |         | 0.938               |         |         | 0.940               |         |         | 0.961 |
|    | APP/DEPART            | 44      | /       | 111                   | 148      | /       | 13      | 304                 | /       | 325     | 342                 | /       | 389     | 0     |
|    | 3:30 PM               |         |         |                       |          |         |         |                     |         |         |                     |         |         | 0     |
|    | 3:45 PM               |         |         |                       |          |         |         |                     |         |         |                     |         |         | 0     |
|    | 4:00 PM               | 2       | 1       | 3                     | 13       | 0       | 2       | 5                   | 13      | 88      | 5                   | 2       | 70      | 11    |
|    | 4:15 PM               | 1       | 0       | 2                     | 8        | 0       | 1       | 8                   | 10      | 95      | 2                   | 6       | 81      | 5     |
|    | 4:30 PM               | 2       | 1       | 2                     | 11       | 0       | 0       | 9                   | 12      | 107     | 3                   | 3       | 76      | 8     |
|    | 4:45 PM               | 2       | 1       | 3                     | 11       | 0       | 0       | 14                  | 9       | 122     | 3                   | 7       | 105     | 13    |
|    | 5:00 PM               | 2       | 2       | 1                     | 9        | 0       | 1       | 10                  | 16      | 133     | 7                   | 4       | 95      | 15    |
|    | 5:15 PM               | 0       | 1       | 1                     | 14       | 0       | 0       | 4                   | 7       | 97      | 6                   | 3       | 108     | 12    |
|    | 5:30 PM               | 1       | 0       | 5                     | 4        | 0       | 1       | 8                   | 9       | 90      | 2                   | 3       | 92      | 12    |
|    | 5:45 PM               | 1       | 4       | 11                    | 19       | 0       | 1       | 8                   | 7       | 77      | 2                   | 3       | 66      | 13    |
|    | 6:00 PM               |         |         |                       |          |         |         |                     |         |         |                     |         |         | 0     |
|    | 6:15 PM               |         |         |                       |          |         |         |                     |         |         |                     |         |         | 0     |
|    | VOLUMES               | 11      | 10      | 28                    | 89       | 0       | 6       | 66                  | 83      | 809     | 30                  | 31      | 693     | 89    |
|    | APPROACH %            | 22%     | 20%     | 57%                   | 55%      | 0%      | 4%      | 41%                 | 9%      | 88%     | 3%                  | 4%      | 85%     | 11%   |
|    | APP/DEPART            | 49      | /       | 182                   | 161      | /       | 67      | 922                 | /       | 926     | 813                 | /       | 770     | 0     |
|    | BEGIN PEAK HR         | 4:30 PM |         |                       |          |         |         |                     |         |         |                     |         |         |       |
|    | VOLUMES               | 6       | 5       | 7                     | 45       | 0       | 1       | 37                  | 44      | 459     | 19                  | 17      | 384     | 48    |
|    | APPROACH %            | 33%     | 28%     | 39%                   | 54%      | 0%      | 1%      | 45%                 | 8%      | 88%     | 4%                  | 4%      | 86%     | 11%   |
|    | PEAK HR FACTOR        | 0.750   |         |                       | 0.830    |         |         | 0.837               |         |         | 0.898               |         |         | 0.908 |
|    | APP/DEPART            | 18      | /       | 97                    | 83       | /       | 37      | 522                 | /       | 511     | 449                 | /       | 427     | 0     |

## Intersection Turning Movement

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE:  
2/10/09  
TUESDAY

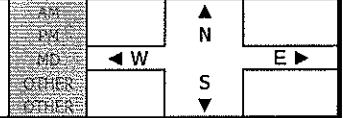
LOCATION:  
NORTH & SOUTH:  
EAST & WEST:

FONTANA  
FONTANA/HEMLOCK  
VALLEY

PROJECT #:  
LOCATION #:  
CONTROL:

CA09-0213-1  
29C  
SIGNAL

NOTES: FIVE WAY INTERSECTION  
SR1 = RIGHT TURN ONTO WB VALLEY  
SR2 = RIGHT TURN ONTO NB HEMLOCK  
EL1 = LEFT TURN ONTO NB HEMLOCK  
EL2 = LEFT TURN ONTO NB VALLEY



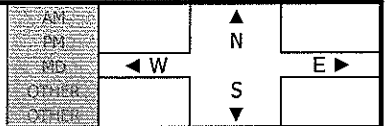
|                | NORTHBOUND<br>HEMLOCK |         |         | SOUTHBOUND<br>FONTANA |         |          |          | EASTBOUND<br>VALLEY |            |         |         | WESTBOUND<br>VALLEY |         |         | TOTAL |
|----------------|-----------------------|---------|---------|-----------------------|---------|----------|----------|---------------------|------------|---------|---------|---------------------|---------|---------|-------|
|                | NL<br>0               | NT<br>1 | NR<br>0 | SL<br>0               | ST<br>1 | SR1<br>0 | SR2<br>0 | EL1<br>0.5          | EL2<br>0.5 | ET<br>2 | ER<br>0 | WL<br>1             | WT<br>2 | WR<br>0 |       |
| LANES:         |                       |         |         |                       |         |          |          |                     |            |         |         |                     |         |         |       |
| 6:30 AM        |                       |         |         |                       |         |          |          |                     |            |         |         |                     |         |         | 0     |
| 6:45 AM        |                       |         |         |                       |         |          |          |                     |            |         |         |                     |         |         | 0     |
| 7:00 AM        | 3                     | 1       | 3       | 1                     | 0       | 44       | 0        | 11                  | 10         | 38      | 3       | 1                   | 62      | 2       | 179   |
| 7:15 AM        | 7                     | 0       | 1       | 0                     | 1       | 44       | 1        | 8                   | 14         | 35      | 0       | 1                   | 67      | 1       | 180   |
| 7:30 AM        | 2                     | 2       | 0       | 2                     | 4       | 55       | 1        | 7                   | 12         | 54      | 3       | 0                   | 79      | 4       | 225   |
| 7:45 AM        | 6                     | 0       | 2       | 3                     | 3       | 68       | 2        | 9                   | 16         | 56      | 5       | 0                   | 81      | 2       | 253   |
| 8:00 AM        | 5                     | 0       | 2       | 2                     | 5       | 68       | 0        | 15                  | 22         | 66      | 0       | 0                   | 72      | 3       | 260   |
| 8:15 AM        | 9                     | 2       | 3       | 0                     | 6       | 48       | 0        | 18                  | 11         | 58      | 0       | 1                   | 68      | 5       | 229   |
| 8:30 AM        | 3                     | 3       | 2       | 2                     | 2       | 53       | 2        | 11                  | 12         | 65      | 1       | 2                   | 72      | 2       | 232   |
| 8:45 AM        | 2                     | 1       | 3       | 3                     | 2       | 56       | 1        | 9                   | 15         | 49      | 3       | 1                   | 77      | 2       | 224   |
| 9:00 AM        |                       |         |         |                       |         |          |          |                     |            |         |         |                     |         |         | 0     |
| 9:15 AM        |                       |         |         |                       |         |          |          |                     |            |         |         |                     |         |         | 0     |
| VOLUMES        | 37                    | 9       | 16      | 13                    | 23      | 436      | 7        | 88                  | 112        | 421     | 15      | 6                   | 578     | 21      | 1,782 |
| APPROACH %     | 60%                   | 15%     | 26%     | 3%                    | 5%      | 91%      | 1%       | 14%                 | 18%        | 66%     | 2%      | 1%                  | 96%     | 3%      |       |
| APP/DEPART     | 62                    | /       | 230     | 479                   | /       | 44       |          | 636                 | /          | 450     |         | 605                 | /       | 1,058   | 0     |
| BEGIN PEAK HR  | 7:45 AM               |         |         |                       |         |          |          |                     |            |         |         |                     |         |         |       |
| VOLUMES        | 23                    | 5       | 9       | 7                     | 16      | 237      | 4        | 53                  | 61         | 245     | 6       | 3                   | 293     | 12      | 974   |
| APPROACH %     | 62%                   | 14%     | 24%     | 3%                    | 6%      | 90%      | 2%       | 15%                 | 17%        | 67%     | 2%      | 1%                  | 95%     | 4%      |       |
| PEAK HR FACTOR | 0.661                 |         |         | 0.868                 |         |          |          | 0.886               |            |         |         | 0.928               |         |         | 0.937 |
| APP/DEPART     | 37                    | /       | 70      | 27                    | /       | 258      | 25       | 304                 | 70         | /       | 261     | 308                 | /       | 320     | 0     |
| 3:30 PM        |                       |         |         |                       |         |          |          |                     |            |         |         |                     |         |         | 0     |
| 3:45 PM        |                       |         |         |                       |         |          |          |                     |            |         |         |                     |         |         | 0     |
| 4:00 PM        | 2                     | 2       | 3       | 2                     | 1       | 13       | 0        | 13                  | 35         | 88      | 5       | 2                   | 70      | 2       | 238   |
| 4:15 PM        | 1                     | 2       | 2       | 1                     | 2       | 14       | 2        | 10                  | 28         | 95      | 2       | 6                   | 81      | 3       | 249   |
| 4:30 PM        | 2                     | 0       | 2       | 2                     | 0       | 5        | 1        | 12                  | 33         | 107     | 3       | 3                   | 76      | 0       | 246   |
| 4:45 PM        | 2                     | 2       | 3       | 0                     | 0       | 33       | 0        | 9                   | 52         | 122     | 3       | 7                   | 105     | 4       | 342   |
| 5:00 PM        | 2                     | 1       | 1       | 0                     | 2       | 34       | 0        | 16                  | 60         | 133     | 7       | 4                   | 95      | 3       | 358   |
| 5:15 PM        | 0                     | 0       | 1       | 0                     | 3       | 33       | 1        | 7                   | 41         | 97      | 6       | 3                   | 108     | 3       | 303   |
| 5:30 PM        | 1                     | 1       | 5       | 5                     | 3       | 22       | 0        | 9                   | 45         | 90      | 2       | 3                   | 92      | 4       | 282   |
| 5:45 PM        | 1                     | 0       | 11      | 3                     | 1       | 15       | 2        | 7                   | 36         | 77      | 2       | 3                   | 66      | 3       | 227   |
| 6:00 PM        |                       |         |         |                       |         |          |          |                     |            |         |         |                     |         |         | 0     |
| 6:15 PM        |                       |         |         |                       |         |          |          |                     |            |         |         |                     |         |         | 0     |
| VOLUMES        | 11                    | 8       | 28      | 13                    | 12      | 169      | 6        | 83                  | 330        | 809     | 30      | 31                  | 693     | 22      | 2,245 |
| APPROACH %     | 23%                   | 17%     | 60%     | 7%                    | 6%      | 85%      | 3%       | 7%                  | 26%        | 65%     | 2%      | 4%                  | 93%     | 3%      |       |
| APP/DEPART     | 47                    | /       | 443     | 200                   | /       | 73       |          | 1,252               | /          | 850     |         | 746                 | /       | 879     | 0     |
| BEGIN PEAK HR  | 4:45 PM               |         |         |                       |         |          |          |                     |            |         |         |                     |         |         |       |
| VOLUMES        | 5                     | 4       | 10      | 5                     | 8       | 122      | 1        | 41                  | 198        | 442     | 18      | 17                  | 400     | 14      | 1,285 |
| APPROACH %     | 26%                   | 21%     | 53%     | 4%                    | 6%      | 84%      | 1%       | 6%                  | 29%        | 63%     | 3%      | 4%                  | 93%     | 3%      |       |
| PEAK HR FACTOR | 0.679                 |         |         | 0.919                 |         |          |          | 0.809               |            |         |         | 0.929               |         |         | 0.897 |
| APP/DEPART     | 19                    | /       | 59      | 14                    | /       | 465      | 43       | 501                 | 233        | /       | 457     | 431                 | /       | 406     | 0     |

## Intersection Turning Movement

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

|                             |                                             |                            |                                       |                                          |
|-----------------------------|---------------------------------------------|----------------------------|---------------------------------------|------------------------------------------|
| DATE:<br>2/10/09<br>TUESDAY | LOCATION:<br>NORTH & SOUTH:<br>EAST & WEST: | FONTANA<br>BEECH<br>VALLEY | PROJECT #:<br>LOCATION #:<br>CONTROL: | CA09-0213-1<br>30<br>2-WAY STOP: NB & SB |
|-----------------------------|---------------------------------------------|----------------------------|---------------------------------------|------------------------------------------|

NOTES:



|    | NORTHBOUND<br>BEECH |         |         | SOUTHBOUND<br>BEECH |         |         | EASTBOUND<br>VALLEY |         |         | WESTBOUND<br>VALLEY |         |         | TOTAL |       |
|----|---------------------|---------|---------|---------------------|---------|---------|---------------------|---------|---------|---------------------|---------|---------|-------|-------|
|    | NL<br>0             | NT<br>1 | NR<br>0 | SL<br>0             | ST<br>1 | SR<br>0 | EL<br>1             | ET<br>2 | ER<br>0 | WL<br>1             | WT<br>2 | WR<br>0 |       |       |
| AM | 6:30 AM             |         |         |                     |         |         |                     |         |         |                     |         |         | 0     |       |
|    | 6:45 AM             |         |         |                     |         |         |                     |         |         |                     |         |         | 0     |       |
|    | 7:00 AM             | 0       | 0       | 7                   | 21      | 0       | 4                   | 2       | 52      | 3                   | 2       | 75      | 8     | 174   |
|    | 7:15 AM             | 0       | 0       | 5                   | 16      | 2       | 5                   | 3       | 56      | 1                   | 4       | 85      | 9     | 186   |
|    | 7:30 AM             | 1       | 2       | 2                   | 2       | 0       | 4                   | 1       | 63      | 1                   | 3       | 83      | 13    | 175   |
|    | 7:45 AM             | 2       | 0       | 1                   | 20      | 1       | 7                   | 2       | 70      | 0                   | 4       | 78      | 17    | 202   |
|    | 8:00 AM             | 0       | 0       | 2                   | 10      | 1       | 3                   | 2       | 71      | 1                   | 5       | 77      | 5     | 177   |
|    | 8:15 AM             | 2       | 1       | 4                   | 14      | 0       | 3                   | 0       | 81      | 3                   | 7       | 78      | 12    | 205   |
|    | 8:30 AM             | 0       | 1       | 4                   | 19      | 1       | 6                   | 2       | 71      | 3                   | 2       | 73      | 10    | 192   |
|    | 8:45 AM             | 4       | 0       | 9                   | 11      | 0       | 6                   | 6       | 66      | 2                   | 2       | 75      | 7     | 188   |
|    | 9:00 AM             |         |         |                     |         |         |                     |         |         |                     |         |         |       | 0     |
|    | 9:15 AM             |         |         |                     |         |         |                     |         |         |                     |         |         |       | 0     |
|    | VOLUMES             | 9       | 4       | 34                  | 113     | 5       | 38                  | 18      | 530     | 14                  | 29      | 624     | 81    | 1,499 |
|    | APPROACH %          | 19%     | 9%      | 72%                 | 72%     | 3%      | 24%                 | 3%      | 94%     | 2%                  | 4%      | 85%     | 11%   |       |
| PM | APP/DEPART          | 47      | /       | 103                 | 156     | /       | 48                  | 562     | /       | 677                 | 734     | /       | 671   | 0     |
|    | BEGIN PEAK HR       | 7:45 AM |         |                     |         |         |                     |         |         |                     |         |         |       |       |
|    | VOLUMES             | 4       | 2       | 11                  | 63      | 3       | 19                  | 6       | 293     | 7                   | 18      | 306     | 44    | 776   |
|    | APPROACH %          | 24%     | 12%     | 65%                 | 74%     | 4%      | 22%                 | 2%      | 96%     | 2%                  | 5%      | 83%     | 12%   |       |
|    | PEAK HR FACTOR      | 0.607   |         |                     | 0.759   |         |                     | 0.911   |         |                     | 0.929   |         |       | 0.946 |
|    | APP/DEPART          | 17      | /       | 52                  | 85      | /       | 28                  | 306     | /       | 367                 | 368     | /       | 329   | 0     |
|    | 3:30 PM             |         |         |                     |         |         |                     |         |         |                     |         |         |       | 0     |
|    | 3:45 PM             |         |         |                     |         |         |                     |         |         |                     |         |         |       | 0     |
|    | 4:00 PM             | 6       | 3       | 6                   | 15      | 1       | 4                   | 16      | 149     | 0                   | 3       | 81      | 16    | 300   |
|    | 4:15 PM             | 1       | 3       | 6                   | 11      | 0       | 7                   | 9       | 133     | 1                   | 3       | 76      | 13    | 263   |
|    | 4:30 PM             | 3       | 2       | 6                   | 18      | 0       | 3                   | 9       | 166     | 3                   | 4       | 93      | 19    | 326   |
|    | 4:45 PM             | 3       | 1       | 5                   | 11      | 0       | 9                   | 11      | 134     | 2                   | 3       | 118     | 11    | 308   |
|    | 5:00 PM             | 2       | 2       | 2                   | 9       | 4       | 2                   | 11      | 151     | 2                   | 2       | 105     | 17    | 309   |
|    | 5:15 PM             | 3       | 3       | 10                  | 11      | 1       | 4                   | 6       | 132     | 0                   | 0       | 127     | 20    | 317   |
|    | 5:30 PM             | 0       | 1       | 4                   | 20      | 0       | 8                   | 8       | 114     | 1                   | 2       | 101     | 16    | 275   |
|    | 5:45 PM             | 0       | 0       | 3                   | 10      | 0       | 2                   | 11      | 103     | 0                   | 6       | 78      | 9     | 222   |
|    | 6:00 PM             |         |         |                     |         |         |                     |         |         |                     |         |         |       | 0     |
|    | 6:15 PM             |         |         |                     |         |         |                     |         |         |                     |         |         |       | 0     |
|    | VOLUMES             | 18      | 15      | 42                  | 105     | 6       | 39                  | 81      | 1,082   | 9                   | 23      | 779     | 121   | 2,320 |
|    | APPROACH %          | 24%     | 20%     | 56%                 | 70%     | 4%      | 26%                 | 7%      | 92%     | 1%                  | 2%      | 84%     | 13%   |       |
|    | APP/DEPART          | 75      | /       | 217                 | 150     | /       | 38                  | 1,172   | /       | 1,229               | 923     | /       | 836   | 0     |
|    | BEGIN PEAK HR       | 4:30 PM |         |                     |         |         |                     |         |         |                     |         |         |       |       |
|    | VOLUMES             | 11      | 8       | 23                  | 49      | 5       | 18                  | 37      | 583     | 7                   | 9       | 443     | 67    | 1,260 |
|    | APPROACH %          | 26%     | 19%     | 55%                 | 68%     | 7%      | 25%                 | 6%      | 93%     | 1%                  | 2%      | 85%     | 13%   |       |
|    | PEAK HR FACTOR      | 0.656   |         |                     | 0.857   |         |                     | 0.881   |         |                     | 0.883   |         |       | 0.966 |
|    | APP/DEPART          | 42      | /       | 112                 | 72      | /       | 21                  | 627     | /       | 655                 | 519     | /       | 472   | 0     |

# Intersection Turning Movement

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

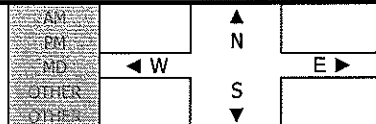
DATE:  
2/10/09  
TUESDAY

LOCATION:  
NORTH & SOUTH:  
EAST & WEST:

FONTANA  
BEECH  
SLOVER

PROJECT #: CA09-0213-1  
LOCATION #: 31  
CONTROL: 4-WAY STOP

NOTES:  
FTMC AM & PM, GEOFFREY



|        | NORTHBOUND<br>BEECH |         |         | SOUTHBOUND<br>BEECH |         |         | EASTBOUND<br>SLOVER |         |         | WESTBOUND<br>SLOVER |         |         |       |
|--------|---------------------|---------|---------|---------------------|---------|---------|---------------------|---------|---------|---------------------|---------|---------|-------|
| LANES: | NL<br>0             | NT<br>1 | NR<br>0 | SL<br>0             | ST<br>1 | SR<br>0 | EL<br>1             | ET<br>2 | ER<br>0 | WL<br>1             | WT<br>2 | WR<br>0 | TOTAL |

|    |                |         |    |     |       |     |     |       |       |     |       |     |       |
|----|----------------|---------|----|-----|-------|-----|-----|-------|-------|-----|-------|-----|-------|
| AM | 6:30 AM        |         |    |     |       |     |     |       |       |     |       |     | 0     |
|    | 6:45 AM        |         |    |     |       |     |     |       |       |     |       |     | 0     |
|    | 7:00 AM        | 8       | 1  | 11  | 2     | 1   | 1   | 80    | 20    | 15  | 62    | 2   | 204   |
|    | 7:15 AM        | 15      | 2  | 18  | 1     | 0   | 2   | 88    | 26    | 22  | 66    | 5   | 246   |
|    | 7:30 AM        | 11      | 3  | 19  | 1     | 0   | 1   | 117   | 21    | 30  | 80    | 1   | 286   |
|    | 7:45 AM        | 25      | 2  | 16  | 3     | 0   | 0   | 98    | 28    | 20  | 101   | 5   | 298   |
|    | 8:00 AM        | 10      | 0  | 9   | 2     | 0   | 1   | 63    | 20    | 32  | 80    | 3   | 221   |
|    | 8:15 AM        | 14      | 1  | 12  | 0     | 1   | 0   | 44    | 19    | 20  | 59    | 4   | 176   |
|    | 8:30 AM        | 14      | 0  | 7   | 9     | 3   | 2   | 56    | 19    | 16  | 59    | 4   | 191   |
|    | 8:45 AM        | 9       | 2  | 8   | 4     | 2   | 2   | 45    | 18    | 22  | 51    | 2   | 168   |
|    | 9:00 AM        |         |    |     |       |     |     |       |       |     |       |     | 0     |
|    | 9:15 AM        |         |    |     |       |     |     |       |       |     |       |     | 0     |
|    | VOLUMES        | 106     | 11 | 100 | 22    | 7   | 9   | 591   | 171   | 177 | 558   | 26  | 1,790 |
|    | APPROACH %     | 49%     | 5% | 46% | 58%   | 18% | 24% | 76%   | 22%   | 23% | 73%   | 3%  |       |
|    | APP/DEPART     | 217     | /  | 49  | 38    | /   | 355 | 774   | 713   | 761 | /     | 673 | 0     |
| PM | BEGIN PEAK HR  | 7:15 AM |    |     |       |     |     |       |       |     |       |     |       |
|    | VOLUMES        | 61      | 7  | 62  | 7     | 0   | 4   | 366   | 95    | 104 | 327   | 14  | 1,051 |
|    | APPROACH %     | 47%     | 5% | 48% | 64%   | 0%  | 36% | 79%   | 20%   | 23% | 73%   | 3%  |       |
|    | PEAK HR FACTOR | 0.756   |    |     | 0.917 |     |     | 0.830 |       |     | 0.883 |     |       |
|    | APP/DEPART     | 130     | /  | 25  | 11    | /   | 199 | 465   | 435   | 445 | /     | 392 | 0     |
|    | 3:30 PM        |         |    |     |       |     |     |       |       |     |       |     | 0     |
|    | 3:45 PM        |         |    |     |       |     |     |       |       |     |       |     | 0     |
|    | 4:00 PM        | 25      | 1  | 31  | 8     | 2   | 1   | 131   | 11    | 18  | 63    | 5   | 296   |
|    | 4:15 PM        | 20      | 0  | 29  | 10    | 4   | 1   | 98    | 15    | 9   | 66    | 4   | 256   |
|    | 4:30 PM        | 20      | 0  | 27  | 7     | 3   | 0   | 100   | 19    | 20  | 94    | 7   | 298   |
|    | 4:45 PM        | 12      | 0  | 17  | 11    | 3   | 1   | 94    | 11    | 23  | 66    | 1   | 241   |
|    | 5:00 PM        | 18      | 0  | 32  | 15    | 5   | 1   | 103   | 21    | 26  | 88    | 6   | 317   |
|    | 5:15 PM        | 21      | 0  | 28  | 8     | 6   | 0   | 99    | 20    | 20  | 95    | 2   | 301   |
|    | 5:30 PM        | 16      | 1  | 29  | 9     | 2   | 2   | 87    | 15    | 14  | 84    | 5   | 265   |
|    | 5:45 PM        | 20      | 0  | 20  | 11    | 2   | 0   | 88    | 13    | 17  | 70    | 2   | 243   |
|    | 6:00 PM        |         |    |     |       |     |     |       |       |     |       |     | 0     |
|    | 6:15 PM        |         |    |     |       |     |     |       |       |     |       |     | 0     |
|    | VOLUMES        | 152     | 2  | 213 | 79    | 27  | 6   | 800   | 125   | 147 | 626   | 32  | 2,217 |
|    | APPROACH %     | 41%     | 1% | 58% | 71%   | 24% | 5%  | 86%   | 13%   | 18% | 78%   | 4%  |       |
|    | APP/DEPART     | 367     | /  | 42  | 112   | /   | 299 | 933   | 1,092 | 805 | /     | 784 | 0     |
|    | BEGIN PEAK HR  | 4:30 PM |    |     |       |     |     |       |       |     |       |     |       |
|    | VOLUMES        | 71      | 0  | 104 | 41    | 17  | 2   | 396   | 71    | 89  | 343   | 16  | 1,157 |
|    | APPROACH %     | 41%     | 0% | 59% | 68%   | 28% | 3%  | 84%   | 15%   | 20% | 77%   | 4%  |       |
|    | PEAK HR FACTOR | 0.875   |    |     | 0.714 |     |     | 0.940 |       |     | 0.926 |     |       |
|    | APP/DEPART     | 175     | /  | 23  | 60    | /   | 177 | 474   | 541   | 448 | /     | 416 | 0     |

# Intersection Turning Movement

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

|                             |                                             |                               |                                       |                                 |
|-----------------------------|---------------------------------------------|-------------------------------|---------------------------------------|---------------------------------|
| DATE:<br>2/10/09<br>TUESDAY | LOCATION:<br>NORTH & SOUTH:<br>EAST & WEST: | FONTANA<br>BEECH<br>SANTA ANA | PROJECT #:<br>LOCATION #:<br>CONTROL: | CA09-0213-1<br>32<br>4-WAY STOP |
|-----------------------------|---------------------------------------------|-------------------------------|---------------------------------------|---------------------------------|

|        |                                                                                                                                                                 |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NOTES: | <div> <div>AM</div> <div>PM</div> <div>MD</div> <div>OTHER</div> <div>OTHER</div> </div> <div> <div>▲ N</div> <div>◀ W</div> <div>S</div> <div>▶ E</div> </div> |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|

|        | NORTHBOUND<br>BEECH |         |         | SOUTHBOUND<br>BEECH |         |         | EASTBOUND<br>SANTA ANA |         |         | WESTBOUND<br>SANTA ANA |         |         |       |
|--------|---------------------|---------|---------|---------------------|---------|---------|------------------------|---------|---------|------------------------|---------|---------|-------|
| LANES: | NL<br>1             | NT<br>1 | NR<br>0 | SL<br>1             | ST<br>1 | SR<br>0 | EL<br>1                | ET<br>1 | ER<br>0 | WL<br>1                | WT<br>1 | WR<br>0 | TOTAL |

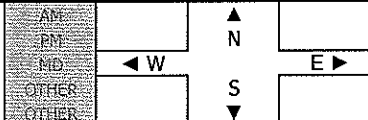
|    |                |         |     |     |       |     |     |       |     |     |       |     |     |       |
|----|----------------|---------|-----|-----|-------|-----|-----|-------|-----|-----|-------|-----|-----|-------|
| AM | 6:30 AM        |         |     |     |       |     |     |       |     |     |       |     | 0   |       |
|    | 6:45 AM        |         |     |     |       |     |     |       |     |     |       |     | 0   |       |
|    | 7:00 AM        | 1       | 15  | 16  | 5     | 8   | 1   | 8     | 22  | 1   | 8     | 15  | 8   | 108   |
|    | 7:15 AM        | 2       | 17  | 17  | 3     | 10  | 5   | 9     | 26  | 2   | 11    | 20  | 7   | 129   |
|    | 7:30 AM        | 2       | 21  | 23  | 4     | 11  | 3   | 11    | 36  | 0   | 10    | 23  | 10  | 154   |
|    | 7:45 AM        | 1       | 34  | 8   | 8     | 9   | 2   | 10    | 26  | 2   | 7     | 22  | 9   | 138   |
|    | 8:00 AM        | 2       | 31  | 13  | 4     | 17  | 6   | 13    | 20  | 2   | 5     | 18  | 5   | 136   |
|    | 8:15 AM        | 0       | 23  | 8   | 2     | 12  | 2   | 5     | 21  | 1   | 9     | 31  | 6   | 120   |
|    | 8:30 AM        | 2       | 26  | 11  | 6     | 15  | 5   | 10    | 22  | 2   | 10    | 26  | 9   | 144   |
|    | 8:45 AM        | 3       | 20  | 15  | 6     | 13  | 2   | 8     | 16  | 2   | 11    | 20  | 8   | 124   |
|    | 9:00 AM        |         |     |     |       |     |     |       |     |     |       |     |     | 0     |
|    | 9:15 AM        |         |     |     |       |     |     |       |     |     |       |     |     | 0     |
|    | VOLUMES        | 13      | 187 | 111 | 38    | 95  | 26  | 74    | 189 | 12  | 71    | 175 | 62  | 1,053 |
|    | APPROACH %     | 4%      | 60% | 36% | 24%   | 60% | 16% | 27%   | 69% | 4%  | 23%   | 57% | 20% |       |
|    | APP/DEPART     | 311     | /   | 323 | 159   | /   | 178 | 275   | /   | 338 | 308   | /   | 214 | 0     |
| PM | BEGIN PEAK HR  | 7:15 AM |     |     |       |     |     |       |     |     |       |     |     |       |
|    | VOLUMES        | 7       | 103 | 61  | 19    | 47  | 16  | 43    | 108 | 6   | 33    | 83  | 31  | 557   |
|    | APPROACH %     | 4%      | 60% | 36% | 23%   | 57% | 20% | 27%   | 69% | 4%  | 22%   | 56% | 21% |       |
|    | PEAK HR FACTOR | 0.929   |     |     | 0.759 |     |     | 0.835 |     |     | 0.855 |     |     | 0.904 |
|    | APP/DEPART     | 171     | /   | 177 | 82    | /   | 86  | 157   | /   | 188 | 147   | /   | 106 | 0     |
|    | 3:30 PM        |         |     |     |       |     |     |       |     |     |       |     |     | 0     |
|    | 3:45 PM        |         |     |     |       |     |     |       |     |     |       |     |     | 0     |
|    | 4:00 PM        | 1       | 17  | 11  | 5     | 30  | 7   | 7     | 37  | 4   | 8     | 20  | 8   | 155   |
|    | 4:15 PM        | 1       | 20  | 11  | 10    | 28  | 4   | 8     | 36  | 2   | 14    | 19  | 5   | 158   |
|    | 4:30 PM        | 2       | 17  | 16  | 10    | 26  | 6   | 7     | 44  | 3   | 8     | 21  | 14  | 174   |
|    | 4:45 PM        | 1       | 10  | 11  | 8     | 20  | 11  | 4     | 41  | 4   | 5     | 17  | 8   | 140   |
|    | 5:00 PM        | 2       | 18  | 18  | 7     | 33  | 9   | 9     | 50  | 5   | 10    | 22  | 7   | 190   |
|    | 5:15 PM        | 2       | 19  | 9   | 12    | 20  | 13  | 9     | 44  | 7   | 11    | 26  | 7   | 179   |
|    | 5:30 PM        | 1       | 16  | 13  | 11    | 22  | 10  | 5     | 35  | 5   | 9     | 18  | 9   | 154   |
|    | 5:45 PM        | 3       | 14  | 10  | 15    | 24  | 11  | 8     | 38  | 4   | 13    | 19  | 10  | 169   |
|    | 6:00 PM        |         |     |     |       |     |     |       |     |     |       |     |     | 0     |
|    | 6:15 PM        |         |     |     |       |     |     |       |     |     |       |     |     | 0     |
|    | VOLUMES        | 13      | 131 | 99  | 78    | 203 | 71  | 57    | 325 | 34  | 78    | 162 | 68  | 1,319 |
|    | APPROACH %     | 5%      | 54% | 41% | 22%   | 58% | 20% | 14%   | 78% | 8%  | 25%   | 53% | 22% |       |
|    | APP/DEPART     | 243     | /   | 256 | 352   | /   | 315 | 416   | /   | 502 | 308   | /   | 246 | 0     |
|    | BEGIN PEAK HR  | 5:00 PM |     |     |       |     |     |       |     |     |       |     |     |       |
|    | VOLUMES        | 8       | 67  | 50  | 45    | 99  | 43  | 31    | 167 | 21  | 43    | 85  | 33  | 692   |
|    | APPROACH %     | 6%      | 54% | 40% | 24%   | 53% | 23% | 14%   | 76% | 10% | 27%   | 53% | 20% |       |
|    | PEAK HR FACTOR | 0.822   |     |     | 0.935 |     |     | 0.855 |     |     | 0.915 |     |     | 0.911 |
|    | APP/DEPART     | 125     | /   | 131 | 187   | /   | 163 | 219   | /   | 262 | 161   | /   | 136 | 0     |

## Intersection Turning Movement

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

|                             |                                             |                            |                                       |                                 |
|-----------------------------|---------------------------------------------|----------------------------|---------------------------------------|---------------------------------|
| DATE:<br>2/10/09<br>TUESDAY | LOCATION:<br>NORTH & SOUTH:<br>EAST & WEST: | FONTANA<br>BEECH<br>JURUPA | PROJECT #:<br>LOCATION #:<br>CONTROL: | CA09-0213-1<br>33<br>4-WAY STOP |
|-----------------------------|---------------------------------------------|----------------------------|---------------------------------------|---------------------------------|

NOTES:



|        | NORTHBOUND     |         |         | SOUTHBOUND |         |         | EASTBOUND |         |         | WESTBOUND |         |         | TOTAL |       |
|--------|----------------|---------|---------|------------|---------|---------|-----------|---------|---------|-----------|---------|---------|-------|-------|
|        | BEECH          |         |         | BEECH      |         |         | JURUPA    |         |         | JURUPA    |         |         |       |       |
| LANES: | NL<br>1        | NT<br>1 | NR<br>1 | SL<br>1    | ST<br>1 | SR<br>1 | EL<br>0   | ET<br>2 | ER<br>0 | WL<br>0   | WT<br>2 | WR<br>0 |       |       |
| AM     | 6:30 AM        |         |         |            |         |         |           |         |         |           |         |         | 0     |       |
|        | 6:45 AM        |         |         |            |         |         |           |         |         |           |         |         | 0     |       |
|        | 7:00 AM        | 79      | 5       | 2          | 1       | 1       | 19        | 25      | 91      | 27        | 0       | 72      | 0     | 322   |
|        | 7:15 AM        | 89      | 9       | 5          | 0       | 2       | 24        | 21      | 108     | 33        | 1       | 87      | 1     | 380   |
|        | 7:30 AM        | 56      | 13      | 3          | 1       | 1       | 13        | 27      | 96      | 34        | 0       | 63      | 1     | 308   |
|        | 7:45 AM        | 43      | 5       | 1          | 0       | 0       | 7         | 32      | 76      | 29        | 0       | 57      | 8     | 258   |
|        | 8:00 AM        | 57      | 10      | 4          | 2       | 3       | 11        | 33      | 62      | 24        | 2       | 66      | 4     | 278   |
|        | 8:15 AM        | 58      | 8       | 2          | 1       | 2       | 8         | 20      | 68      | 26        | 2       | 58      | 10    | 263   |
|        | 8:30 AM        | 36      | 7       | 2          | 1       | 1       | 10        | 27      | 66      | 22        | 1       | 52      | 8     | 233   |
|        | 8:45 AM        | 29      | 4       | 1          | 3       | 2       | 11        | 33      | 75      | 17        | 1       | 51      | 7     | 234   |
|        | 9:00 AM        |         |         |            |         |         |           |         |         |           |         |         |       | 0     |
|        | 9:15 AM        |         |         |            |         |         |           |         |         |           |         |         |       | 0     |
|        | VOLUMES        | 447     | 61      | 20         | 9       | 12      | 103       | 218     | 642     | 212       | 7       | 506     | 39    | 2,276 |
|        | APPROACH %     | 85%     | 12%     | 4%         | 7%      | 10%     | 83%       | 20%     | 60%     | 20%       | 1%      | 92%     | 7%    |       |
| PM     | APP/DEPART     | 528     | /       | 318        | 124     | /       | 231       | 1,072   | /       | 671       | 552     | /       | 1,056 | 0     |
|        | BEGIN PEAK HR  | 7:00 AM |         |            |         |         |           |         |         |           |         |         |       |       |
|        | VOLUMES        | 267     | 32      | 11         | 2       | 4       | 63        | 105     | 371     | 123       | 1       | 279     | 10    | 1,268 |
|        | APPROACH %     | 86%     | 10%     | 4%         | 3%      | 6%      | 91%       | 18%     | 62%     | 21%       | 0%      | 96%     | 3%    |       |
|        | PEAK HR FACTOR | 0.752   |         |            | 0.663   |         |           | 0.924   |         |           | 0.815   |         |       | 0.834 |
|        | APP/DEPART     | 310     | /       | 147        | 69      | /       | 128       | 599     | /       | 384       | 290     | /       | 609   | 0     |
|        | 3:30 PM        |         |         |            |         |         |           |         |         |           |         |         |       | 0     |
|        | 3:45 PM        |         |         |            |         |         |           |         |         |           |         |         |       | 0     |
|        | 4:00 PM        | 37      | 3       | 3          | 6       | 5       | 36        | 19      | 136     | 61        | 3       | 87      | 3     | 399   |
|        | 4:15 PM        | 38      | 7       | 2          | 2       | 6       | 28        | 18      | 127     | 53        | 1       | 73      | 0     | 355   |
|        | 4:30 PM        | 40      | 5       | 3          | 0       | 13      | 23        | 19      | 131     | 65        | 1       | 77      | 1     | 378   |
|        | 4:45 PM        | 37      | 3       | 1          | 1       | 10      | 21        | 14      | 132     | 61        | 2       | 68      | 2     | 352   |
|        | 5:00 PM        | 32      | 4       | 0          | 3       | 11      | 24        | 18      | 137     | 54        | 0       | 76      | 1     | 360   |
|        | 5:15 PM        | 33      | 3       | 5          | 3       | 10      | 16        | 15      | 122     | 79        | 1       | 94      | 2     | 383   |
|        | 5:30 PM        | 32      | 4       | 3          | 4       | 11      | 19        | 13      | 96      | 72        | 1       | 85      | 4     | 344   |
|        | 5:45 PM        | 27      | 5       | 2          | 5       | 12      | 16        | 10      | 94      | 65        | 0       | 73      | 13    | 322   |
|        | 6:00 PM        |         |         |            |         |         |           |         |         |           |         |         |       | 0     |
|        | 6:15 PM        |         |         |            |         |         |           |         |         |           |         |         |       | 0     |
|        | VOLUMES        | 276     | 34      | 19         | 24      | 78      | 183       | 126     | 975     | 510       | 9       | 633     | 26    | 2,893 |
|        | APPROACH %     | 84%     | 10%     | 6%         | 8%      | 27%     | 64%       | 8%      | 61%     | 32%       | 1%      | 95%     | 4%    |       |
|        | APP/DEPART     | 329     | /       | 186        | 285     | /       | 597       | 1,611   | /       | 1,018     | 668     | /       | 1,092 | 0     |
|        | BEGIN PEAK HR  | 4:00 PM |         |            |         |         |           |         |         |           |         |         |       |       |
|        | VOLUMES        | 152     | 18      | 9          | 9       | 34      | 108       | 70      | 526     | 240       | 7       | 305     | 6     | 1,484 |
|        | APPROACH %     | 85%     | 10%     | 5%         | 6%      | 23%     | 72%       | 8%      | 63%     | 29%       | 2%      | 96%     | 2%    |       |
|        | PEAK HR FACTOR | 0.932   |         |            | 0.803   |         |           | 0.968   |         |           | 0.855   |         |       | 0.930 |
|        | APP/DEPART     | 179     | /       | 94         | 151     | /       | 281       | 836     | /       | 544       | 318     | /       | 565   | 0     |



City of Fontana  
N/S: Citrus Avenue  
E/W: Valley Boulevard  
Weather: Sunny

File Name : FOCIVAAM  
Site Code : 04300781  
Start Date : 1/10/2007  
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

|                         | Citrus Avenue Southbound |      |       |            | Valley Boulevard Westbound |      |       |            | Citrus Avenue Northbound |      |       |            | Valley Boulevard Eastbound |      |       |            |            |
|-------------------------|--------------------------|------|-------|------------|----------------------------|------|-------|------------|--------------------------|------|-------|------------|----------------------------|------|-------|------------|------------|
| Start Time              | Left                     | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                     | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Int. Total |
| 07:00 AM                | 7                        | 174  | 3     | 184        | 70                         | 75   | 19    | 164        | 61                       | 152  | 20    | 233        | 6                          | 38   | 119   | 163        | 744        |
| 07:15 AM                | 15                       | 117  | 4     | 136        | 104                        | 96   | 18    | 218        | 71                       | 144  | 22    | 237        | 6                          | 61   | 152   | 219        | 810        |
| 07:30 AM                | 31                       | 137  | 9     | 177        | 89                         | 96   | 22    | 207        | 72                       | 139  | 22    | 233        | 7                          | 38   | 92    | 137        | 754        |
| 07:45 AM                | 31                       | 162  | 12    | 205        | 67                         | 86   | 10    | 163        | 73                       | 113  | 32    | 218        | 6                          | 49   | 82    | 137        | 723        |
| Total                   | 84                       | 590  | 28    | 702        | 330                        | 353  | 69    | 752        | 277                      | 548  | 96    | 921        | 25                         | 186  | 445   | 656        | 3031       |
| 08:00 AM                | 30                       | 128  | 2     | 160        | 56                         | 85   | 12    | 153        | 54                       | 120  | 32    | 206        | 10                         | 51   | 61    | 122        | 641        |
| 08:15 AM                | 17                       | 144  | 10    | 171        | 44                         | 64   | 14    | 122        | 57                       | 107  | 28    | 192        | 14                         | 52   | 67    | 133        | 618        |
| 08:30 AM                | 35                       | 139  | 3     | 177        | 55                         | 55   | 19    | 129        | 60                       | 108  | 30    | 198        | 7                          | 71   | 62    | 140        | 644        |
| 08:45 AM                | 36                       | 108  | 14    | 158        | 46                         | 66   | 26    | 138        | 51                       | 104  | 34    | 189        | 9                          | 50   | 73    | 132        | 617        |
| Total                   | 118                      | 519  | 29    | 666        | 201                        | 270  | 71    | 542        | 222                      | 439  | 124   | 785        | 40                         | 224  | 263   | 527        | 2520       |
| Grand Total             | 202                      | 1109 | 57    | 1368       | 531                        | 623  | 140   | 1294       | 499                      | 987  | 220   | 1706       | 65                         | 410  | 708   | 1183       | 5551       |
| Apprch %                | 14.8                     | 81.1 | 4.2   |            | 41                         | 48.1 | 10.8  |            | 29.2                     | 57.9 | 12.9  |            | 5.5                        | 34.7 | 59.8  |            |            |
| Total %                 | 3.6                      | 20   | 1     | 24.6       | 9.6                        | 11.2 | 2.5   | 23.3       | 9                        | 17.8 | 4     | 30.7       | 1.2                        | 7.4  | 12.8  | 21.3       |            |
| Passenger Vehicles      | 198                      | 1036 | 54    | 1288       | 500                        | 574  | 132   | 1206       | 457                      | 908  | 195   | 1560       | 55                         | 378  | 641   | 1074       | 5128       |
| % Passenger Vehicles    | 98                       | 93.4 | 94.7  | 94.2       | 94.2                       | 92.1 | 94.3  | 93.2       | 91.6                     | 92   | 88.6  | 91.4       | 84.6                       | 92.2 | 90.5  | 90.8       | 92.4       |
| Large 2 Axle Vehicles   | 3                        | 34   | 1     | 38         | 14                         | 26   | 7     | 47         | 21                       | 47   | 9     | 77         | 3                          | 15   | 38    | 56         | 218        |
| % Large 2 Axle Vehicles | 1.5                      | 3.1  | 1.8   | 2.8        | 2.6                        | 4.2  | 5     | 3.6        | 4.2                      | 4.8  | 4.1   | 4.5        | 4.6                        | 3.7  | 5.4   | 4.7        | 3.9        |
| 3 Axle Vehicles         | 0                        | 12   | 1     | 13         | 3                          | 13   | 0     | 16         | 4                        | 7    | 2     | 13         | 2                          | 9    | 12    | 23         | 65         |
| % 3 Axle Vehicles       | 0                        | 1.1  | 1.8   | 1          | 0.6                        | 2.1  | 0     | 1.2        | 0.8                      | 0.7  | 0.9   | 0.8        | 3.1                        | 2.2  | 1.7   | 1.9        | 1.2        |
| 4+ Axle Trucks          | 1                        | 27   | 1     | 29         | 14                         | 10   | 1     | 25         | 17                       | 25   | 14    | 56         | 5                          | 8    | 17    | 30         | 140        |
| % 4+ Axle Trucks        | 0.5                      | 2.4  | 1.8   | 2.1        | 2.6                        | 1.6  | 0.7   | 1.9        | 3.4                      | 2.5  | 6.4   | 3.3        | 7.7                        | 2    | 2.4   | 2.5        | 2.5        |

|                                                            | Citrus Avenue Southbound |      |       |            | Valley Boulevard Westbound |      |       |            | Citrus Avenue Northbound |      |       |            | Valley Boulevard Eastbound |      |       |            |            |
|------------------------------------------------------------|--------------------------|------|-------|------------|----------------------------|------|-------|------------|--------------------------|------|-------|------------|----------------------------|------|-------|------------|------------|
| Start Time                                                 | Left                     | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                     | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                          |      |       |            |                            |      |       |            |                          |      |       |            |                            |      |       |            |            |
| Peak Hour for Entire Intersection Begins at 07:00 AM       |                          |      |       |            |                            |      |       |            |                          |      |       |            |                            |      |       |            |            |
| 07:00 AM                                                   | 7                        | 174  | 3     | 184        | 70                         | 75   | 19    | 164        | 61                       | 152  | 20    | 233        | 6                          | 38   | 119   | 163        | 744        |
| 07:15 AM                                                   | 15                       | 117  | 4     | 136        | 104                        | 96   | 18    | 218        | 71                       | 144  | 22    | 237        | 6                          | 61   | 152   | 219        | 810        |
| 07:30 AM                                                   | 31                       | 137  | 9     | 177        | 89                         | 96   | 22    | 207        | 72                       | 139  | 22    | 233        | 7                          | 38   | 92    | 137        | 754        |
| 07:45 AM                                                   | 31                       | 162  | 12    | 205        | 67                         | 86   | 10    | 163        | 73                       | 113  | 32    | 218        | 6                          | 49   | 82    | 137        | 723        |
| Total Volume                                               | 84                       | 590  | 28    | 702        | 330                        | 353  | 69    | 752        | 277                      | 548  | 96    | 921        | 25                         | 186  | 445   | 656        | 3031       |
| % App. Total                                               | 12                       | 84   | 4     |            | 43.9                       | 46.9 | 9.2   |            | 30.1                     | 59.5 | 10.4  |            | 3.8                        | 28.4 | 67.8  |            |            |
| PHF                                                        | .677                     | .848 | .583  | .856       | .793                       | .919 | .784  | .862       | .949                     | .901 | .750  | .972       | .893                       | .762 | .732  | .749       | .935       |

City of Fontana  
N/S: Citrus Avenue  
E/W: Valley Boulevard  
Weather: Partially Cloudy

File Name : FOCIVAPM  
Site Code : 04300781  
Start Date : 1/10/2007  
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

|                         | Citrus Avenue<br>Southbound |      |       |            | Valley Boulevard<br>Westbound |      |       |            | Citrus Avenue<br>Northbound |      |       |            | Valley Boulevard<br>Eastbound |      |       |            |            |
|-------------------------|-----------------------------|------|-------|------------|-------------------------------|------|-------|------------|-----------------------------|------|-------|------------|-------------------------------|------|-------|------------|------------|
| Start Time              | Left                        | Thru | Right | App. Total | Left                          | Thru | Right | App. Total | Left                        | Thru | Right | App. Total | Left                          | Thru | Right | App. Total | Int. Total |
| 04:00 PM                | 19                          | 148  | 9     | 176        | 54                            | 115  | 31    | 200        | 56                          | 152  | 32    | 240        | 23                            | 121  | 82    | 226        | 842        |
| 04:15 PM                | 23                          | 131  | 10    | 164        | 77                            | 120  | 24    | 221        | 63                          | 132  | 40    | 235        | 25                            | 144  | 82    | 251        | 871        |
| 04:30 PM                | 32                          | 159  | 10    | 201        | 65                            | 82   | 22    | 169        | 64                          | 153  | 41    | 258        | 20                            | 124  | 93    | 237        | 865        |
| 04:45 PM                | 21                          | 143  | 7     | 171        | 75                            | 113  | 33    | 221        | 46                          | 150  | 42    | 238        | 25                            | 143  | 80    | 248        | 878        |
| Total                   | 95                          | 581  | 36    | 712        | 271                           | 430  | 110   | 811        | 229                         | 587  | 155   | 971        | 93                            | 532  | 337   | 962        | 3456       |
| 05:00 PM                | 18                          | 139  | 10    | 167        | 76                            | 106  | 30    | 212        | 61                          | 171  | 53    | 285        | 39                            | 132  | 69    | 240        | 904        |
| 05:15 PM                | 28                          | 179  | 8     | 215        | 71                            | 74   | 26    | 171        | 57                          | 186  | 35    | 278        | 14                            | 124  | 82    | 220        | 884        |
| 05:30 PM                | 25                          | 137  | 6     | 168        | 57                            | 118  | 30    | 205        | 55                          | 159  | 48    | 262        | 18                            | 80   | 71    | 169        | 804        |
| 05:45 PM                | 30                          | 124  | 11    | 165        | 50                            | 104  | 18    | 172        | 57                          | 156  | 42    | 255        | 33                            | 103  | 54    | 190        | 782        |
| Total                   | 101                         | 579  | 35    | 715        | 254                           | 402  | 104   | 760        | 230                         | 672  | 178   | 1080       | 104                           | 439  | 276   | 819        | 3374       |
| Grand Total             | 196                         | 1160 | 71    | 1427       | 525                           | 832  | 214   | 1571       | 459                         | 1259 | 333   | 2051       | 197                           | 971  | 613   | 1781       | 6830       |
| Apprch %                | 13.7                        | 81.3 | 5     |            | 33.4                          | 53   | 13.6  |            | 22.4                        | 61.4 | 16.2  |            | 11.1                          | 54.5 | 34.4  |            |            |
| Total %                 | 2.9                         | 17   | 1     | 20.9       | 7.7                           | 12.2 | 3.1   | 23         | 6.7                         | 18.4 | 4.9   | 30         | 2.9                           | 14.2 | 9     | 26.1       |            |
| Passenger Vehicles      | 189                         | 1116 | 68    | 1373       | 502                           | 792  | 208   | 1502       | 421                         | 1229 | 312   | 1962       | 194                           | 919  | 561   | 1674       | 6511       |
| % Passenger Vehicles    | 96.4                        | 96.2 | 95.8  | 96.2       | 95.6                          | 95.2 | 97.2  | 95.6       | 91.7                        | 97.6 | 93.7  | 95.7       | 98.5                          | 94.6 | 91.5  | 94         | 95.3       |
| Large 2 Axle Vehicles   | 4                           | 26   | 1     | 31         | 10                            | 11   | 4     | 25         | 14                          | 17   | 8     | 39         | 2                             | 16   | 21    | 39         | 134        |
| % Large 2 Axle Vehicles | 2                           | 2.2  | 1.4   | 2.2        | 1.9                           | 1.3  | 1.9   | 1.6        | 3.1                         | 1.4  | 2.4   | 1.9        | 1                             | 1.6  | 3.4   | 2.2        | 2          |
| 3 Axle Vehicles         | 2                           | 7    | 1     | 10         | 5                             | 21   | 0     | 26         | 11                          | 6    | 4     | 21         | 0                             | 19   | 10    | 29         | 86         |
| % 3 Axle Vehicles       | 1                           | 0.6  | 1.4   | 0.7        | 1                             | 2.5  | 0     | 1.7        | 2.4                         | 0.5  | 1.2   | 1          | 0                             | 2    | 1.6   | 1.6        | 1.3        |
| 4+ Axle Trucks          | 1                           | 11   | 1     | 13         | 8                             | 8    | 2     | 18         | 13                          | 7    | 9     | 29         | 1                             | 17   | 21    | 39         | 99         |
| % 4+ Axle Trucks        | 0.5                         | 0.9  | 1.4   | 0.9        | 1.5                           | 1    | 0.9   | 1.1        | 2.8                         | 0.6  | 2.7   | 1.4        | 0.5                           | 1.8  | 3.4   | 2.2        | 1.4        |

|                                                            | Citrus Avenue<br>Southbound |      |       |            | Valley Boulevard<br>Westbound |      |       |            | Citrus Avenue<br>Northbound |      |       |            | Valley Boulevard<br>Eastbound |      |       |            |            |
|------------------------------------------------------------|-----------------------------|------|-------|------------|-------------------------------|------|-------|------------|-----------------------------|------|-------|------------|-------------------------------|------|-------|------------|------------|
| Start Time                                                 | Left                        | Thru | Right | App. Total | Left                          | Thru | Right | App. Total | Left                        | Thru | Right | App. Total | Left                          | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 |                             |      |       |            |                               |      |       |            |                             |      |       |            |                               |      |       |            |            |
| Peak Hour for Entire Intersection Begins at 04:30 PM       |                             |      |       |            |                               |      |       |            |                             |      |       |            |                               |      |       |            |            |
| 04:30 PM                                                   | 32                          | 159  | 10    | 201        | 65                            | 82   | 22    | 169        | 64                          | 153  | 41    | 258        | 20                            | 124  | 93    | 237        | 865        |
| 04:45 PM                                                   | 21                          | 143  | 7     | 171        | 75                            | 113  | 33    | 221        | 46                          | 150  | 42    | 238        | 25                            | 143  | 80    | 248        | 878        |
| 05:00 PM                                                   | 18                          | 139  | 10    | 167        | 76                            | 106  | 30    | 212        | 61                          | 171  | 53    | 285        | 39                            | 132  | 69    | 240        | 904        |
| 05:15 PM                                                   | 28                          | 179  | 8     | 215        | 71                            | 74   | 26    | 171        | 57                          | 186  | 35    | 278        | 14                            | 124  | 82    | 220        | 884        |
| Total Volume                                               | 99                          | 620  | 35    | 754        | 287                           | 375  | 111   | 773        | 228                         | 660  | 171   | 1059       | 98                            | 523  | 324   | 945        | 3531       |
| % App. Total                                               | 13.1                        | 82.2 | 4.6   |            | 37.1                          | 48.5 | 14.4  |            | 21.5                        | 62.3 | 16.1  |            | 10.4                          | 55.3 | 34.3  |            |            |
| PHF                                                        | .773                        | .866 | .875  | .877       | .944                          | .830 | .841  | .874       | .891                        | .887 | .807  | .929       | .628                          | .914 | .871  | .953       | .976       |

# Intersection Turning Movement

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

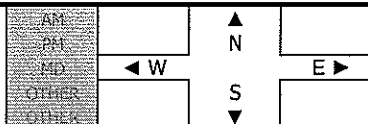
DATE:  
2/10/09  
TUESDAY

LOCATION:  
NORTH & SOUTH:  
EAST & WEST:

FONTANA  
CITRUS  
I-10 WB RAMP

PROJECT #: CA09-0213-1  
LOCATION #: 35  
CONTROL: SIGNAL

NOTES:



|                |            | NORTHBOUND |         |         | SOUTHBOUND |         |         | EASTBOUND    |         |         | WESTBOUND    |         |         |       |
|----------------|------------|------------|---------|---------|------------|---------|---------|--------------|---------|---------|--------------|---------|---------|-------|
|                |            | CITRUS     |         |         | CITRUS     |         |         | I-10 WB RAMP |         |         | I-10 WB RAMP |         |         |       |
| LANES:         |            | NL<br>1    | NT<br>1 | NR<br>X | SL<br>X    | ST<br>2 | SR<br>1 | EL<br>X      | ET<br>X | ER<br>X | WL<br>1      | WT<br>0 | WR<br>1 | TOTAL |
| AM             | 6:30 AM    |            |         |         |            |         |         |              |         |         |              |         |         | 0     |
|                | 6:45 AM    |            |         |         |            |         |         |              |         |         |              |         |         | 0     |
|                | 7:00 AM    | 66         | 144     |         |            | 155     | 105     |              |         |         | 54           | 0       | 95      | 619   |
|                | 7:15 AM    | 55         | 152     |         |            | 165     | 118     |              |         |         | 57           | 0       | 98      | 645   |
|                | 7:30 AM    | 52         | 129     |         |            | 190     | 153     |              |         |         | 58           | 0       | 99      | 681   |
|                | 7:45 AM    | 54         | 132     |         |            | 171     | 129     |              |         |         | 71           | 0       | 108     | 665   |
|                | 8:00 AM    | 44         | 141     |         |            | 162     | 93      |              |         |         | 56           | 0       | 72      | 568   |
|                | 8:15 AM    | 43         | 131     |         |            | 132     | 110     |              |         |         | 65           | 0       | 77      | 558   |
|                | 8:30 AM    | 50         | 122     |         |            | 122     | 84      |              |         |         | 51           | 1       | 53      | 483   |
|                | 8:45 AM    | 53         | 125     |         |            | 115     | 69      |              |         |         | 46           | 0       | 67      | 475   |
|                | 9:00 AM    |            |         |         |            |         |         |              |         |         |              |         |         | 0     |
|                | 9:15 AM    |            |         |         |            |         |         |              |         |         |              |         |         | 0     |
|                | VOLUMES    | 417        | 1,076   | 0       | 0          | 1,212   | 861     | 0            | 0       | 0       | 458          | 1       | 669     | 4,694 |
|                | APPROACH % | 28%        | 72%     | 0%      | 0%         | 58%     | 42%     | 0%           | 0%      | 0%      | 41%          | 0%      | 59%     |       |
| APP/DEPART     | 1,493      | /          | 1,745   | 2,073   | /          | 1,670   | 0       | /            | 0       | 1,128   | /            | 1,279   | 0       |       |
| BEGIN PEAK HR  | 7:00 AM    |            |         |         |            |         |         |              |         |         |              |         |         |       |
| VOLUMES        | 227        | 557        | 0       | 0       | 681        | 505     | 0       | 0            | 0       | 240     | 0            | 400     | 2,610   |       |
| APPROACH %     | 29%        | 71%        | 0%      | 0%      | 57%        | 43%     | 0%      | 0%           | 0%      | 38%     | 0%           | 63%     |         |       |
| PEAK HR FACTOR | 0.933      |            |         | 0.864   |            |         | 0.000   |              |         | 0.894   |              |         | 0.958   |       |
| APP/DEPART     | 784        | /          | 957     | 1,186   | /          | 921     | 0       | /            | 0       | 640     | /            | 732     | 0       |       |
| PM             | 3:30 PM    |            |         |         |            |         |         |              |         |         |              |         |         | 0     |
|                | 3:45 PM    |            |         |         |            |         |         |              |         |         |              |         |         | 0     |
|                | 4:00 PM    | 38         | 189     |         |            | 203     | 95      |              |         |         | 27           | 1       | 103     | 656   |
|                | 4:15 PM    | 41         | 206     |         |            | 170     | 80      |              |         |         | 51           | 0       | 144     | 692   |
|                | 4:30 PM    | 41         | 211     |         |            | 195     | 87      |              |         |         | 41           | 1       | 109     | 685   |
|                | 4:45 PM    | 21         | 235     |         |            | 199     | 97      |              |         |         | 43           | 0       | 119     | 714   |
|                | 5:00 PM    | 23         | 216     |         |            | 202     | 87      |              |         |         | 34           | 0       | 91      | 653   |
|                | 5:15 PM    | 24         | 221     |         |            | 182     | 60      |              |         |         | 33           | 0       | 87      | 607   |
|                | 5:30 PM    | 27         | 188     |         |            | 175     | 62      |              |         |         | 39           | 1       | 99      | 591   |
|                | 5:45 PM    | 25         | 182     |         |            | 132     | 69      |              |         |         | 36           | 0       | 97      | 541   |
|                | 6:00 PM    |            |         |         |            |         |         |              |         |         |              |         |         | 0     |
|                | 6:15 PM    |            |         |         |            |         |         |              |         |         |              |         |         | 0     |
|                | VOLUMES    | 240        | 1,648   | 0       | 0          | 1,458   | 637     | 0            | 0       | 0       | 304          | 3       | 849     | 5,139 |
|                | APPROACH % | 13%        | 87%     | 0%      | 0%         | 70%     | 30%     | 0%           | 0%      | 0%      | 26%          | 0%      | 73%     |       |
| APP/DEPART     | 1,888      | /          | 2,497   | 2,095   | /          | 1,762   | 0       | /            | 0       | 1,156   | /            | 880     | 0       |       |
| BEGIN PEAK HR  | 4:00 PM    |            |         |         |            |         |         |              |         |         |              |         |         |       |
| VOLUMES        | 141        | 841        | 0       | 0       | 767        | 359     | 0       | 0            | 0       | 162     | 2            | 475     | 2,747   |       |
| APPROACH %     | 14%        | 86%        | 0%      | 0%      | 68%        | 32%     | 0%      | 0%           | 0%      | 25%     | 0%           | 74%     |         |       |
| PEAK HR FACTOR | 0.959      |            |         | 0.945   |            |         | 0.000   |              |         | 0.819   |              |         | 0.962   |       |
| APP/DEPART     | 982        | /          | 1,316   | 1,126   | /          | 929     | 0       | /            | 0       | 639     | /            | 502     | 0       |       |

## Intersection Turning Movement

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

|                                    |                                                    |                                   |                                                                                           |
|------------------------------------|----------------------------------------------------|-----------------------------------|-------------------------------------------------------------------------------------------|
| <b>DATE:</b><br>2/10/09<br>TUESDAY | <b>LOCATION:</b><br>NORTH & SOUTH:<br>EAST & WEST: | FONTANA<br>CITRUS<br>I-10 EB RAMP | <b>PROJECT #:</b><br>CA09-0213-1<br><b>LOCATION #:</b><br>36<br><b>CONTROL:</b><br>SIGNAL |
|------------------------------------|----------------------------------------------------|-----------------------------------|-------------------------------------------------------------------------------------------|

|               |  |
|---------------|--|
| <b>NOTES:</b> |  |
|---------------|--|

|                |            | NORTHBOUND |         |         | SOUTHBOUND |         |         | EASTBOUND    |         |         | WESTBOUND    |         |       |       |
|----------------|------------|------------|---------|---------|------------|---------|---------|--------------|---------|---------|--------------|---------|-------|-------|
|                |            | CITRUS     |         |         | CITRUS     |         |         | I-10 EB RAMP |         |         | I-10 EB RAMP |         |       |       |
| LANES:         | NL<br>X    | NT<br>2    | NR<br>0 | SL<br>1 | ST<br>1    | SR<br>X | EL<br>1 | ET<br>0      | ER<br>1 | WL<br>X | WT<br>X      | WR<br>X | TOTAL |       |
| AM             | 6:30 AM    |            |         |         |            |         |         |              |         |         |              |         | 0     |       |
|                | 6:45 AM    |            |         |         |            |         |         |              |         |         |              |         | 0     |       |
|                | 7:00 AM    |            | 123     | 30      | 99         | 119     |         | 93           | 1       | 43      |              |         | 508   |       |
|                | 7:15 AM    |            | 139     | 36      | 110        | 111     |         | 66           | 0       | 35      |              |         | 497   |       |
|                | 7:30 AM    |            | 123     | 45      | 129        | 124     |         | 58           | 0       | 20      |              |         | 499   |       |
|                | 7:45 AM    |            | 112     | 33      | 98         | 135     |         | 63           | 0       | 30      |              |         | 471   |       |
|                | 8:00 AM    |            | 116     | 30      | 90         | 121     |         | 66           | 1       | 41      |              |         | 465   |       |
|                | 8:15 AM    |            | 106     | 31      | 93         | 100     |         | 76           | 1       | 25      |              |         | 432   |       |
|                | 8:30 AM    |            | 108     | 35      | 74         | 106     |         | 68           | 1       | 36      |              |         | 428   |       |
|                | 8:45 AM    |            | 107     | 46      | 67         | 87      |         | 65           | 1       | 31      |              |         | 404   |       |
|                | 9:00 AM    |            |         |         |            |         |         |              |         |         |              |         | 0     |       |
|                | 9:15 AM    |            |         |         |            |         |         |              |         |         |              |         | 0     |       |
|                | VOLUMES    | 0          | 934     | 286     | 760        | 903     | 0       | 555          | 5       | 261     | 0            | 0       | 0     | 3,704 |
|                | APPROACH % | 0%         | 77%     | 23%     | 46%        | 54%     | 0%      | 68%          | 1%      | 32%     | 0%           | 0%      | 0%    |       |
| APP/DEPART     | 1,220      | /          | 1,489   | 1,663   | /          | 1,164   | 821     | /            | 1,051   | 0       | /            | 0       | 0     |       |
| BEGIN PEAK HR  | 7:00 AM    |            |         |         |            |         |         |              |         |         |              |         |       |       |
| VOLUMES        | 0          | 497        | 144     | 436     | 489        | 0       | 280     | 1            | 128     | 0       | 0            | 0       | 1,975 |       |
| APPROACH %     | 0%         | 78%        | 22%     | 47%     | 53%        | 0%      | 68%     | 0%           | 31%     | 0%      | 0%           | 0%      |       |       |
| PEAK HR FACTOR |            | 0.916      |         |         | 0.914      |         |         | 0.746        |         |         | 0.000        |         | 0.972 |       |
| APP/DEPART     | 641        | /          | 777     | 925     | /          | 617     | 409     | /            | 581     | 0       | /            | 0       | 0     |       |
| PM             | 3:30 PM    |            |         |         |            |         |         |              |         |         |              |         | 0     |       |
|                | 3:45 PM    |            |         |         |            |         |         |              |         |         |              |         | 0     |       |
|                | 4:00 PM    |            | 110     | 12      | 109        | 126     |         | 122          | 0       | 46      |              |         | 525   |       |
|                | 4:15 PM    |            | 100     | 15      | 103        | 110     |         | 140          | 1       | 52      |              |         | 521   |       |
|                | 4:30 PM    |            | 124     | 30      | 119        | 110     |         | 133          | 1       | 37      |              |         | 554   |       |
|                | 4:45 PM    |            | 108     | 26      | 104        | 139     |         | 141          | 3       | 39      |              |         | 560   |       |
|                | 5:00 PM    |            | 123     | 28      | 113        | 121     |         | 116          | 1       | 46      |              |         | 548   |       |
|                | 5:15 PM    |            | 93      | 39      | 96         | 112     |         | 145          | 1       | 47      |              |         | 533   |       |
|                | 5:30 PM    |            | 85      | 45      | 111        | 100     |         | 138          | 0       | 47      |              |         | 526   |       |
|                | 5:45 PM    |            | 96      | 27      | 81         | 81      |         | 114          | 0       | 58      |              |         | 457   |       |
|                | 6:00 PM    |            |         |         |            |         |         |              |         |         |              |         | 0     |       |
|                | 6:15 PM    |            |         |         |            |         |         |              |         |         |              |         | 0     |       |
|                | VOLUMES    | 0          | 839     | 222     | 836        | 899     | 0       | 1,049        | 7       | 372     | 0            | 0       | 0     | 4,224 |
|                | APPROACH % | 0%         | 79%     | 21%     | 48%        | 52%     | 0%      | 73%          | 0%      | 26%     | 0%           | 0%      | 0%    |       |
| APP/DEPART     | 1,061      | /          | 1,888   | 1,735   | /          | 1,271   | 1,428   | /            | 1,065   | 0       | /            | 0       | 0     |       |
| BEGIN PEAK HR  | 4:30 PM    |            |         |         |            |         |         |              |         |         |              |         |       |       |
| VOLUMES        | 0          | 448        | 123     | 432     | 482        | 0       | 535     | 6            | 169     | 0       | 0            | 0       | 2,195 |       |
| APPROACH %     | 0%         | 78%        | 22%     | 47%     | 53%        | 0%      | 75%     | 1%           | 24%     | 0%      | 0%           | 0%      |       |       |
| PEAK HR FACTOR |            | 0.927      |         |         | 0.940      |         |         | 0.920        |         |         | 0.000        |         | 0.980 |       |
| APP/DEPART     | 571        | /          | 983     | 914     | /          | 651     | 710     | /            | 561     | 0       | /            | 0       | 0     |       |

COUNTS UNLIMITED INC.  
25424 JACLYN AVENUE  
MORENO VALLEY CA. 92557  
951-247-6716

CITY OF FONTANA  
N/S: CITRUS AVENUE  
E/W: SLOVER AVENUE  
WEATHER: SUNNY

File Name : FOCISLAM  
Site Code : 0438825  
Start Date : 4/25/2008  
Page No : 1

Groups Printed- PASSENGER VEHICLES - LARGE 2 AXLE VEHICLES - 3 AXLE VEHICLES - 4+ AXLE TRUCKS  
CITRUS AVENUE SLOVER AVENUE CITRUS AVENUE SLOVER AVENUE

| Start Time              | CITRUS AVENUE Southbound |      |       |            | SLOVER AVENUE Westbound |      |       |            | CITRUS AVENUE Northbound |      |       |            | SLOVER AVENUE Eastbound |      |       |            | Int. Total |
|-------------------------|--------------------------|------|-------|------------|-------------------------|------|-------|------------|--------------------------|------|-------|------------|-------------------------|------|-------|------------|------------|
|                         | Left                     | Thru | Right | App. Total | Left                    | Thru | Right | App. Total | Left                     | Thru | Right | App. Total | Left                    | Thru | Right | App. Total |            |
| 07:00 AM                | 53                       | 35   | 99    | 187        | 7                       | 85   | 57    | 149        | 4                        | 86   | 4     | 94         | 47                      | 32   | 1     | 80         | 510        |
| 07:15 AM                | 82                       | 35   | 102   | 219        | 11                      | 99   | 59    | 169        | 5                        | 77   | 12    | 94         | 52                      | 54   | 1     | 107        | 589        |
| 07:30 AM                | 39                       | 27   | 92    | 158        | 16                      | 91   | 60    | 167        | 1                        | 75   | 15    | 91         | 45                      | 67   | 1     | 113        | 529        |
| 07:45 AM                | 23                       | 47   | 113   | 183        | 8                       | 89   | 17    | 114        | 4                        | 56   | 18    | 78         | 54                      | 43   | 3     | 100        | 475        |
| Total                   | 197                      | 144  | 406   | 747        | 42                      | 364  | 193   | 599        | 14                       | 294  | 49    | 357        | 198                     | 196  | 6     | 400        | 2103       |
| 08:00 AM                | 29                       | 24   | 85    | 138        | 11                      | 63   | 16    | 90         | 1                        | 81   | 6     | 88         | 36                      | 41   | 5     | 82         | 398        |
| 08:15 AM                | 24                       | 46   | 71    | 141        | 7                       | 42   | 24    | 73         | 1                        | 74   | 8     | 83         | 43                      | 26   | 3     | 72         | 369        |
| 08:30 AM                | 19                       | 31   | 67    | 117        | 10                      | 55   | 16    | 81         | 3                        | 74   | 4     | 81         | 43                      | 26   | 3     | 72         | 351        |
| 08:45 AM                | 16                       | 40   | 60    | 116        | 10                      | 49   | 18    | 77         | 5                        | 66   | 4     | 75         | 46                      | 35   | 2     | 83         | 351        |
| Total                   | 88                       | 141  | 283   | 512        | 38                      | 209  | 74    | 321        | 10                       | 295  | 22    | 327        | 168                     | 128  | 13    | 309        | 1469       |
| Grand Total             | 285                      | 285  | 689   | 1259       | 80                      | 573  | 267   | 920        | 24                       | 589  | 71    | 684        | 366                     | 324  | 19    | 709        | 3572       |
| Apprch %                | 22.6                     | 22.6 | 54.7  |            | 8.7                     | 62.3 | 29    |            | 3.5                      | 86.1 | 10.4  |            | 51.6                    | 45.7 | 2.7   |            |            |
| Total %                 | 8                        | 8    | 19.3  | 35.2       | 2.2                     | 16   | 7.5   | 25.8       | 0.7                      | 16.5 | 2     | 19.1       | 10.2                    | 9.1  | 0.5   | 19.8       |            |
| PASSENGER VEHICLES      | 266                      | 259  | 602   | 1127       | 78                      | 504  | 251   | 833        | 23                       | 563  | 70    | 656        | 245                     | 248  | 19    | 512        | 3128       |
| - PASSENGER VEHICLE     | 93.3                     | 90.9 | 87.4  | 89.5       | 97.5                    | 88   | 94    | 90.5       | 95.8                     | 95.6 | 98.6  | 95.9       | 66.9                    | 76.5 | 100   | 72.2       | 87.6       |
| - LARGE 2 AXLE VEHICLES | 11                       | 14   | 26    | 51         | 2                       | 29   | 12    | 43         | 1                        | 15   | 0     | 16         | 37                      | 32   | 0     | 69         | 179        |
| - 3 AXLE VEHICLES       | 3.9                      | 4.9  | 3.8   | 4.1        | 2.5                     | 5.1  | 4.5   | 4.7        | 4.2                      | 2.5  | 0     | 2.3        | 10.1                    | 9.9  | 0     | 9.7        | 5          |
| - 4+ AXLE TRUCKS        | 1                        | 1    | 10    | 12         | 0                       | 17   | 2     | 19         | 0                        | 1    | 0     | 1          | 11                      | 9    | 0     | 20         | 52         |
| % 3 AXLE VEHICLES       | 0.4                      | 0.4  | 1.5   | 1          | 0                       | 3    | 0.7   | 2.1        | 0                        | 0.2  | 0     | 0.1        | 3                       | 2.8  | 0     | 2.8        | 1.5        |
| % 4+ AXLE TRUCKS        | 2.5                      | 3.9  | 7.4   | 5.5        | 0                       | 4    | 0.7   | 2.7        | 0                        | 1.7  | 1.4   | 1.6        | 19.9                    | 10.8 | 0     | 15.2       | 6          |

| Start Time                                           | CITRUS AVENUE<br>Southbound                                |      |       |            | SLOVER AVENUE<br>Westbound |      |       |            | CITRUS AVENUE<br>Northbound |      |       |            | SLOVER AVENUE<br>Eastbound |      |       |            |      | Int. Total |
|------------------------------------------------------|------------------------------------------------------------|------|-------|------------|----------------------------|------|-------|------------|-----------------------------|------|-------|------------|----------------------------|------|-------|------------|------|------------|
|                                                      | Left                                                       | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                        | Thru | Right | App. Total | Left                       | Thru | Right | App. Total |      |            |
|                                                      | Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |      |       |            |                            |      |       |            |                             |      |       |            |                            |      |       |            |      |            |
| Peak Hour for Entire Intersection Begins at 07:00 AM |                                                            |      |       |            |                            |      |       |            |                             |      |       |            |                            |      |       |            |      |            |
| 07:00 AM                                             | 53                                                         | 35   | 99    | 187        | 7                          | 85   | 57    | 149        | 4                           | 86   | 4     | 94         | 47                         | 32   | 1     | 80         | 510  |            |
| 07:15 AM                                             | 82                                                         | 35   | 102   | 219        | 11                         | 99   | 59    | 169        | 5                           | 77   | 12    | 94         | 52                         | 54   | 1     | 107        | 589  |            |
| 07:30 AM                                             | 39                                                         | 27   | 92    | 158        | 16                         | 91   | 60    | 167        | 1                           | 75   | 15    | 91         | 45                         | 67   | 1     | 113        | 529  |            |
| 07:45 AM                                             | 23                                                         | 47   | 113   | 183        | 8                          | 89   | 17    | 114        | 4                           | 56   | 18    | 78         | 54                         | 43   | 3     | 100        | 475  |            |
| Total Volume                                         | 197                                                        | 144  | 406   | 747        | 42                         | 364  | 193   | 599        | 14                          | 294  | 49    | 357        | 198                        | 196  | 6     | 400        | 2103 |            |
| % App. Total                                         | 26.4                                                       | 19.3 | 54.4  |            | 7                          | 60.8 | 32.2  |            | 3.9                         | 82.4 | 13.7  |            | 49.5                       | 49   | 1.5   |            |      |            |
| PHF                                                  | .601                                                       | .766 | .898  | .853       | .656                       | .919 | .804  | .886       | .700                        | .855 | .681  | .949       | .917                       | .731 | .500  | .885       | .893 |            |

COUNTS UNLIMITED INC.  
25424 JACLYN AVENUE  
MORENO VALLEY CA. 92557  
951-247-6716

CITY OF FONTANA  
N/S: CITRUS AVENUE  
E/W: SLOVER AVENUE  
WEATHER: SUNNY

File Name : focislpm  
Site Code : 0438825  
Start Date : 4/25/2006  
Page No : 1

Groups Printed- PASSENGER VEHICLES - LARGE 2 AXLE VEHICLES - 3 AXLE VEHICLES - 4+ AXLE TRUCKS

|                       | CITRUS AVENUE<br>Southbound |      |       |            | SLOVER AVENUE<br>Westbound |      |       |            | CITRUS AVENUE<br>Northbound |      |       |            | SLOVER AVENUE<br>Eastbound |      |       |            |            |
|-----------------------|-----------------------------|------|-------|------------|----------------------------|------|-------|------------|-----------------------------|------|-------|------------|----------------------------|------|-------|------------|------------|
| Start Time            | Left                        | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                        | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Int. Total |
| 04:00 PM              | 25                          | 68   | 63    | 156        | 11                         | 65   | 37    | 113        | 3                           | 27   | 18    | 48         | 36                         | 182  | 8     | 226        | 543        |
| 04:15 PM              | 32                          | 64   | 64    | 160        | 18                         | 55   | 19    | 92         | 4                           | 50   | 21    | 75         | 43                         | 170  | 6     | 219        | 546        |
| 04:30 PM              | 30                          | 46   | 55    | 131        | 12                         | 51   | 22    | 85         | 3                           | 47   | 13    | 63         | 36                         | 178  | 7     | 221        | 500        |
| 04:45 PM              | 35                          | 71   | 70    | 176        | 10                         | 49   | 16    | 75         | 4                           | 40   | 21    | 65         | 53                         | 186  | 10    | 249        | 565        |
| Total                 | 122                         | 249  | 252   | 623        | 51                         | 220  | 94    | 365        | 14                          | 164  | 73    | 251        | 168                        | 716  | 31    | 915        | 2154       |
| 05:00 PM              | 29                          | 48   | 63    | 140        | 21                         | 58   | 23    | 102        | 7                           | 52   | 10    | 69         | 68                         | 184  | 6     | 258        | 569        |
| 05:15 PM              | 37                          | 77   | 45    | 159        | 18                         | 70   | 23    | 111        | 3                           | 50   | 12    | 65         | 68                         | 194  | 11    | 273        | 608        |
| 05:30 PM              | 23                          | 47   | 60    | 130        | 16                         | 53   | 20    | 89         | 5                           | 52   | 13    | 70         | 63                         | 156  | 15    | 234        | 523        |
| 05:45 PM              | 32                          | 73   | 47    | 152        | 11                         | 66   | 22    | 99         | 4                           | 50   | 17    | 71         | 56                         | 149  | 8     | 213        | 535        |
| Total                 | 121                         | 245  | 215   | 581        | 66                         | 247  | 88    | 401        | 19                          | 204  | 52    | 275        | 255                        | 683  | 40    | 978        | 2235       |
| Grand Total           | 243                         | 494  | 467   | 1204       | 117                        | 467  | 182   | 766        | 33                          | 368  | 125   | 526        | 423                        | 1399 | 71    | 1893       | 4389       |
| Apprch %              | 20.2                        | 41   | 38.8  |            | 15.3                       | 61   | 23.8  |            | 6.3                         | 70   | 23.8  |            | 22.3                       | 73.9 | 3.8   |            |            |
| Total %               | 5.5                         | 11.3 | 10.6  | 27.4       | 2.7                        | 10.6 | 4.1   | 17.5       | 0.8                         | 8.4  | 2.8   | 12         | 9.6                        | 31.9 | 1.6   | 43.1       |            |
| PASSENGER VEHICLES    | 223                         | 474  | 402   | 1099       | 109                        | 411  | 167   | 687        | 29                          | 350  | 115   | 494        | 388                        | 1288 | 63    | 1739       | 4019       |
| LARGE 2 AXLE VEHICLES | 91.8                        | 96   | 86.1  | 91.3       | 93.2                       | 88   | 91.8  | 89.7       | 87.9                        | 95.1 | 92    | 93.9       | 91.7                       | 92.1 | 88.7  | 91.9       | 91.6       |
| 3 AXLE VEHICLES       | 14                          | 9    | 21    | 44         | 5                          | 25   | 12    | 42         | 2                           | 8    | 2     | 12         | 11                         | 44   | 3     | 58         | 156        |
| 4+ AXLE TRUCKS        | 5.8                         | 1.8  | 4.5   | 3.7        | 4.3                        | 5.4  | 6.6   | 5.5        | 6.1                         | 2.2  | 1.6   | 2.3        | 2.6                        | 3.1  | 4.2   | 3.1        | 3.6        |
| 3 AXLE VEHICLES       | 2                           | 3    | 14    | 19         | 2                          | 8    | 3     | 13         | 0                           | 2    | 5     | 7          | 11                         | 21   | 1     | 33         | 72         |
| 4+ AXLE TRUCKS        | 0.8                         | 0.6  | 3     | 1.6        | 1.7                        | 1.7  | 1.6   | 1.7        | 0                           | 0.5  | 4     | 1.3        | 2.6                        | 1.5  | 1.4   | 1.7        | 1.6        |
| 4+ AXLE TRUCKS        | 4                           | 8    | 30    | 42         | 1                          | 23   | 0     | 24         | 2                           | 8    | 3     | 13         | 13                         | 46   | 4     | 63         | 142        |
| 4+ AXLE TRUCKS        | 1.6                         | 1.6  | 6.4   | 3.5        | 0.9                        | 4.9  | 0     | 3.1        | 6.1                         | 2.2  | 2.4   | 2.5        | 3.1                        | 3.3  | 5.6   | 3.3        | 3.2        |

|                                                            | CITRUS AVENUE<br>Southbound |      |       |            | SLOVER AVENUE<br>Westbound |      |       |            | CITRUS AVENUE<br>Northbound |      |       |            | SLOVER AVENUE<br>Eastbound |      |       |            |            |
|------------------------------------------------------------|-----------------------------|------|-------|------------|----------------------------|------|-------|------------|-----------------------------|------|-------|------------|----------------------------|------|-------|------------|------------|
| Start Time                                                 | Left                        | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                        | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 |                             |      |       |            |                            |      |       |            |                             |      |       |            |                            |      |       |            |            |
| Peak Hour for Entire Intersection Begins at 04:45 PM       |                             |      |       |            |                            |      |       |            |                             |      |       |            |                            |      |       |            |            |
| 04:45 PM                                                   | 35                          | 71   | 70    | 176        | 10                         | 49   | 16    | 75         | 4                           | 40   | 21    | 65         | 53                         | 186  | 10    | 249        | 565        |
| 05:00 PM                                                   | 29                          | 48   | 63    | 140        | 21                         | 58   | 23    | 102        | 7                           | 52   | 10    | 69         | 68                         | 184  | 6     | 258        | 569        |
| 05:15 PM                                                   | 37                          | 77   | 45    | 159        | 18                         | 70   | 23    | 111        | 3                           | 50   | 12    | 65         | 68                         | 194  | 11    | 273        | 608        |
| 05:30 PM                                                   | 23                          | 47   | 60    | 130        | 16                         | 53   | 20    | 89         | 5                           | 52   | 13    | 70         | 63                         | 156  | 15    | 234        | 523        |
| Total Volume                                               | 124                         | 243  | 238   | 605        | 65                         | 230  | 82    | 377        | 19                          | 194  | 56    | 269        | 252                        | 720  | 42    | 1014       | 2265       |
| % App. Total                                               | 20.5                        | 40.2 | 39.3  |            | 17.2                       | 61   | 21.8  |            | 7.1                         | 72.1 | 20.8  |            | 24.9                       | 71   | 4.1   |            |            |
| PHF                                                        | .838                        | .789 | .850  | .859       | .774                       | .821 | .891  | .849       | .679                        | .933 | .667  | .961       | .926                       | .928 | .700  | .929       | .931       |

# Intersection Turning Movement

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

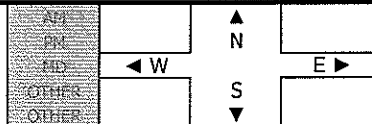
DATE:  
2/10/09  
TUESDAY

LOCATION:  
NORTH & SOUTH:  
EAST & WEST:

FONTANA  
CITRUS  
SANTA ANA

PROJECT #: CA09-0213-1  
LOCATION #: 38  
CONTROL: 4-WAY STOP

NOTES:



|                | NORTHBOUND |         |         | SOUTHBOUND |         |         | EASTBOUND |         |         | WESTBOUND |         |         | TOTAL |
|----------------|------------|---------|---------|------------|---------|---------|-----------|---------|---------|-----------|---------|---------|-------|
|                | CITRUS     |         |         | CITRUS     |         |         | SANTA ANA |         |         | SANTA ANA |         |         |       |
| LANES:         | NL<br>0    | NT<br>1 | NR<br>0 | SL<br>0    | ST<br>1 | SR<br>0 | EL<br>0   | ET<br>1 | ER<br>0 | WL<br>0   | WT<br>1 | WR<br>0 |       |
| 6:30 AM        |            |         |         |            |         |         |           |         |         |           |         |         | 0     |
| 6:45 AM        |            |         |         |            |         |         |           |         |         |           |         |         | 0     |
| 7:00 AM        | 1          | 79      | 9       | 5          | 31      | 13      | 9         | 7       | 0       | 2         | 62      | 5       | 223   |
| 7:15 AM        | 0          | 54      | 6       | 2          | 29      | 2       | 15        | 24      | 0       | 5         | 33      | 4       | 174   |
| 7:30 AM        | 5          | 53      | 7       | 3          | 34      | 5       | 10        | 34      | 0       | 10        | 34      | 4       | 199   |
| 7:45 AM        | 3          | 49      | 9       | 5          | 34      | 7       | 8         | 24      | 0       | 1         | 29      | 6       | 175   |
| 8:00 AM        | 2          | 55      | 6       | 5          | 31      | 4       | 13        | 24      | 0       | 4         | 31      | 6       | 181   |
| 8:15 AM        | 2          | 64      | 9       | 1          | 36      | 3       | 4         | 26      | 0       | 7         | 32      | 5       | 189   |
| 8:30 AM        | 3          | 65      | 11      | 8          | 31      | 2       | 5         | 23      | 0       | 8         | 20      | 7       | 183   |
| 8:45 AM        | 0          | 49      | 8       | 8          | 29      | 3       | 7         | 25      | 0       | 7         | 29      | 7       | 172   |
| 9:00 AM        |            |         |         |            |         |         |           |         |         |           |         |         | 0     |
| 9:15 AM        |            |         |         |            |         |         |           |         |         |           |         |         | 0     |
| VOLUMES        | 16         | 468     | 65      | 37         | 255     | 39      | 71        | 187     | 0       | 44        | 270     | 44      | 1,496 |
| APPROACH %     | 3%         | 85%     | 12%     | 11%        | 77%     | 12%     | 28%       | 72%     | 0%      | 12%       | 75%     | 12%     |       |
| APP/DEPART     | 549        | /       | 583     | 331        | /       | 299     | 258       | /       | 289     | 358       | /       | 325     | 0     |
| BEGIN PEAK HR  | 7:00 AM    |         |         |            |         |         |           |         |         |           |         |         |       |
| VOLUMES        | 9          | 235     | 31      | 15         | 128     | 27      | 42        | 89      | 0       | 18        | 158     | 19      | 771   |
| APPROACH %     | 3%         | 85%     | 11%     | 9%         | 75%     | 16%     | 32%       | 68%     | 0%      | 9%        | 81%     | 10%     |       |
| PEAK HR FACTOR | 0.772      |         |         | 0.867      |         |         | 0.744     |         |         | 0.707     |         |         | 0.864 |
| APP/DEPART     | 275        | /       | 296     | 170        | /       | 146     | 131       | /       | 135     | 195       | /       | 194     | 0     |
| 3:30 PM        |            |         |         |            |         |         |           |         |         |           |         |         | 0     |
| 3:45 PM        |            |         |         |            |         |         |           |         |         |           |         |         | 0     |
| 4:00 PM        | 0          | 31      | 8       | 11         | 52      | 5       | 15        | 64      | 3       | 7         | 28      | 9       | 233   |
| 4:15 PM        | 0          | 37      | 10      | 10         | 69      | 2       | 12        | 60      | 1       | 11        | 23      | 10      | 245   |
| 4:30 PM        | 2          | 45      | 8       | 7          | 55      | 3       | 15        | 55      | 0       | 9         | 28      | 10      | 237   |
| 4:45 PM        | 1          | 29      | 5       | 6          | 59      | 5       | 13        | 51      | 0       | 17        | 25      | 2       | 213   |
| 5:00 PM        | 0          | 28      | 4       | 17         | 61      | 4       | 7         | 56      | 0       | 6         | 28      | 5       | 216   |
| 5:15 PM        | 0          | 36      | 7       | 8          | 69      | 6       | 6         | 37      | 0       | 16        | 29      | 10      | 224   |
| 5:30 PM        | 0          | 43      | 5       | 10         | 45      | 3       | 6         | 43      | 0       | 8         | 20      | 8       | 191   |
| 5:45 PM        | 0          | 58      | 8       | 8          | 57      | 3       | 7         | 31      | 0       | 13        | 15      | 7       | 207   |
| 6:00 PM        |            |         |         |            |         |         |           |         |         |           |         |         | 0     |
| 6:15 PM        |            |         |         |            |         |         |           |         |         |           |         |         | 0     |
| VOLUMES        | 3          | 307     | 55      | 77         | 467     | 31      | 81        | 397     | 4       | 87        | 196     | 61      | 1,766 |
| APPROACH %     | 1%         | 84%     | 15%     | 13%        | 81%     | 5%      | 17%       | 82%     | 1%      | 25%       | 57%     | 18%     |       |
| APP/DEPART     | 365        | /       | 449     | 575        | /       | 558     | 482       | /       | 529     | 344       | /       | 230     | 0     |
| BEGIN PEAK HR  | 4:00 PM    |         |         |            |         |         |           |         |         |           |         |         |       |
| VOLUMES        | 3          | 142     | 31      | 34         | 235     | 15      | 55        | 230     | 4       | 44        | 104     | 31      | 928   |
| APPROACH %     | 2%         | 81%     | 18%     | 12%        | 83%     | 5%      | 19%       | 80%     | 1%      | 25%       | 58%     | 17%     |       |
| PEAK HR FACTOR | 0.800      |         |         | 0.877      |         |         | 0.881     |         |         | 0.952     |         |         | 0.947 |
| APP/DEPART     | 176        | /       | 228     | 284        | /       | 283     | 289       | /       | 295     | 179       | /       | 122     | 0     |

COUNTS UNLIMITED INC.  
25424 JACLYN AVENUE  
MORENO VALLEY CA. 92557  
951-247-6716

CITY OF FONTANA  
N/S: CITRUS AVENUE  
E/W: JURUPA AVENUE  
WEATHER SUNNY:

File Name : FOCIJUAM  
Site Code : 0438825  
Start Date : 3/14/2006  
Page No : 1

Groups Printed- PASSENGER VEHICLES - LARGE 2 AXLE VEHICLES - 3 AXLE VEHICLES - 4+ AXLE VEHICLES

|                         | CITRUS AVENUE<br>Southbound |      |       |            | JURUPA AVENUE<br>Westbound |      |       |            | CITRUS AVENUE<br>Northbound |      |       |            | JURUPA AVENUE<br>Eastbound |      |       |            |            |
|-------------------------|-----------------------------|------|-------|------------|----------------------------|------|-------|------------|-----------------------------|------|-------|------------|----------------------------|------|-------|------------|------------|
| Start Time              | Left                        | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                        | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Int. Total |
| 07:00 AM                | 6                           | 9    | 3     | 18         | 13                         | 95   | 4     | 112        | 23                          | 35   | 51    | 109        | 20                         | 72   | 7     | 99         | 338        |
| 07:15 AM                | 5                           | 15   | 14    | 34         | 24                         | 75   | 11    | 110        | 14                          | 33   | 47    | 94         | 25                         | 105  | 6     | 136        | 374        |
| 07:30 AM                | 7                           | 12   | 7     | 26         | 28                         | 76   | 10    | 114        | 10                          | 48   | 44    | 102        | 30                         | 114  | 4     | 148        | 390        |
| 07:45 AM                | 14                          | 14   | 17    | 45         | 23                         | 64   | 6     | 93         | 11                          | 26   | 54    | 91         | 32                         | 88   | 3     | 123        | 352        |
| Total                   | 32                          | 50   | 41    | 123        | 88                         | 310  | 31    | 429        | 58                          | 142  | 196   | 396        | 107                        | 379  | 20    | 506        | 1454       |
| 08:00 AM                | 9                           | 11   | 13    | 33         | 31                         | 42   | 7     | 80         | 9                           | 28   | 34    | 71         | 17                         | 84   | 6     | 107        | 291        |
| 08:15 AM                | 6                           | 16   | 17    | 39         | 17                         | 48   | 13    | 78         | 11                          | 24   | 9     | 44         | 26                         | 54   | 4     | 84         | 245        |
| 08:30 AM                | 6                           | 12   | 11    | 29         | 10                         | 39   | 4     | 53         | 11                          | 35   | 30    | 76         | 14                         | 58   | 5     | 77         | 235        |
| 08:45 AM                | 5                           | 3    | 10    | 18         | 10                         | 48   | 9     | 67         | 5                           | 29   | 17    | 51         | 22                         | 63   | 3     | 88         | 224        |
| Total                   | 26                          | 42   | 51    | 119        | 68                         | 177  | 33    | 278        | 36                          | 116  | 90    | 242        | 79                         | 259  | 18    | 356        | 995        |
| Grand Total             | 58                          | 92   | 92    | 242        | 156                        | 487  | 64    | 707        | 94                          | 258  | 286   | 638        | 186                        | 638  | 38    | 862        | 2449       |
| Apprch %                | 24                          | 38   | 38    |            | 22.1                       | 68.9 | 9.1   |            | 14.7                        | 40.4 | 44.8  |            | 21.6                       | 74   | 4.4   |            |            |
| Total %                 | 2.4                         | 3.8  | 3.8   | 9.9        | 6.4                        | 19.9 | 2.6   | 28.9       | 3.8                         | 10.5 | 11.7  | 26.1       | 7.6                        | 26.1 | 1.6   | 35.2       |            |
| PASSENGER VEHICLES      | 51                          | 86   | 83    | 220        | 149                        | 459  | 60    | 668        | 94                          | 256  | 275   | 625        | 182                        | 607  | 37    | 826        | 2339       |
| % PASSENGER VEHICLES    | 87.9                        | 93.5 | 90.2  | 90.9       | 95.5                       | 94.3 | 93.8  | 94.5       | 100                         | 99.2 | 96.2  | 98         | 97.8                       | 95.1 | 97.4  | 95.8       | 95.5       |
| LARGE 2 AXLE VEHICLES   | 6                           | 6    | 5     | 17         | 7                          | 19   | 4     | 30         | 0                           | 2    | 11    | 13         | 2                          | 22   | 1     | 25         | 85         |
| % LARGE 2 AXLE VEHICLES | 10.3                        | 6.5  | 5.4   | 7          | 4.5                        | 3.9  | 6.2   | 4.2        | 0                           | 0.8  | 3.8   | 2          | 1.1                        | 3.4  | 2.6   | 2.9        | 3.5        |
| 3 AXLE VEHICLES         | 0                           | 0    | 3     | 3          | 0                          | 5    | 0     | 5          | 0                           | 0    | 0     | 0          | 0                          | 2    | 0     | 2          | 10         |
| % 3 AXLE VEHICLES       | 0                           | 0    | 3.3   | 1.2        | 0                          | 1    | 0     | 0.7        | 0                           | 0    | 0     | 0          | 0                          | 0.3  | 0     | 0.2        | 0.4        |
| 4+ AXLE VEHICLES        | 1                           | 0    | 1     | 2          | 0                          | 4    | 0     | 4          | 0                           | 0    | 0     | 0          | 2                          | 7    | 0     | 9          | 15         |
| % 4+ AXLE VEHICLES      | 1.7                         | 0    | 1.1   | 0.8        | 0                          | 0.8  | 0     | 0.6        | 0                           | 0    | 0     | 0          | 1.1                        | 1.1  | 0     | 1          | 0.6        |

|                                                            | CITRUS AVENUE<br>Southbound |      |       |            | JURUPA AVENUE<br>Westbound |      |       |            | CITRUS AVENUE<br>Northbound |      |       |            | JURUPA AVENUE<br>Eastbound |      |       |            |            |
|------------------------------------------------------------|-----------------------------|------|-------|------------|----------------------------|------|-------|------------|-----------------------------|------|-------|------------|----------------------------|------|-------|------------|------------|
| Start Time                                                 | Left                        | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                        | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                             |      |       |            |                            |      |       |            |                             |      |       |            |                            |      |       |            |            |
| Peak Hour for Entire Intersection Begins at 07:00 AM       |                             |      |       |            |                            |      |       |            |                             |      |       |            |                            |      |       |            |            |
| 07:00 AM                                                   | 6                           | 9    | 3     | 18         | 13                         | 95   | 4     | 112        | 23                          | 35   | 51    | 109        | 20                         | 72   | 7     | 99         | 338        |
| 07:15 AM                                                   | 5                           | 15   | 14    | 34         | 24                         | 75   | 11    | 110        | 14                          | 33   | 47    | 94         | 25                         | 105  | 6     | 136        | 374        |
| 07:30 AM                                                   | 7                           | 12   | 7     | 26         | 28                         | 76   | 10    | 114        | 10                          | 48   | 44    | 102        | 30                         | 114  | 4     | 148        | 390        |
| 07:45 AM                                                   | 14                          | 14   | 17    | 45         | 23                         | 64   | 6     | 93         | 11                          | 26   | 54    | 91         | 32                         | 88   | 3     | 123        | 352        |
| Total Volume                                               | 32                          | 50   | 41    | 123        | 88                         | 310  | 31    | 429        | 58                          | 142  | 196   | 396        | 107                        | 379  | 20    | 506        | 1454       |
| % App. Total                                               | 26                          | 40.7 | 33.3  |            | 20.5                       | 72.3 | 7.2   |            | 14.6                        | 35.9 | 49.5  |            | 21.1                       | 74.9 | 4     |            |            |
| PHF                                                        | .571                        | .833 | .603  | .683       | .786                       | .816 | .705  | .941       | .630                        | .740 | .907  | .908       | .836                       | .831 | .714  | .855       | .932       |



COUNTS UNLIMITED INC.  
25424 JACLYN AVENUE  
MORENO VALLEY CA. 92557  
951-247-6716

CITY OF FONTANA  
N/S: CITRUS AVENUE  
E/W: JURUPA AVENUE  
WEATHER: SUNNY

File Name : FOCIJUPM  
Site Code : 0438835  
Start Date : 4/25/2006  
Page No : 1

Groups Printed- PASSENGER VEHICLES - LARGE 2 AXLE VEHICLES - 3 AXLE VEHICLES - 4+ AXLE TRUCKS

|                         | CITRUS AVENUE<br>Southbound |      |       |            | JURUPA AVENUE<br>Westbound |      |       |            | CITRUS AVENUE<br>Northbound |      |       |            | JURUPA AVENUE<br>Eastbound |      |       |            |            |
|-------------------------|-----------------------------|------|-------|------------|----------------------------|------|-------|------------|-----------------------------|------|-------|------------|----------------------------|------|-------|------------|------------|
| Start Time              | Left                        | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                        | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Int. Total |
| 04:00 PM                | 16                          | 30   | 18    | 64         | 28                         | 48   | 6     | 82         | 6                           | 20   | 21    | 47         | 12                         | 120  | 10    | 142        | 335        |
| 04:15 PM                | 9                           | 38   | 21    | 68         | 36                         | 70   | 8     | 114        | 5                           | 26   | 23    | 54         | 17                         | 145  | 11    | 173        | 409        |
| 04:30 PM                | 17                          | 20   | 20    | 57         | 29                         | 67   | 8     | 104        | 5                           | 17   | 26    | 48         | 25                         | 177  | 13    | 215        | 424        |
| 04:45 PM                | 21                          | 22   | 18    | 61         | 31                         | 77   | 4     | 112        | 9                           | 16   | 16    | 41         | 23                         | 176  | 16    | 215        | 429        |
| Total                   | 63                          | 110  | 77    | 250        | 124                        | 262  | 26    | 412        | 25                          | 79   | 86    | 190        | 77                         | 618  | 50    | 745        | 1597       |
| 05:00 PM                | 20                          | 25   | 24    | 69         | 37                         | 82   | 2     | 121        | 7                           | 18   | 20    | 45         | 22                         | 169  | 18    | 209        | 444        |
| 05:15 PM                | 26                          | 30   | 33    | 89         | 33                         | 87   | 6     | 126        | 8                           | 13   | 20    | 41         | 15                         | 154  | 25    | 194        | 450        |
| 05:30 PM                | 15                          | 23   | 24    | 62         | 26                         | 80   | 11    | 117        | 12                          | 29   | 29    | 70         | 19                         | 153  | 20    | 192        | 441        |
| 05:45 PM                | 12                          | 34   | 33    | 79         | 29                         | 78   | 12    | 119        | 3                           | 29   | 31    | 63         | 26                         | 137  | 12    | 175        | 436        |
| Total                   | 73                          | 112  | 114   | 299        | 125                        | 327  | 31    | 483        | 30                          | 89   | 100   | 219        | 82                         | 613  | 75    | 770        | 1771       |
| Grand Total             | 136                         | 222  | 191   | 549        | 249                        | 589  | 57    | 895        | 55                          | 168  | 186   | 409        | 159                        | 1231 | 125   | 1515       | 3368       |
| Apprch %                | 24.8                        | 40.4 | 34.8  |            | 27.8                       | 65.8 | 6.4   |            | 13.4                        | 41.1 | 45.5  |            | 10.5                       | 81.3 | 8.3   |            |            |
| Total %                 | 4                           | 6.6  | 5.7   | 16.3       | 7.4                        | 17.5 | 1.7   | 26.6       | 1.6                         | 5    | 5.5   | 12.1       | 4.7                        | 36.5 | 3.7   | 45         |            |
| PASSENGER VEHICLES      | 131                         | 219  | 184   | 534        | 243                        | 577  | 53    | 873        | 54                          | 164  | 183   | 401        | 154                        | 1199 | 125   | 1478       | 3286       |
| % PASSENGER VEHICLES    | 96.3                        | 98.6 | 96.3  | 97.3       | 97.6                       | 98   | 93    | 97.5       | 98.2                        | 97.6 | 98.4  | 98         | 96.9                       | 97.4 | 100   | 97.6       | 97.6       |
| LARGE 2 AXLE VEHICLES   | 4                           | 2    | 3     | 9          | 4                          | 9    | 0     | 13         | 1                           | 3    | 3     | 7          | 0                          | 13   | 0     | 13         | 42         |
| % LARGE 2 AXLE VEHICLES | 2.9                         | 0.9  | 1.6   | 1.6        | 1.6                        | 1.5  | 0     | 1.5        | 1.8                         | 1.8  | 1.6   | 1.7        | 0                          | 1.1  | 0     | 0.9        | 1.2        |
| 3 AXLE VEHICLES         | 1                           | 1    | 1     | 3          | 2                          | 2    | 2     | 6          | 0                           | 1    | 0     | 1          | 2                          | 10   | 0     | 12         | 22         |
| % 3 AXLE VEHICLES       | 0.7                         | 0.5  | 0.5   | 0.5        | 0.8                        | 0.3  | 3.5   | 0.7        | 0                           | 0.6  | 0     | 0.2        | 1.3                        | 0.8  | 0     | 0.8        | 0.7        |
| 4+ AXLE TRUCKS          | 0                           | 0    | 3     | 3          | 0                          | 1    | 2     | 3          | 0                           | 0    | 0     | 0          | 3                          | 9    | 0     | 12         | 18         |
| % 4+ AXLE TRUCKS        | 0                           | 0    | 1.6   | 0.5        | 0                          | 0.2  | 3.5   | 0.3        | 0                           | 0    | 0     | 0          | 1.9                        | 0.7  | 0     | 0.8        | 0.5        |

|                                                            | CITRUS AVENUE<br>Southbound |      |       |            | JURUPA AVENUE<br>Westbound |      |       |            | CITRUS AVENUE<br>Northbound |      |       |            | JURUPA AVENUE<br>Eastbound |      |       |            |            |
|------------------------------------------------------------|-----------------------------|------|-------|------------|----------------------------|------|-------|------------|-----------------------------|------|-------|------------|----------------------------|------|-------|------------|------------|
| Start Time                                                 | Left                        | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                        | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 |                             |      |       |            |                            |      |       |            |                             |      |       |            |                            |      |       |            |            |
| Peak Hour for Entire Intersection Begins at 05:00 PM       |                             |      |       |            |                            |      |       |            |                             |      |       |            |                            |      |       |            |            |
| 05:00 PM                                                   | 20                          | 25   | 24    | 69         | 37                         | 82   | 2     | 121        | 7                           | 18   | 20    | 45         | 22                         | 169  | 18    | 209        | 444        |
| 05:15 PM                                                   | 26                          | 30   | 33    | 89         | 33                         | 87   | 6     | 126        | 8                           | 13   | 20    | 41         | 15                         | 154  | 25    | 194        | 450        |
| 05:30 PM                                                   | 15                          | 23   | 24    | 62         | 26                         | 80   | 11    | 117        | 12                          | 29   | 29    | 70         | 19                         | 153  | 20    | 192        | 441        |
| 05:45 PM                                                   | 12                          | 34   | 33    | 79         | 29                         | 78   | 12    | 119        | 3                           | 29   | 31    | 63         | 26                         | 137  | 12    | 175        | 436        |
| Total Volume                                               | 73                          | 112  | 114   | 299        | 125                        | 327  | 31    | 483        | 30                          | 89   | 100   | 219        | 82                         | 613  | 75    | 770        | 1771       |
| % App. Total                                               | 24.4                        | 37.5 | 38.1  |            | 25.9                       | 67.7 | 6.4   |            | 13.7                        | 40.6 | 45.7  |            | 10.6                       | 79.6 | 9.7   |            |            |
| PHF                                                        | .702                        | .824 | .864  | .840       | .845                       | .940 | .646  | .958       | .625                        | .767 | .806  | .782       | .788                       | .907 | .750  | .921       | .984       |

COUNTS UNLIMITED INC.  
25424 JACLYN AVENUE  
MORENO VALLEY CA. 92557  
951-247-6716

CITY OF FONTANA  
N/S; SIERRA AVENUE  
E/W; SLOVER AVENUE  
WEATHER; SUNNY

File Name : FOSISLAM  
Site Code : 0438882  
Start Date : 4/20/2006  
Page No : 1

| Groups Printed- PASSENGER VEHICLES - LARGE 2 AXLE VEHICLES - 3 AXLE VEHICLES - 4+ AXLE TRUCKS |                             |      |       |            |                            |      |       |            |                             |      |       |            |                            |      |       |            |            |
|-----------------------------------------------------------------------------------------------|-----------------------------|------|-------|------------|----------------------------|------|-------|------------|-----------------------------|------|-------|------------|----------------------------|------|-------|------------|------------|
|                                                                                               | SIERRA AVENUE<br>Southbound |      |       |            | SLOVER AVENUE<br>Westbound |      |       |            | SIERRA AVENUE<br>Northbound |      |       |            | SLOVER AVENUE<br>Eastbound |      |       |            |            |
| Start Time                                                                                    | Left                        | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                        | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Int. Total |
| 07:00 AM                                                                                      | 121                         | 108  | 66    | 295        | 2                          | 43   | 65    | 110        | 20                          | 184  | 7     | 211        | 33                         | 25   | 6     | 64         | 680        |
| 07:15 AM                                                                                      | 105                         | 114  | 69    | 288        | 8                          | 30   | 105   | 143        | 22                          | 245  | 18    | 285        | 46                         | 17   | 8     | 71         | 787        |
| 07:30 AM                                                                                      | 70                          | 146  | 67    | 283        | 8                          | 45   | 81    | 134        | 18                          | 258  | 7     | 283        | 56                         | 22   | 12    | 90         | 790        |
| 07:45 AM                                                                                      | 82                          | 144  | 53    | 279        | 3                          | 39   | 64    | 106        | 34                          | 246  | 15    | 295        | 32                         | 22   | 12    | 66         | 746        |
| Total                                                                                         | 378                         | 512  | 255   | 1145       | 21                         | 157  | 315   | 493        | 94                          | 933  | 47    | 1074       | 167                        | 86   | 38    | 291        | 3003       |
| 08:00 AM                                                                                      | 45                          | 146  | 34    | 225        | 3                          | 27   | 80    | 110        | 18                          | 225  | 18    | 261        | 30                         | 14   | 7     | 51         | 647        |
| 08:15 AM                                                                                      | 64                          | 108  | 33    | 205        | 12                         | 35   | 48    | 95         | 25                          | 237  | 18    | 280        | 33                         | 33   | 10    | 76         | 656        |
| 08:30 AM                                                                                      | 60                          | 131  | 30    | 221        | 11                         | 31   | 65    | 107        | 16                          | 198  | 14    | 228        | 38                         | 23   | 6     | 67         | 623        |
| 08:45 AM                                                                                      | 62                          | 127  | 27    | 216        | 12                         | 35   | 90    | 137        | 9                           | 174  | 21    | 204        | 28                         | 22   | 9     | 59         | 616        |
| Total                                                                                         | 231                         | 512  | 124   | 867        | 38                         | 128  | 283   | 449        | 68                          | 834  | 71    | 973        | 129                        | 92   | 32    | 253        | 2542       |
| Grand Total                                                                                   | 609                         | 1024 | 379   | 2012       | 59                         | 285  | 598   | 942        | 162                         | 1767 | 118   | 2047       | 296                        | 178  | 70    | 544        | 5545       |
| Apprch %                                                                                      | 30.3                        | 50.9 | 18.8  |            | 6.3                        | 30.3 | 63.5  |            | 7.9                         | 86.3 | 5.8   |            | 54.4                       | 32.7 | 12.9  |            |            |
| Total %                                                                                       | 11                          | 18.5 | 6.8   | 36.3       | 1.1                        | 5.1  | 10.8  | 17         | 2.9                         | 31.9 | 2.1   | 36.9       | 5.3                        | 3.2  | 1.3   | 9.8        |            |
| PASSENGER VEHICLES                                                                            | 573                         | 955  | 352   | 1880       | 56                         | 263  | 571   | 890        | 131                         | 1722 | 109   | 1962       | 268                        | 139  | 49    | 456        | 5188       |
| % PASSENGER VEHICLES                                                                          | 94.1                        | 93.3 | 92.9  | 93.4       | 94.9                       | 92.3 | 95.5  | 94.5       | 80.9                        | 97.5 | 92.4  | 95.8       | 90.5                       | 78.1 | 70    | 83.8       | 93.6       |
| LARGE 2 AXLE VEHICLES                                                                         | 15                          | 42   | 15    | 72         | 3                          | 11   | 16    | 30         | 7                           | 23   | 6     | 36         | 17                         | 20   | 10    | 47         | 185        |
| % LARGE 2 AXLE VEHICLES                                                                       | 2.5                         | 4.1  | 4     | 3.6        | 5.1                        | 3.9  | 2.7   | 3.2        | 4.3                         | 1.3  | 5.1   | 1.8        | 5.7                        | 11.2 | 14.3  | 8.6        | 3.3        |
| 3 AXLE VEHICLES                                                                               | 5                           | 2    | 2     | 9          | 0                          | 4    | 9     | 13         | 1                           | 6    | 2     | 9          | 3                          | 2    | 1     | 6          | 37         |
| % 3 AXLE VEHICLES                                                                             | 0.8                         | 0.2  | 0.5   | 0.4        | 0                          | 1.4  | 1.5   | 1.4        | 0.6                         | 0.3  | 1.7   | 0.4        | 1                          | 1.1  | 1.4   | 1.1        | 0.7        |
| 4+ AXLE TRUCKS                                                                                | 16                          | 25   | 10    | 51         | 0                          | 7    | 2     | 9          | 23                          | 16   | 1     | 40         | 8                          | 17   | 10    | 35         | 135        |
| % 4+ AXLE TRUCKS                                                                              | 2.6                         | 2.4  | 2.6   | 2.5        | 0                          | 2.5  | 0.3   | 1          | 14.2                        | 0.9  | 0.8   | 2          | 2.7                        | 9.6  | 14.3  | 6.4        | 2.4        |

|                                                            | SIERRA AVENUE<br>Southbound |      |       |            | SLOVER AVENUE<br>Westbound |      |       |            | SIERRA AVENUE<br>Northbound |      |       |            | SLOVER AVENUE<br>Eastbound |      |       |            |            |
|------------------------------------------------------------|-----------------------------|------|-------|------------|----------------------------|------|-------|------------|-----------------------------|------|-------|------------|----------------------------|------|-------|------------|------------|
| Start Time                                                 | Left                        | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                        | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |                             |      |       |            |                            |      |       |            |                             |      |       |            |                            |      |       |            |            |
| Peak Hour for Entire Intersection Begins at 07:00 AM       |                             |      |       |            |                            |      |       |            |                             |      |       |            |                            |      |       |            |            |
| 07:00 AM                                                   | 121                         | 108  | 66    | 295        | 2                          | 43   | 65    | 110        | 20                          | 184  | 7     | 211        | 33                         | 25   | 6     | 64         | 680        |
| 07:15 AM                                                   | 105                         | 114  | 69    | 288        | 8                          | 30   | 105   | 143        | 22                          | 245  | 18    | 285        | 46                         | 17   | 8     | 71         | 787        |
| 07:30 AM                                                   | 70                          | 146  | 67    | 283        | 8                          | 45   | 81    | 134        | 18                          | 258  | 7     | 283        | 56                         | 22   | 12    | 90         | 790        |
| 07:45 AM                                                   | 82                          | 144  | 53    | 279        | 3                          | 39   | 64    | 106        | 34                          | 246  | 15    | 295        | 32                         | 22   | 12    | 66         | 746        |
| Total Volume                                               | 378                         | 512  | 255   | 1145       | 21                         | 157  | 315   | 493        | 94                          | 933  | 47    | 1074       | 167                        | 86   | 38    | 291        | 3003       |
| % App. Total                                               | 33                          | 44.7 | 22.3  |            | 4.3                        | 31.8 | 63.9  |            | 8.8                         | 86.9 | 4.4   |            | 57.4                       | 29.6 | 13.1  |            |            |
| PHF                                                        | .781                        | .877 | .924  | .970       | .656                       | .872 | .750  | .862       | .691                        | .904 | .653  | .910       | .746                       | .860 | .792  | .808       | .950       |

COUNTS UNLIMITED INC.  
25424 JACLYN AVENUE  
MORENO VALLEY CA. 92557  
951-247-6716

CITY OF FONTANA  
N/S; SIERRA AVENUE  
E/W; SLOVER AVENUE  
WEATHER; SUNNY

File Name : FOSISLPM  
Site Code : 0438882  
Start Date : 4/20/2006  
Page No : 1

Groups Printed- PASSENGER VEHICLES - LARGE 2 AXLE VEHICLES - 3 AXLE VEHICLES - 4+ AXLE TRUCKS  
SIERRA AVENUE SLOVER AVENUE SIERRA AVENUE SLOVER AVENUE

| Start Time              | SIERRA AVENUE Southbound |      |       |            | SLOVER AVENUE Westbound |      |       |            | SIERRA AVENUE Northbound |      |       |            | SLOVER AVENUE Eastbound |      |       |            | Int. Total |
|-------------------------|--------------------------|------|-------|------------|-------------------------|------|-------|------------|--------------------------|------|-------|------------|-------------------------|------|-------|------------|------------|
|                         | Left                     | Thru | Right | App. Total | Left                    | Thru | Right | App. Total | Left                     | Thru | Right | App. Total | Left                    | Thru | Right | App. Total |            |
| 04:00 PM                | 50                       | 78   | 18    | 146        | 15                      | 24   | 95    | 134        | 1                        | 116  | 28    | 145        | 83                      | 45   | 10    | 138        | 563        |
| 04:15 PM                | 96                       | 159  | 34    | 289        | 39                      | 43   | 129   | 211        | 2                        | 259  | 33    | 294        | 84                      | 120  | 11    | 215        | 1009       |
| 04:30 PM                | 115                      | 161  | 34    | 310        | 21                      | 27   | 133   | 181        | 1                        | 185  | 34    | 220        | 129                     | 88   | 10    | 227        | 938        |
| 04:45 PM                | 82                       | 163  | 33    | 278        | 23                      | 45   | 131   | 199        | 14                       | 230  | 16    | 260        | 134                     | 98   | 15    | 247        | 984        |
| Total                   | 343                      | 561  | 119   | 1023       | 98                      | 139  | 488   | 725        | 18                       | 790  | 111   | 919        | 430                     | 351  | 46    | 827        | 3494       |
| 05:00 PM                | 127                      | 178  | 44    | 349        | 23                      | 40   | 125   | 188        | 14                       | 233  | 21    | 268        | 120                     | 103  | 13    | 236        | 1041       |
| 05:15 PM                | 130                      | 182  | 47    | 359        | 31                      | 51   | 166   | 248        | 10                       | 216  | 30    | 256        | 135                     | 101  | 17    | 253        | 1116       |
| 05:30 PM                | 122                      | 187  | 35    | 344        | 37                      | 47   | 127   | 211        | 10                       | 197  | 23    | 230        | 100                     | 91   | 14    | 205        | 990        |
| 05:45 PM                | 101                      | 142  | 39    | 282        | 27                      | 31   | 113   | 171        | 8                        | 202  | 29    | 239        | 94                      | 88   | 19    | 201        | 893        |
| Total                   | 480                      | 689  | 165   | 1334       | 118                     | 169  | 531   | 818        | 42                       | 848  | 103   | 993        | 449                     | 383  | 63    | 895        | 4040       |
| Grand Total             | 823                      | 1250 | 284   | 2357       | 216                     | 308  | 1019  | 1543       | 60                       | 1638 | 214   | 1912       | 879                     | 734  | 109   | 1722       | 7534       |
| Apprch %                | 34.9                     | 53   | 12    |            | 14                      | 20   | 66    |            | 3.1                      | 85.7 | 11.2  |            | 51                      | 42.6 | 6.3   |            |            |
| Total %                 | 10.9                     | 16.6 | 3.8   | 31.3       | 2.9                     | 4.1  | 13.5  | 20.5       | 0.8                      | 21.7 | 2.8   | 25.4       | 11.7                    | 9.7  | 1.4   | 22.9       |            |
| PASSENGER VEHICLES      | 784                      | 1223 | 268   | 2275       | 213                     | 279  | 995   | 1487       | 53                       | 1594 | 206   | 1853       | 817                     | 659  | 100   | 1576       | 7191       |
| % PASSENGER VEHICLES    | 95.3                     | 97.8 | 94.4  | 96.5       | 98.6                    | 90.6 | 97.6  | 96.4       | 88.3                     | 97.3 | 96.3  | 96.9       | 92.9                    | 89.8 | 91.7  | 91.5       | 95.4       |
| LARGE 2 AXLE VEHICLES   | 21                       | 23   | 9     | 53         | 2                       | 10   | 15    | 27         | 2                        | 27   | 5     | 34         | 24                      | 39   | 5     | 68         | 182        |
| % LARGE 2 AXLE VEHICLES | 2.6                      | 1.8  | 3.2   | 2.2        | 0.9                     | 3.2  | 1.5   | 1.7        | 3.3                      | 1.6  | 2.3   | 1.8        | 2.7                     | 5.3  | 4.6   | 3.9        | 2.4        |
| 3 AXLE VEHICLES         | 8                        | 2    | 3     | 13         | 0                       | 7    | 3     | 10         | 5                        | 10   | 0     | 15         | 16                      | 9    | 2     | 27         | 65         |
| % 3 AXLE VEHICLES       | 1                        | 0.2  | 1.1   | 0.6        | 0                       | 2.3  | 0.3   | 0.6        | 8.3                      | 0.6  | 0     | 0.8        | 1.8                     | 1.2  | 1.8   | 1.6        | 0.9        |
| 4+ AXLE TRUCKS          | 10                       | 2    | 4     | 16         | 1                       | 12   | 6     | 19         | 0                        | 7    | 3     | 10         | 22                      | 27   | 2     | 51         | 96         |
| % 4+ AXLE TRUCKS        | 1.2                      | 0.2  | 1.4   | 0.7        | 0.5                     | 3.9  | 0.6   | 1.2        | 0                        | 0.4  | 1.4   | 0.5        | 2.5                     | 3.7  | 1.8   | 3          | 1.3        |

| Start Time                                                 | SIERRA AVENUE<br>Southbound |      |       |            | SLOVER AVENUE<br>Westbound |      |       |            | SIERRA AVENUE<br>Northbound |      |       |            | SLOVER AVENUE<br>Eastbound |      |       |            | Int. Total |
|------------------------------------------------------------|-----------------------------|------|-------|------------|----------------------------|------|-------|------------|-----------------------------|------|-------|------------|----------------------------|------|-------|------------|------------|
|                                                            | Left                        | Thru | Right | App. Total | Left                       | Thru | Right | App. Total | Left                        | Thru | Right | App. Total | Left                       | Thru | Right | App. Total |            |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 |                             |      |       |            |                            |      |       |            |                             |      |       |            |                            |      |       |            |            |
| Peak Hour for Entire Intersection Begins at 04:45 PM       |                             |      |       |            |                            |      |       |            |                             |      |       |            |                            |      |       |            |            |
| 04:45 PM                                                   | 82                          | 163  | 33    | 278        | 23                         | 45   | 131   | 199        | 14                          | 230  | 16    | 260        | 134                        | 98   | 15    | 247        | 984        |
| 05:00 PM                                                   | 127                         | 178  | 44    | 349        | 23                         | 40   | 125   | 188        | 14                          | 233  | 21    | 268        | 120                        | 103  | 13    | 236        | 1041       |
| 05:15 PM                                                   | 130                         | 182  | 47    | 359        | 31                         | 51   | 166   | 248        | 10                          | 216  | 30    | 256        | 135                        | 101  | 17    | 253        | 1116       |
| 05:30 PM                                                   | 122                         | 187  | 35    | 344        | 37                         | 47   | 127   | 211        | 10                          | 197  | 23    | 230        | 100                        | 91   | 14    | 205        | 990        |
| Total Volume                                               | 461                         | 710  | 159   | 1330       | 114                        | 183  | 549   | 846        | 48                          | 876  | 90    | 1014       | 489                        | 393  | 59    | 941        | 4131       |
| % App. Total                                               | 34.7                        | 53.4 | 12    |            | 13.5                       | 21.6 | 64.9  |            | 4.7                         | 86.4 | 8.9   |            | 52                         | 41.8 | 6.3   |            |            |
| PHF                                                        | .887                        | .949 | .846  | .926       | .770                       | .897 | .827  | .853       | .857                        | .940 | .750  | .946       | .906                       | .954 | .868  | .930       | .925       |

## Intersection Turning Movement

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

|                                           |                                                    |                                |                                                                                           |
|-------------------------------------------|----------------------------------------------------|--------------------------------|-------------------------------------------------------------------------------------------|
| <b>DATE:</b><br>2/10/09<br><b>TUESDAY</b> | <b>LOCATION:</b><br>NORTH & SOUTH:<br>EAST & WEST: | FONTANA<br>SIERRA<br>SANTA ANA | <b>PROJECT #:</b><br>CA09-0213-1<br><b>LOCATION #:</b><br>41<br><b>CONTROL:</b><br>SIGNAL |
|-------------------------------------------|----------------------------------------------------|--------------------------------|-------------------------------------------------------------------------------------------|

|                       |  |
|-----------------------|--|
| <b>NOTES:</b><br><br> |  |
|-----------------------|--|

|                |            | NORTHBOUND<br>SIERRA |         |         | SOUTHBOUND<br>SIERRA |         |         | EASTBOUND<br>SANTA ANA |         |         | WESTBOUND<br>SANTA ANA |         |         |       |       |
|----------------|------------|----------------------|---------|---------|----------------------|---------|---------|------------------------|---------|---------|------------------------|---------|---------|-------|-------|
| LANES:         |            | NL<br>1              | NT<br>2 | NR<br>1 | SL<br>1              | ST<br>2 | SR<br>1 | EL<br>1                | ET<br>1 | ER<br>1 | WL<br>1                | WT<br>1 | WR<br>1 | TOTAL |       |
| AM             | 6:30 AM    |                      |         |         |                      |         |         |                        |         |         |                        |         |         | 0     |       |
|                | 6:45 AM    |                      |         |         |                      |         |         |                        |         |         |                        |         |         | 0     |       |
|                | 7:00 AM    | 8                    | 177     | 12      | 7                    | 92      | 18      | 17                     | 13      | 18      | 8                      | 19      | 18      | 407   |       |
|                | 7:15 AM    | 15                   | 199     | 8       | 13                   | 108     | 16      | 23                     | 15      | 9       | 11                     | 26      | 11      | 454   |       |
|                | 7:30 AM    | 20                   | 195     | 9       | 10                   | 115     | 20      | 28                     | 11      | 13      | 7                      | 22      | 13      | 463   |       |
|                | 7:45 AM    | 12                   | 218     | 9       | 18                   | 111     | 14      | 33                     | 14      | 15      | 14                     | 22      | 10      | 490   |       |
|                | 8:00 AM    | 29                   | 217     | 4       | 15                   | 95      | 21      | 29                     | 15      | 7       | 12                     | 19      | 14      | 477   |       |
|                | 8:15 AM    | 14                   | 202     | 10      | 12                   | 90      | 11      | 23                     | 20      | 8       | 8                      | 20      | 22      | 440   |       |
|                | 8:30 AM    | 22                   | 187     | 3       | 5                    | 106     | 20      | 28                     | 12      | 12      | 7                      | 13      | 13      | 428   |       |
|                | 8:45 AM    | 18                   | 170     | 7       | 8                    | 85      | 15      | 20                     | 16      | 11      | 5                      | 14      | 12      | 381   |       |
|                | 9:00 AM    |                      |         |         |                      |         |         |                        |         |         |                        |         |         | 0     |       |
|                | 9:15 AM    |                      |         |         |                      |         |         |                        |         |         |                        |         |         | 0     |       |
|                | VOLUMES    | 138                  | 1,565   | 62      | 88                   | 802     | 135     | 201                    | 116     | 93      | 72                     | 155     | 113     |       | 3,540 |
|                | APPROACH % | 8%                   | 89%     | 4%      | 9%                   | 78%     | 13%     | 49%                    | 28%     | 23%     | 21%                    | 46%     | 33%     |       |       |
| APP/DEPART     | 1,765      | /                    | 1,879   | 1,025   | /                    | 967     | 410     | /                      | 266     | 340     | /                      | 428     |         | 0     |       |
| BEGIN PEAK HR  | 7:15 AM    |                      |         |         |                      |         |         |                        |         |         |                        |         |         |       |       |
| VOLUMES        | 76         | 829                  | 30      | 56      | 429                  | 71      | 113     | 55                     | 44      | 44      | 89                     | 48      |         | 1,884 |       |
| APPROACH %     | 8%         | 89%                  | 3%      | 10%     | 77%                  | 13%     | 53%     | 26%                    | 21%     | 24%     | 49%                    | 27%     |         |       |       |
| PEAK HR FACTOR |            | 0.935                |         |         | 0.959                |         |         | 0.855                  |         |         | 0.943                  |         |         | 0.961 |       |
| APP/DEPART     | 935        | /                    | 990     | 556     | /                    | 517     | 212     | /                      | 141     | 181     | /                      | 236     |         | 0     |       |
| PM             | 3:30 PM    |                      |         |         |                      |         |         |                        |         |         |                        |         |         | 0     |       |
|                | 3:45 PM    |                      |         |         |                      |         |         |                        |         |         |                        |         |         | 0     |       |
|                | 4:00 PM    | 19                   | 156     | 10      | 20                   | 209     | 27      | 51                     | 26      | 30      | 6                      | 22      | 22      | 598   |       |
|                | 4:15 PM    | 18                   | 179     | 3       | 10                   | 202     | 28      | 67                     | 23      | 32      | 15                     | 19      | 26      | 622   |       |
|                | 4:30 PM    | 32                   | 189     | 3       | 14                   | 234     | 29      | 59                     | 36      | 30      | 11                     | 25      | 24      | 686   |       |
|                | 4:45 PM    | 22                   | 221     | 5       | 26                   | 244     | 32      | 66                     | 29      | 36      | 15                     | 20      | 30      | 746   |       |
|                | 5:00 PM    | 26                   | 201     | 4       | 19                   | 250     | 30      | 61                     | 29      | 28      | 6                      | 21      | 21      | 696   |       |
|                | 5:15 PM    | 33                   | 207     | 7       | 20                   | 232     | 25      | 60                     | 33      | 31      | 19                     | 16      | 28      | 711   |       |
|                | 5:30 PM    | 20                   | 189     | 7       | 18                   | 202     | 26      | 52                     | 42      | 20      | 11                     | 22      | 31      | 640   |       |
|                | 5:45 PM    | 19                   | 192     | 2       | 11                   | 211     | 20      | 55                     | 28      | 19      | 13                     | 18      | 20      | 608   |       |
|                | 6:00 PM    |                      |         |         |                      |         |         |                        |         |         |                        |         |         | 0     |       |
|                | 6:15 PM    |                      |         |         |                      |         |         |                        |         |         |                        |         |         | 0     |       |
|                | VOLUMES    | 189                  | 1,534   | 41      | 138                  | 1,784   | 217     | 471                    | 246     | 226     | 96                     | 163     | 202     |       | 5,307 |
|                | APPROACH % | 11%                  | 87%     | 2%      | 6%                   | 83%     | 10%     | 50%                    | 26%     | 24%     | 21%                    | 35%     | 44%     |       |       |
| APP/DEPART     | 1,764      | /                    | 2,207   | 2,139   | /                    | 2,106   | 943     | /                      | 425     | 461     | /                      | 569     |         | 0     |       |
| BEGIN PEAK HR  | 4:30 PM    |                      |         |         |                      |         |         |                        |         |         |                        |         |         |       |       |
| VOLUMES        | 113        | 818                  | 19      | 79      | 960                  | 116     | 246     | 127                    | 125     | 51      | 82                     | 103     |         | 2,839 |       |
| APPROACH %     | 12%        | 86%                  | 2%      | 7%      | 83%                  | 10%     | 49%     | 26%                    | 25%     | 22%     | 35%                    | 44%     |         |       |       |
| PEAK HR FACTOR |            | 0.958                |         |         | 0.956                |         |         | 0.950                  |         |         | 0.908                  |         |         | 0.951 |       |
| APP/DEPART     | 950        | /                    | 1,167   | 1,155   | /                    | 1,136   | 498     | /                      | 225     | 236     | /                      | 311     |         | 0     |       |

COUNTS UNLIMITED INC.  
25424 JACLYN AVENUE  
MORENO VALLEY CA 92557  
951-247-6716

CITY OF FONTANA  
N/S: SIERRA AVENUE  
E/W: JURUPA AVENUE  
WEATHER: SUNNY

File Name : FOSIJUAM  
Site Code : 0438809  
Start Date : 4/18/2006  
Page No : 1

| Groups Printed- PASSENGER VEHICLES - LARGE 2 AXLE VEHICLES - 3 AXLE VEHICLES - 4+ AXLE TRUCKS |      |      |       |               |      |      |       |               |      |      |       |               |      |      |       |            |            |
|-----------------------------------------------------------------------------------------------|------|------|-------|---------------|------|------|-------|---------------|------|------|-------|---------------|------|------|-------|------------|------------|
| SIERRA AVENUE                                                                                 |      |      |       | JURUPA AVENUE |      |      |       | SIERRA AVENUE |      |      |       | JURUPA AVENUE |      |      |       |            |            |
| Southbound                                                                                    |      |      |       | Westbound     |      |      |       | Northbound    |      |      |       | Eastbound     |      |      |       |            |            |
| Start Time                                                                                    | Left | Thru | Right | App. Total    | Left | Thru | Right | App. Total    | Left | Thru | Right | App. Total    | Left | Thru | Right | App. Total | Int. Total |
| 07:00 AM                                                                                      | 8    | 66   | 40    | 114           | 34   | 44   | 12    | 90            | 23   | 120  | 20    | 163           | 69   | 75   | 19    | 163        | 530        |
| 07:15 AM                                                                                      | 11   | 87   | 36    | 134           | 25   | 79   | 29    | 133           | 37   | 124  | 21    | 182           | 85   | 81   | 22    | 188        | 637        |
| 07:30 AM                                                                                      | 7    | 93   | 31    | 131           | 24   | 58   | 36    | 118           | 29   | 137  | 13    | 179           | 77   | 40   | 25    | 142        | 570        |
| 07:45 AM                                                                                      | 9    | 74   | 37    | 120           | 20   | 44   | 22    | 86            | 36   | 124  | 18    | 178           | 72   | 70   | 29    | 171        | 555        |
| Total                                                                                         | 35   | 320  | 144   | 499           | 103  | 225  | 99    | 427           | 125  | 505  | 72    | 702           | 303  | 266  | 95    | 664        | 2292       |
| 08:00 AM                                                                                      | 13   | 62   | 41    | 116           | 23   | 71   | 27    | 121           | 24   | 106  | 9     | 139           | 60   | 44   | 20    | 124        | 500        |
| 08:15 AM                                                                                      | 9    | 66   | 33    | 108           | 25   | 43   | 17    | 85            | 14   | 107  | 7     | 128           | 75   | 28   | 18    | 121        | 442        |
| 08:30 AM                                                                                      | 11   | 87   | 34    | 132           | 22   | 24   | 28    | 74            | 22   | 109  | 3     | 134           | 62   | 16   | 24    | 102        | 442        |
| 08:45 AM                                                                                      | 14   | 70   | 39    | 123           | 24   | 16   | 14    | 54            | 17   | 86   | 4     | 107           | 86   | 16   | 25    | 127        | 411        |
| Total                                                                                         | 47   | 285  | 147   | 479           | 94   | 154  | 86    | 334           | 77   | 408  | 23    | 508           | 283  | 104  | 87    | 474        | 1795       |
| Grand Total                                                                                   | 82   | 605  | 291   | 978           | 197  | 379  | 185   | 761           | 202  | 913  | 95    | 1210          | 586  | 370  | 182   | 1138       | 4087       |
| Apprch %                                                                                      | 8.4  | 61.9 | 29.8  |               | 25.9 | 49.8 | 24.3  |               | 16.7 | 75.5 | 7.9   |               | 51.5 | 32.5 | 16    |            |            |
| Total %                                                                                       | 2    | 14.8 | 7.1   | 23.9          | 4.8  | 9.3  | 4.5   | 18.6          | 4.9  | 22.3 | 2.3   | 29.6          | 14.3 | 9.1  | 4.5   | 27.8       |            |
| PASSENGER VEHICLES                                                                            | 54   | 480  | 237   | 771           | 166  | 340  | 152   | 658           | 156  | 769  | 76    | 1001          | 518  | 332  | 151   | 1001       | 3431       |
| PASSENGER EMULSION                                                                            | 65.9 | 79.3 | 81.4  | 78.8          | 84.3 | 89.7 | 82.2  | 86.5          | 77.2 | 84.2 | 80    | 82.7          | 88.4 | 89.7 | 83    | 88         | 83.9       |
| WHEEL 2 AXLE TRUCKS                                                                           | 27   | 118  | 43    | 188           | 28   | 37   | 25    | 90            | 43   | 133  | 18    | 194           | 59   | 33   | 25    | 117        | 589        |
| WHEEL 3 AXLE TRUCKS                                                                           | 32.9 | 19.5 | 14.8  | 19.2          | 14.2 | 9.8  | 13.5  | 11.8          | 21.3 | 14.6 | 18.9  | 16            | 10.1 | 8.9  | 13.7  | 10.3       | 14.4       |
| 3 AXLE VEHICLES                                                                               | 1    | 5    | 1     | 7             | 3    | 2    | 2     | 7             | 1    | 9    | 1     | 11            | 0    | 1    | 1     | 2          | 27         |
| 4+ AXLE TRUCKS                                                                                | 1.2  | 0.8  | 0.3   | 0.7           | 1.5  | 0.5  | 1.1   | 0.9           | 0.5  | 1    | 1.1   | 0.9           | 0    | 0.3  | 0.5   | 0.2        | 0.7        |
| 4+ AXLE TRUCKS                                                                                | 0    | 2    | 10    | 12            | 0    | 0    | 6     | 6             | 2    | 2    | 0     | 4             | 9    | 4    | 5     | 18         | 40         |
| 4+ AXLE TRUCKS                                                                                | 0    | 0.3  | 3.4   | 1.2           | 0    | 0    | 3.2   | 0.8           | 1    | 0.2  | 0     | 0.3           | 1.5  | 1.1  | 2.7   | 1.6        | 1          |

| SIERRA AVENUE                                              |      |      |       | JURUPA AVENUE |      |      |       | SIERRA AVENUE |      |      |       | JURUPA AVENUE |      |      |       |            |            |
|------------------------------------------------------------|------|------|-------|---------------|------|------|-------|---------------|------|------|-------|---------------|------|------|-------|------------|------------|
| Southbound                                                 |      |      |       | Westbound     |      |      |       | Northbound    |      |      |       | Eastbound     |      |      |       |            |            |
| Start Time                                                 | Left | Thru | Right | App. Total    | Left | Thru | Right | App. Total    | Left | Thru | Right | App. Total    | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |      |      |       |               |      |      |       |               |      |      |       |               |      |      |       |            |            |
| Peak Hour for Entire Intersection Begins at 07:00 AM       |      |      |       |               |      |      |       |               |      |      |       |               |      |      |       |            |            |
| 07:00 AM                                                   | 8    | 66   | 40    | 114           | 34   | 44   | 12    | 90            | 23   | 120  | 20    | 163           | 69   | 75   | 19    | 163        | 530        |
| 07:15 AM                                                   | 11   | 87   | 36    | 134           | 25   | 79   | 29    | 133           | 37   | 124  | 21    | 182           | 85   | 81   | 22    | 188        | 637        |
| 07:30 AM                                                   | 7    | 93   | 31    | 131           | 24   | 58   | 36    | 118           | 29   | 137  | 13    | 179           | 77   | 40   | 25    | 142        | 570        |
| 07:45 AM                                                   | 9    | 74   | 37    | 120           | 20   | 44   | 22    | 86            | 36   | 124  | 18    | 178           | 72   | 70   | 29    | 171        | 555        |
| Total Volume                                               | 35   | 320  | 144   | 499           | 103  | 225  | 99    | 427           | 125  | 505  | 72    | 702           | 303  | 266  | 95    | 664        | 2292       |
| % App. Total                                               | 7    | 64.1 | 28.9  |               | 24.1 | 52.7 | 23.2  |               | 17.8 | 71.9 | 10.3  |               | 45.6 | 40.1 | 14.3  |            |            |
| PHF                                                        | .795 | .860 | .900  | .931          | .757 | .712 | .688  | .803          | .845 | .922 | .857  | .964          | .891 | .821 | .819  | .883       | .900       |

COUNTS UNLIMITED INC.  
25424 JACLYN AVENUE  
MORENO VALLEY CA. 92557  
951-247-6716

CITY OF FONTANA  
N/S: SIERRA AVENUE  
E/W: JURUPA AVENUE  
WEATHER: SUNNY

File Name : FOSIJUPM  
Site Code : 0438809  
Start Date : 4/18/2006  
Page No : 1

| Groups Printed- PASSENGER VEHICLES - LARGE 2 AXLE VEHICLES - 3 AXLE VEHICLES - 4+ AXLE TRUCKS |               |      |       |            |               |      |       |            |               |      |       |            |               |      |       |            |            |
|-----------------------------------------------------------------------------------------------|---------------|------|-------|------------|---------------|------|-------|------------|---------------|------|-------|------------|---------------|------|-------|------------|------------|
|                                                                                               | SIERRA AVENUE |      |       |            | JURUPA AVENUE |      |       |            | SIERRA AVENUE |      |       |            | JURUPA AVENUE |      |       |            |            |
|                                                                                               | Southbound    |      |       |            | Westbound     |      |       |            | Northbound    |      |       |            | Eastbound     |      |       |            |            |
| Start Time                                                                                    | Left          | Thru | Right | App. Total | Left          | Thru | Right | App. Total | Left          | Thru | Right | App. Total | Left          | Thru | Right | App. Total | Int. Total |
| 04:00 PM                                                                                      | 17            | 115  | 39    | 171        | 21            | 41   | 21    | 83         | 59            | 131  | 25    | 215        | 60            | 38   | 34    | 132        | 601        |
| 04:15 PM                                                                                      | 14            | 137  | 45    | 196        | 18            | 40   | 10    | 68         | 18            | 117  | 15    | 150        | 81            | 44   | 38    | 163        | 577        |
| 04:30 PM                                                                                      | 24            | 108  | 48    | 180        | 23            | 50   | 23    | 96         | 21            | 92   | 20    | 133        | 101           | 49   | 43    | 193        | 602        |
| 04:45 PM                                                                                      | 26            | 119  | 66    | 211        | 15            | 44   | 9     | 68         | 22            | 90   | 28    | 140        | 109           | 57   | 41    | 207        | 626        |
| Total                                                                                         | 81            | 479  | 198   | 758        | 77            | 175  | 63    | 315        | 120           | 430  | 88    | 638        | 351           | 188  | 156   | 695        | 2406       |
| 05:00 PM                                                                                      | 22            | 116  | 65    | 203        | 21            | 40   | 11    | 72         | 19            | 139  | 25    | 183        | 88            | 60   | 45    | 193        | 651        |
| 05:15 PM                                                                                      | 27            | 101  | 69    | 197        | 15            | 41   | 10    | 66         | 28            | 106  | 24    | 158        | 82            | 45   | 36    | 163        | 584        |
| 05:30 PM                                                                                      | 13            | 101  | 65    | 179        | 19            | 39   | 14    | 72         | 24            | 115  | 26    | 165        | 95            | 40   | 38    | 173        | 589        |
| 05:45 PM                                                                                      | 29            | 103  | 54    | 186        | 7             | 45   | 13    | 65         | 33            | 96   | 21    | 150        | 77            | 42   | 41    | 160        | 561        |
| Total                                                                                         | 91            | 421  | 253   | 765        | 62            | 165  | 48    | 275        | 104           | 456  | 96    | 656        | 342           | 187  | 160   | 689        | 2385       |
| Grand Total                                                                                   | 172           | 900  | 451   | 1523       | 139           | 340  | 111   | 590        | 224           | 886  | 184   | 1294       | 693           | 375  | 316   | 1384       | 4791       |
| Apprch %                                                                                      | 11.3          | 59.1 | 29.6  |            | 23.6          | 57.6 | 18.8  |            | 17.3          | 68.5 | 14.2  |            | 50.1          | 27.1 | 22.8  |            |            |
| Total %                                                                                       | 3.6           | 18.8 | 9.4   | 31.8       | 2.9           | 7.1  | 2.3   | 12.3       | 4.7           | 18.5 | 3.8   | 27         | 14.5          | 7.8  | 6.6   | 28.9       |            |
| PASSENGER VEHICLES                                                                            | 150           | 739  | 403   | 1292       | 113           | 283  | 100   | 496        | 186           | 748  | 147   | 1081       | 598           | 310  | 242   | 1150       | 4019       |
| - PASSENGER VEHICLES                                                                          | 87.2          | 82.1 | 89.4  | 84.8       | 81.3          | 83.2 | 90.1  | 84.1       | 83            | 84.4 | 79.9  | 83.5       | 86.3          | 82.7 | 76.6  | 83.1       | 83.9       |
| AROI - 2 AXLE VEHICLES                                                                        | 21            | 147  | 45    | 213        | 26            | 56   | 8     | 90         | 37            | 126  | 34    | 197        | 89            | 59   | 72    | 220        | 720        |
| - LARGE 2 AXLE VEHICLES                                                                       | 12.2          | 16.3 | 10    | 14         | 18.7          | 16.5 | 7.2   | 15.3       | 16.5          | 14.2 | 18.5  | 15.2       | 12.8          | 15.7 | 22.8  | 15.9       | 15         |
| 3 AXLE VEHICLES                                                                               | 0             | 9    | 0     | 9          | 0             | 1    | 2     | 3          | 0             | 6    | 2     | 8          | 2             | 3    | 1     | 6          | 26         |
| % 3 AXLE VEHICLES                                                                             | 0             | 1    | 0     | 0.6        | 0             | 0.3  | 1.8   | 0.5        | 0             | 0.7  | 1.1   | 0.6        | 0.3           | 0.8  | 0.3   | 0.4        | 0.5        |
| 4+ AXLE TRUCKS                                                                                | 1             | 5    | 3     | 9          | 0             | 0    | 1     | 1          | 1             | 6    | 1     | 8          | 4             | 3    | 1     | 8          | 26         |
| % 4+ AXLE TRUCKS                                                                              | 0.6           | 0.6  | 0.7   | 0.6        | 0             | 0    | 0.9   | 0.2        | 0.4           | 0.7  | 0.5   | 0.6        | 0.6           | 0.8  | 0.3   | 0.6        | 0.5        |

|                                                            | SIERRA AVENUE |      |       |            | JURUPA AVENUE |      |       |            | SIERRA AVENUE |      |       |            | JURUPA AVENUE |      |       |            |            |
|------------------------------------------------------------|---------------|------|-------|------------|---------------|------|-------|------------|---------------|------|-------|------------|---------------|------|-------|------------|------------|
|                                                            | Southbound    |      |       |            | Westbound     |      |       |            | Northbound    |      |       |            | Eastbound     |      |       |            |            |
| Start Time                                                 | Left          | Thru | Right | App. Total | Left          | Thru | Right | App. Total | Left          | Thru | Right | App. Total | Left          | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 |               |      |       |            |               |      |       |            |               |      |       |            |               |      |       |            |            |
| Peak Hour for Entire Intersection Begins at 04:30 PM       |               |      |       |            |               |      |       |            |               |      |       |            |               |      |       |            |            |
| 04:30 PM                                                   | 24            | 108  | 48    | 180        | 23            | 50   | 23    | 96         | 21            | 92   | 20    | 133        | 101           | 49   | 43    | 193        | 602        |
| 04:45 PM                                                   | 26            | 119  | 66    | 211        | 15            | 44   | 9     | 68         | 22            | 90   | 28    | 140        | 109           | 57   | 41    | 207        | 626        |
| 05:00 PM                                                   | 22            | 116  | 65    | 203        | 21            | 40   | 11    | 72         | 19            | 139  | 25    | 183        | 88            | 60   | 45    | 193        | 651        |
| 05:15 PM                                                   | 27            | 101  | 69    | 197        | 15            | 41   | 10    | 66         | 28            | 106  | 24    | 158        | 82            | 45   | 36    | 163        | 584        |
| Total Volume                                               | 99            | 444  | 248   | 791        | 74            | 175  | 53    | 302        | 90            | 427  | 97    | 614        | 380           | 211  | 165   | 756        | 2463       |
| % App. Total                                               | 12.5          | 56.1 | 31.4  |            | 24.5          | 57.9 | 17.5  |            | 14.7          | 69.5 | 15.8  |            | 50.3          | 27.9 | 21.8  |            |            |
| PHF                                                        | .917          | .933 | .899  | .937       | .804          | .875 | .576  | .786       | .804          | .768 | .866  | .839       | .872          | .879 | .917  | .913       | .946       |

## Intersection Turning Movement

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

|                             |                                             |                                |                                       |                             |
|-----------------------------|---------------------------------------------|--------------------------------|---------------------------------------|-----------------------------|
| DATE:<br>2/10/09<br>TUESDAY | LOCATION:<br>NORTH & SOUTH:<br>EAST & WEST: | FONTANA<br>ARMSTRONG<br>SIERRA | PROJECT #:<br>LOCATION #:<br>CONTROL: | CA09-0213-1<br>43<br>SIGNAL |
|-----------------------------|---------------------------------------------|--------------------------------|---------------------------------------|-----------------------------|

|        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NOTES: | <div style="display: flex; align-items: center; justify-content: center;"> <div style="border: 1px solid black; padding: 2px; margin-right: 5px;"> AM<br/>PM<br/>MD<br/>OTHER<br/>OTHER </div> <div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 5px;">▲ N</div> <div style="margin-bottom: 5px;">◀ W</div> <div style="margin-bottom: 5px;">S ▼</div> </div> <div style="border: 1px solid black; padding: 2px; margin-left: 5px;"> E ▶ </div> </div> |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|        | NORTHBOUND |         |         | SOUTHBOUND |         |         | EASTBOUND |         |         | WESTBOUND |         |         |       |
|--------|------------|---------|---------|------------|---------|---------|-----------|---------|---------|-----------|---------|---------|-------|
|        | ARMSTRONG  |         |         | ARMSTRONG  |         |         | SIERRA    |         |         | SIERRA    |         |         |       |
| LANES: | NL<br>1    | NT<br>1 | NR<br>1 | SL<br>1    | ST<br>1 | SR<br>1 | EL<br>1   | ET<br>2 | ER<br>1 | WL<br>1   | WT<br>2 | WR<br>0 | TOTAL |

|                |            |       |     |       |     |     |       |       |     |       |     |     |       |       |
|----------------|------------|-------|-----|-------|-----|-----|-------|-------|-----|-------|-----|-----|-------|-------|
| AM             | 6:30 AM    |       |     |       |     |     |       |       |     |       |     |     |       | 0     |
|                | 6:45 AM    |       |     |       |     |     |       |       |     |       |     |     |       | 0     |
|                | 7:00 AM    | 115   | 28  | 3     | 4   | 41  | 3     | 8     | 2   | 102   | 7   | 6   | 1     | 320   |
|                | 7:15 AM    | 124   | 38  | 9     | 2   | 24  | 5     | 7     | 1   | 104   | 6   | 7   | 3     | 330   |
|                | 7:30 AM    | 120   | 21  | 3     | 0   | 37  | 4     | 0     | 1   | 116   | 7   | 8   | 1     | 318   |
|                | 7:45 AM    | 134   | 27  | 3     | 4   | 39  | 1     | 0     | 2   | 121   | 8   | 7   | 6     | 352   |
|                | 8:00 AM    | 156   | 41  | 2     | 4   | 58  | 9     | 1     | 2   | 89    | 6   | 0   | 2     | 370   |
|                | 8:15 AM    | 137   | 26  | 1     | 2   | 48  | 1     | 1     | 1   | 87    | 5   | 7   | 1     | 317   |
|                | 8:30 AM    | 132   | 31  | 2     | 2   | 50  | 2     | 2     | 2   | 94    | 3   | 3   | 3     | 326   |
|                | 8:45 AM    | 118   | 22  | 4     | 3   | 36  | 5     | 0     | 3   | 83    | 2   | 4   | 2     | 282   |
|                | 9:00 AM    |       |     |       |     |     |       |       |     |       |     |     |       | 0     |
|                | 9:15 AM    |       |     |       |     |     |       |       |     |       |     |     |       | 0     |
|                | VOLUMES    | 1,036 | 234 | 27    | 21  | 333 | 30    | 19    | 14  | 796   | 44  | 42  | 19    | 2,615 |
|                | APPROACH % | 80%   | 18% | 2%    | 5%  | 87% | 8%    | 2%    | 2%  | 96%   | 42% | 40% | 18%   |       |
|                | APP/DEPART | 1,297 | /   | 272   | 384 | /   | 1,173 | 829   | /   | 62    | 105 | /   | 1,108 | 0     |
| BEGIN PEAK HR  | 7:15 AM    |       |     |       |     |     |       |       |     |       |     |     |       |       |
| VOLUMES        | 534        | 127   | 17  | 10    | 158 | 19  | 8     | 6     | 430 | 27    | 22  | 12  | 1,370 |       |
| APPROACH %     | 79%        | 19%   | 3%  | 5%    | 84% | 10% | 2%    | 1%    | 97% | 44%   | 36% | 20% |       |       |
| PEAK HR FACTOR | 0.852      |       |     | 0.658 |     |     | 0.902 |       |     | 0.726 |     |     | 0.926 |       |
| APP/DEPART     | 678        | /     | 147 | 187   | /   | 615 | 444   | /     | 33  | 61    | /   | 575 | 0     |       |
| PM             | 3:30 PM    |       |     |       |     |     |       |       |     |       |     |     |       | 0     |
|                | 3:45 PM    |       |     |       |     |     |       |       |     |       |     |     |       | 0     |
|                | 4:00 PM    | 122   | 42  | 4     | 3   | 38  | 6     | 4     | 6   | 136   | 5   | 3   | 3     | 372   |
|                | 4:15 PM    | 136   | 44  | 7     | 5   | 47  | 5     | 5     | 8   | 154   | 4   | 4   | 2     | 421   |
|                | 4:30 PM    | 148   | 64  | 9     | 2   | 43  | 4     | 8     | 12  | 142   | 3   | 6   | 1     | 442   |
|                | 4:45 PM    | 144   | 62  | 8     | 3   | 32  | 2     | 9     | 8   | 152   | 3   | 6   | 1     | 430   |
|                | 5:00 PM    | 166   | 61  | 4     | 4   | 43  | 5     | 7     | 8   | 152   | 2   | 5   | 3     | 460   |
|                | 5:15 PM    | 163   | 57  | 4     | 7   | 41  | 6     | 10    | 10  | 168   | 7   | 7   | 2     | 482   |
|                | 5:30 PM    | 148   | 64  | 5     | 3   | 41  | 9     | 4     | 6   | 162   | 2   | 5   | 2     | 451   |
|                | 5:45 PM    | 130   | 45  | 3     | 5   | 33  | 5     | 7     | 9   | 140   | 5   | 7   | 3     | 392   |
|                | 6:00 PM    |       |     |       |     |     |       |       |     |       |     |     |       | 0     |
|                | 6:15 PM    |       |     |       |     |     |       |       |     |       |     |     |       | 0     |
|                | VOLUMES    | 1,157 | 439 | 44    | 32  | 318 | 42    | 54    | 67  | 1,206 | 31  | 43  | 17    | 3,450 |
|                | APPROACH % | 71%   | 27% | 3%    | 8%  | 81% | 11%   | 4%    | 5%  | 91%   | 34% | 47% | 19%   |       |
|                | APP/DEPART | 1,640 | /   | 510   | 392 | /   | 1,555 | 1,327 | /   | 143   | 91  | /   | 1,242 | 0     |
| BEGIN PEAK HR  | 4:45 PM    |       |     |       |     |     |       |       |     |       |     |     |       |       |
| VOLUMES        | 621        | 244   | 21  | 17    | 157 | 22  | 30    | 32    | 634 | 14    | 23  | 8   | 1,823 |       |
| APPROACH %     | 70%        | 28%   | 2%  | 9%    | 80% | 11% | 4%    | 5%    | 91% | 31%   | 51% | 18% |       |       |
| PEAK HR FACTOR | 0.959      |       |     | 0.907 |     |     | 0.926 |       |     | 0.703 |     |     | 0.946 |       |
| APP/DEPART     | 886        | /     | 282 | 196   | /   | 805 | 696   | /     | 70  | 45    | /   | 666 | 0     |       |

## Intersection Turning Movement

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

|                             |                                             |                                       |                                       |                             |
|-----------------------------|---------------------------------------------|---------------------------------------|---------------------------------------|-----------------------------|
| DATE:<br>2/10/09<br>TUESDAY | LOCATION:<br>NORTH & SOUTH:<br>EAST & WEST: | FONTANA<br>ARMSTRONG<br>SR-60 WB RAMP | PROJECT #:<br>LOCATION #:<br>CONTROL: | CA09-0213-1<br>44<br>SIGNAL |
|-----------------------------|---------------------------------------------|---------------------------------------|---------------------------------------|-----------------------------|

|        |                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NOTES: | WT = THRU TRAFFIC TO WB ON RAMP. GRANITE HILL DR WAS TREATED AS THE INTERSECTION TO THE NORTH. | <div style="display: flex; align-items: center;"> <div style="border: 1px solid black; padding: 2px; margin-right: 5px;">             AM<br/>PM<br/>MD<br/>OTHER           </div> <div style="display: flex; flex-direction: column; align-items: center;"> <div style="display: flex; justify-content: space-around; width: 100px;"> <div style="text-align: center;">◀ W</div> <div style="text-align: center;">E ▶</div> </div> <div style="display: flex; justify-content: space-around; width: 100px;"> <div style="text-align: center;">▲ N</div> <div style="text-align: center;">S ▼</div> </div> </div> </div> |
|--------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                |            | NORTHBOUND |         |         | SOUTHBOUND |         |         | EASTBOUND     |         |         | WESTBOUND     |           |           |       |
|----------------|------------|------------|---------|---------|------------|---------|---------|---------------|---------|---------|---------------|-----------|-----------|-------|
|                |            | ARMSTRONG  |         |         | ARMSTRONG  |         |         | SR-60 WB RAMP |         |         | SR-60 WB RAMP |           |           |       |
| LANES:         |            | NL<br>1    | NT<br>1 | NR<br>0 | SL<br>0    | ST<br>2 | SR<br>1 | EL<br>X       | ET<br>X | ER<br>X | WL<br>1       | WT<br>0.5 | WR<br>0.5 | TOTAL |
| AM             | 6:30 AM    |            |         |         |            |         |         |               |         |         |               |           |           | 0     |
|                | 6:45 AM    |            |         |         |            |         |         |               |         |         |               |           |           | 0     |
|                | 7:00 AM    | 40         | 110     |         |            | 131     | 40      |               |         |         | 38            | 2         | 66        | 427   |
|                | 7:15 AM    | 35         | 108     |         |            | 126     | 42      |               |         |         | 40            | 2         | 80        | 433   |
|                | 7:30 AM    | 51         | 131     |         |            | 135     | 60      |               |         |         | 51            | 2         | 95        | 525   |
|                | 7:45 AM    | 44         | 126     |         |            | 141     | 55      |               |         |         | 44            | 1         | 88        | 499   |
|                | 8:00 AM    | 57         | 120     |         |            | 159     | 51      |               |         |         | 46            | 4         | 97        | 534   |
|                | 8:15 AM    | 37         | 101     |         |            | 129     | 56      |               |         |         | 43            | 1         | 73        | 440   |
|                | 8:30 AM    | 45         | 97      |         |            | 134     | 63      |               |         |         | 35            | 2         | 74        | 450   |
|                | 8:45 AM    | 54         | 117     |         |            | 127     | 41      |               |         |         | 40            | 0         | 57        | 436   |
|                | 9:00 AM    |            |         |         |            |         |         |               |         |         |               |           |           | 0     |
|                | 9:15 AM    |            |         |         |            |         |         |               |         |         |               |           |           | 0     |
|                | VOLUMES    | 363        | 910     | 0       | 0          | 1,082   | 408     | 0             | 0       | 0       | 337           | 14        | 630       | 3,744 |
|                | APPROACH % | 29%        | 71%     | 0%      | 0%         | 73%     | 27%     | 0%            | 0%      | 0%      | 34%           | 1%        | 64%       |       |
|                | APP/DEPART | 1,273      | /       | 1,540   | 1,490      | /       | 1,419   | 0             | /       | 0       | 981           | /         | 785       | 0     |
| BEGIN PEAK HR  | 7:30 AM    |            |         |         |            |         |         |               |         |         |               |           |           |       |
| VOLUMES        | 189        | 478        | 0       | 0       | 564        | 222     | 0       | 0             | 0       | 184     | 8             | 353       | 1,998     |       |
| APPROACH %     | 28%        | 72%        | 0%      | 0%      | 72%        | 28%     | 0%      | 0%            | 0%      | 34%     | 1%            | 65%       |           |       |
| PEAK HR FACTOR | 0.916      |            |         |         | 0.936      |         | 0.000   |               |         | 0.921   |               |           | 0.935     |       |
| APP/DEPART     | 667        | /          | 831     | 786     | /          | 748     | 0       | /             | 0       | 545     | /             | 419       | 0         |       |
| PM             | 3:30 PM    |            |         |         |            |         |         |               |         |         |               |           |           | 0     |
|                | 3:45 PM    |            |         |         |            |         |         |               |         |         |               |           |           | 0     |
|                | 4:00 PM    | 40         | 136     |         |            | 162     | 31      |               |         |         | 51            | 0         | 70        | 490   |
|                | 4:15 PM    | 45         | 148     |         |            | 185     | 29      |               |         |         | 54            | 0         | 69        | 530   |
|                | 4:30 PM    | 58         | 158     |         |            | 166     | 28      |               |         |         | 65            | 0         | 83        | 558   |
|                | 4:45 PM    | 51         | 168     |         |            | 175     | 35      |               |         |         | 70            | 0         | 77        | 576   |
|                | 5:00 PM    | 42         | 177     |         |            | 188     | 45      |               |         |         | 63            | 1         | 70        | 586   |
|                | 5:15 PM    | 62         | 157     |         |            | 189     | 45      |               |         |         | 76            | 0         | 94        | 623   |
|                | 5:30 PM    | 35         | 152     |         |            | 219     | 56      |               |         |         | 59            | 0         | 77        | 598   |
|                | 5:45 PM    | 48         | 156     |         |            | 158     | 36      |               |         |         | 55            | 1         | 84        | 538   |
|                | 6:00 PM    |            |         |         |            |         |         |               |         |         |               |           |           | 0     |
|                | 6:15 PM    |            |         |         |            |         |         |               |         |         |               |           |           | 0     |
|                | VOLUMES    | 381        | 1,252   | 0       | 0          | 1,442   | 305     | 0             | 0       | 0       | 493           | 2         | 624       | 4,499 |
|                | APPROACH % | 23%        | 77%     | 0%      | 0%         | 83%     | 17%     | 0%            | 0%      | 0%      | 44%           | 0%        | 56%       |       |
|                | APP/DEPART | 1,633      | /       | 1,876   | 1,747      | /       | 1,935   | 0             | /       | 0       | 1,119         | /         | 688       | 0     |
| BEGIN PEAK HR  | 4:45 PM    |            |         |         |            |         |         |               |         |         |               |           |           |       |
| VOLUMES        | 190        | 654        | 0       | 0       | 771        | 181     | 0       | 0             | 0       | 268     | 1             | 318       | 2,383     |       |
| APPROACH %     | 23%        | 77%        | 0%      | 0%      | 81%        | 19%     | 0%      | 0%            | 0%      | 46%     | 0%            | 54%       |           |       |
| PEAK HR FACTOR | 0.963      |            |         |         | 0.865      |         | 0.000   |               |         | 0.863   |               |           | 0.956     |       |
| APP/DEPART     | 844        | /          | 972     | 952     | /          | 1,039   | 0       | /             | 0       | 587     | /             | 372       | 0         |       |



# Intersection Turning Movement

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

|                             |                                             |                                                  |                                       |                             |
|-----------------------------|---------------------------------------------|--------------------------------------------------|---------------------------------------|-----------------------------|
| DATE:<br>2/10/09<br>TUESDAY | LOCATION:<br>NORTH & SOUTH:<br>EAST & WEST: | FONTANA<br>VALLEY WAY/ARMSTRONG<br>SR-60 EB RAMP | PROJECT #:<br>LOCATION #:<br>CONTROL: | CA09-0213-1<br>45<br>SIGNAL |
|-----------------------------|---------------------------------------------|--------------------------------------------------|---------------------------------------|-----------------------------|

|        |                                                                                                                                                |
|--------|------------------------------------------------------------------------------------------------------------------------------------------------|
| NOTES: | <div> <div>AM</div> <div>PM</div> <div>MT</div> <div>OTHER</div> </div> <div> <div>▲ N</div> <div>◀ W</div> <div>S</div> <div>▶ E</div> </div> |
|--------|------------------------------------------------------------------------------------------------------------------------------------------------|

|        | NORTHBOUND<br>VALLEY WAY/ARMSTRONG |         |         | SOUTHBOUND<br>VALLEY WAY/ARMSTRONG |         |         | EASTBOUND<br>SR-60 EB RAMP |         |         | WESTBOUND<br>SR-60 EB RAMP |         |         |       |
|--------|------------------------------------|---------|---------|------------------------------------|---------|---------|----------------------------|---------|---------|----------------------------|---------|---------|-------|
| LANES: | NL<br>X                            | NT<br>2 | NR<br>0 | SL<br>1                            | ST<br>2 | SR<br>X | EL<br>1                    | ET<br>0 | ER<br>1 | WL<br>X                    | WT<br>X | WR<br>X | TOTAL |

|    |                |         |       |       |       |       |       |     |       |       |    |       |     |       |
|----|----------------|---------|-------|-------|-------|-------|-------|-----|-------|-------|----|-------|-----|-------|
| AM | 6:30 AM        |         |       |       |       |       |       |     |       |       |    |       | 0   |       |
|    | 6:45 AM        |         |       |       |       |       |       |     |       |       |    |       | 0   |       |
|    | 7:00 AM        |         | 135   | 72    | 62    | 105   | 12    | 0   | 35    |       |    |       | 421 |       |
|    | 7:15 AM        |         | 132   | 88    | 56    | 102   | 20    | 0   | 33    |       |    |       | 431 |       |
|    | 7:30 AM        |         | 168   | 81    | 70    | 110   | 16    | 1   | 35    |       |    |       | 481 |       |
|    | 7:45 AM        |         | 143   | 91    | 72    | 118   | 23    | 0   | 37    |       |    |       | 484 |       |
|    | 8:00 AM        |         | 153   | 79    | 79    | 118   | 23    | 0   | 34    |       |    |       | 486 |       |
|    | 8:15 AM        |         | 122   | 68    | 59    | 108   | 27    | 0   | 39    |       |    |       | 423 |       |
|    | 8:30 AM        |         | 118   | 51    | 63    | 115   | 26    | 0   | 25    |       |    |       | 398 |       |
|    | 8:45 AM        |         | 138   | 58    | 63    | 96    | 24    | 0   | 42    |       |    |       | 421 |       |
|    | 9:00 AM        |         |       |       |       |       |       |     |       |       |    |       | 0   |       |
|    | 9:15 AM        |         |       |       |       |       |       |     |       |       |    |       | 0   |       |
|    | VOLUMES        | 0       | 1,109 | 588   | 524   | 872   | 0     | 171 | 1     | 280   | 0  | 0     | 0   | 3,545 |
|    | APPROACH %     | 0%      | 65%   | 35%   | 38%   | 62%   | 0%    | 38% | 0%    | 62%   | 0% | 0%    | 0%  |       |
| PM | APP/DEPART     | 1,697   | /     | 1,280 | 1,396 | /     | 1,152 | 452 | /     | 1,113 | 0  | /     | 0   | 0     |
|    | BEGIN PEAK HR  | 7:15 AM |       |       |       |       |       |     |       |       |    |       |     |       |
|    | VOLUMES        | 0       | 596   | 339   | 277   | 448   | 0     | 82  | 1     | 139   | 0  | 0     | 0   | 1,882 |
|    | APPROACH %     | 0%      | 64%   | 36%   | 38%   | 62%   | 0%    | 37% | 0%    | 63%   | 0% | 0%    | 0%  |       |
|    | PEAK HR FACTOR |         | 0.939 |       |       | 0.920 |       |     | 0.925 |       |    | 0.000 |     | 0.968 |
|    | APP/DEPART     | 935     | /     | 678   | 725   | /     | 587   | 222 | /     | 617   | 0  | /     | 0   | 0     |
|    | 3:30 PM        |         |       |       |       |       |       |     |       |       |    |       |     | 0     |
|    | 3:45 PM        |         |       |       |       |       |       |     |       |       |    |       |     | 0     |
|    | 4:00 PM        |         | 112   | 38    | 60    | 145   |       | 67  | 0     | 51    |    |       |     | 473   |
|    | 4:15 PM        |         | 128   | 37    | 77    | 156   |       | 57  | 0     | 54    |    |       |     | 509   |
|    | 4:30 PM        |         | 140   | 32    | 73    | 168   |       | 70  | 0     | 40    |    |       |     | 523   |
|    | 4:45 PM        |         | 157   | 39    | 58    | 188   |       | 59  | 0     | 42    |    |       |     | 543   |
|    | 5:00 PM        |         | 169   | 32    | 65    | 175   |       | 44  | 1     | 31    |    |       |     | 517   |
|    | 5:15 PM        |         | 178   | 40    | 79    | 184   |       | 43  | 0     | 37    |    |       |     | 561   |
|    | 5:30 PM        |         | 146   | 32    | 71    | 195   |       | 52  | 0     | 30    |    |       |     | 526   |
|    | 5:45 PM        |         | 148   | 57    | 81    | 130   |       | 53  | 0     | 41    |    |       |     | 510   |
|    | 6:00 PM        |         |       |       |       |       |       |     |       |       |    |       |     | 0     |
|    | 6:15 PM        |         |       |       |       |       |       |     |       |       |    |       |     | 0     |
|    | VOLUMES        | 0       | 1,178 | 307   | 564   | 1,341 | 0     | 445 | 1     | 326   | 0  | 0     | 0   | 4,162 |
|    | APPROACH %     | 0%      | 79%   | 21%   | 30%   | 70%   | 0%    | 58% | 0%    | 42%   | 0% | 0%    | 0%  |       |
|    | APP/DEPART     | 1,485   | /     | 1,623 | 1,905 | /     | 1,667 | 772 | /     | 872   | 0  | /     | 0   | 0     |
|    | BEGIN PEAK HR  | 4:45 PM |       |       |       |       |       |     |       |       |    |       |     |       |
|    | VOLUMES        | 0       | 650   | 143   | 273   | 742   | 0     | 198 | 1     | 140   | 0  | 0     | 0   | 2,147 |
|    | APPROACH %     | 0%      | 82%   | 18%   | 27%   | 73%   | 0%    | 58% | 0%    | 41%   | 0% | 0%    | 0%  |       |
|    | PEAK HR FACTOR |         | 0.909 |       |       | 0.954 |       |     | 0.839 |       |    | 0.000 |     | 0.957 |
|    | APP/DEPART     | 793     | /     | 848   | 1,015 | /     | 882   | 339 | /     | 417   | 0  | /     | 0   | 0     |

## **APPENDIX B**

### **LOS Analysis Sheets**

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## **Existing Conditions**

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FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
AM PEAK HOUR

## Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative)

## Intersection #1 I-15 SB Ramps/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.612  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 21.9  
Optimal Cycle: 34 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |   |
| Control:    | Split Phase |   |   | Split Phase |   |   | Protected  |   |   | Protected  |   |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |   |
| Lanes:      | 0           | 0 | 0 | 1           | 0 | 1 | 0          | 0 | 3 | 0          | 1 | 2 | 0 |

## Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 0    | 0    | 0    | 790  | 1    | 647  | 0    | 302  | 139  | 244  | 639  | 0    |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 0    | 0    | 0    | 790  | 1    | 647  | 0    | 302  | 139  | 244  | 639  | 0    |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 0    | 0    | 0    | 832  | 1    | 681  | 0    | 318  | 146  | 257  | 673  | 0    |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 0    | 0    | 0    | 832  | 1    | 681  | 0    | 318  | 146  | 257  | 673  | 0    |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 0    | 0    | 0    | 832  | 1    | 681  | 0    | 318  | 146  | 257  | 673  | 0    |

## Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 1.00 | 0.97 | 0.91 | 1.00 |
| Lanes:      | 0.00 | 0.00 | 0.00 | 1.54 | 0.01 | 1.45 | 0.00 | 3.00 | 1.00 | 2.00 | 3.00 | 0.00 |
| Final Sat.: | 0    | 0    | 0    | 2788 | 3    | 2609 | 0    | 4914 | 1800 | 3492 | 4914 | 0    |

## Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.00 | 0.00 | 0.00 | 0.30 | 0.42 | 0.26 | 0.00 | 0.06 | 0.08 | 0.07 | 0.14 | 0.00 |
| Crit Moves:  |      |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.00 | 0.00 | 0.00 | 0.69 | 0.69 | 0.69 | 0.00 | 0.13 | 0.13 | 0.12 | 0.25 | 0.00 |
| Volume/Cap:  | 0.00 | 0.00 | 0.00 | 0.43 | 0.61 | 0.38 | 0.00 | 0.49 | 0.61 | 0.61 | 0.54 | 0.00 |
| Delay/Veh:   | 0.0  | 0.0  | 0.0  | 7.1  | 8.9  | 6.7  | 0.0  | 40.8 | 45.6 | 44.5 | 32.8 | 0.0  |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 0.0  | 0.0  | 0.0  | 7.1  | 8.9  | 6.7  | 0.0  | 40.8 | 45.6 | 44.5 | 32.8 | 0.0  |
| LOS by Move: | A    | A    | A    | A    | A    | A    | A    | D    | D    | D    | C    | A    |
| HCM2kAvgQ:   | 0    | 0    | 0    | 7    | 13   | 6    | 0    | 4    | 5    | 5    | 7    | 0    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
AM PEAK HOUR

## Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative)

## Intersection #2 I-15 NB Ramps/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.607  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 20.3  
Optimal Cycle: 34 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Split Phase |   |   | Split Phase |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 0           | 1 | 0 | 2          | 0 | 3 | 0          | 0 | 1 |

## Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 340  | 1    | 536  | 0    | 0    | 0    | 175  | 899  | 0    | 0    | 530  | 446  |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 340  | 1    | 536  | 0    | 0    | 0    | 175  | 899  | 0    | 0    | 530  | 446  |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 358  | 1    | 564  | 0    | 0    | 0    | 184  | 946  | 0    | 0    | 558  | 469  |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 358  | 1    | 564  | 0    | 0    | 0    | 184  | 946  | 0    | 0    | 558  | 469  |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 358  | 1    | 564  | 0    | 0    | 0    | 184  | 946  | 0    | 0    | 558  | 469  |

## Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.97 | 0.91 | 1.00 | 1.00 | 0.91 | 1.00 |
| Lanes:      | 1.38 | 0.01 | 1.61 | 0.00 | 0.00 | 0.00 | 2.00 | 3.00 | 0.00 | 0.00 | 3.00 | 1.00 |
| Final Sat.: | 2497 | 4    | 2899 | 0    | 0    | 0    | 3492 | 4914 | 0    | 0    | 4914 | 1800 |

## Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.14 | 0.26 | 0.19 | 0.00 | 0.00 | 0.00 | 0.05 | 0.19 | 0.00 | 0.00 | 0.11 | 0.26 |
| Crit Moves:  |      |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.42 | 0.42 | 0.42 | 0.00 | 0.00 | 0.00 | 0.09 | 0.52 | 0.00 | 0.00 | 0.43 | 0.43 |
| Volume/Cap:  | 0.34 | 0.61 | 0.46 | 0.00 | 0.00 | 0.00 | 0.61 | 0.37 | 0.00 | 0.00 | 0.26 | 0.61 |
| Delay/Veh:   | 19.5 | 23.1 | 20.8 | 0.0  | 0.0  | 0.0  | 47.5 | 14.5 | 0.0  | 0.0  | 18.4 | 23.4 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 19.5 | 23.1 | 20.8 | 0.0  | 0.0  | 0.0  | 47.5 | 14.5 | 0.0  | 0.0  | 18.4 | 23.4 |
| LOS by Move: | B    | C    | C    | A    | A    | A    | D    | B    | A    | A    | B    | C    |
| HCM2kAvgQ:   | 5    | 11   | 8    | 0    | 0    | 0    | 4    | 6    | 0    | 0    | 4    | 12   |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Base Volume Alternative)

Intersection #3 Etiwanda Ave/San Bernardino Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.403  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 23.9  
Optimal Cycle: 27 Level Of Service: C

| Approach:   | North Bound | South Bound | East Bound | West Bound |
|-------------|-------------|-------------|------------|------------|
| Movement:   | L - T - R   | L - T - R   | L - T - R  | L - T - R  |
| Control:    | Protected   | Protected   | Protected  | Protected  |
| Rights:     | Include     | Include     | Include    | Include    |
| Min. Green: | 0 0 0       | 0 0 0       | 0 0 0      | 0 0 0      |
| Lanes:      | 2 0 2 0 1   | 2 0 1 1 0   | 2 0 2 0 1  | 2 0 1 1 0  |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 270  | 466  | 81   | 27   | 536  | 102  | 88   | 189  | 118  | 67   | 188  | 27   |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 270  | 466  | 81   | 27   | 536  | 102  | 88   | 189  | 118  | 67   | 188  | 27   |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 284  | 491  | 85   | 28   | 564  | 107  | 93   | 199  | 124  | 71   | 198  | 28   |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 284  | 491  | 85   | 28   | 564  | 107  | 93   | 199  | 124  | 71   | 198  | 28   |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 284  | 491  | 85   | 28   | 564  | 107  | 93   | 199  | 124  | 71   | 198  | 28   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 0.95 | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 0.95 |
| Lanes:      | 2.00 | 2.00 | 1.00 | 2.00 | 1.68 | 0.32 | 2.00 | 2.00 | 1.00 | 2.00 | 1.75 | 0.25 |
| Final Sat.: | 3492 | 3420 | 1800 | 3492 | 2873 | 547  | 3492 | 3420 | 1800 | 3492 | 2991 | 429  |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.08 | 0.14 | 0.05 | 0.01 | 0.20 | 0.20 | 0.03 | 0.06 | 0.07 | 0.02 | 0.07 | 0.07 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.20 | 0.65 | 0.65 | 0.04 | 0.49 | 0.49 | 0.07 | 0.18 | 0.18 | 0.05 | 0.16 | 0.16 |
| Volume/Cap:  | 0.40 | 0.22 | 0.07 | 0.22 | 0.40 | 0.40 | 0.40 | 0.33 | 0.39 | 0.39 | 0.40 | 0.40 |
| Delay/Veh:   | 35.0 | 7.1  | 6.4  | 47.6 | 16.5 | 16.5 | 46.0 | 36.2 | 37.1 | 47.2 | 37.9 | 37.9 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 35.0 | 7.1  | 6.4  | 47.6 | 16.5 | 16.5 | 46.0 | 36.2 | 37.1 | 47.2 | 37.9 | 37.9 |
| LOS by Move: | D    | A    | A    | D    | B    | B    | D    | D    | D    | D    | D    | D    |
| HCM2kAvgQ:   | 4    | 3    | 1    | 1    | 7    | 7    | 2    | 3    | 4    | 2    | 4    | 4    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Base Volume Alternative)

Intersection #4 Etiwanda Ave/I-10 WB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.404  
Loss Time (sec): 4 (Y+R=4.0 sec) Average Delay (sec/veh): 18.8  
Optimal Cycle: 19 Level Of Service: B

| Approach:   | North Bound | South Bound | East Bound  | West Bound  |
|-------------|-------------|-------------|-------------|-------------|
| Movement:   | L - T - R   | L - T - R   | L - T - R   | L - T - R   |
| Control:    | Permitted   | Permitted   | Split Phase | Split Phase |
| Rights:     | Ignore      | Ignore      | Include     | Include     |
| Min. Green: | 0 0 0       | 0 0 0       | 0 0 0       | 0 0 0       |
| Lanes:      | 0 0 2 0 1   | 0 0 3 0 1   | 0 0 0 0 0   | 1 0 0 0 2   |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 0    | 493  | 466  | 0    | 684  | 246  | 0    | 0    | 0    | 403  | 0    | 214  |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 0    | 493  | 466  | 0    | 684  | 246  | 0    | 0    | 0    | 403  | 0    | 214  |
| User Adj:     | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.00 | 0.95 | 0.95 | 0.00 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 0    | 519  | 0    | 0    | 720  | 0    | 0    | 0    | 0    | 424  | 0    | 225  |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 0    | 519  | 0    | 0    | 720  | 0    | 0    | 0    | 0    | 424  | 0    | 225  |
| PCE Adj:      | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 0    | 519  | 0    | 0    | 720  | 0    | 0    | 0    | 0    | 424  | 0    | 225  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.88 |
| Lanes:      | 0.00 | 2.00 | 1.00 | 0.00 | 3.00 | 1.00 | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 2.00 |
| Final Sat.: | 0    | 3420 | 1800 | 0    | 4914 | 1800 | 0    | 0    | 0    | 1800 | 0    | 3168 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.00 | 0.15 | 0.00 | 0.00 | 0.15 | 0.00 | 0.00 | 0.00 | 0.00 | 0.24 | 0.00 | 0.07 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.00 | 0.38 | 0.00 | 0.00 | 0.38 | 0.00 | 0.00 | 0.00 | 0.00 | 0.58 | 0.00 | 0.58 |
| Volume/Cap:  | 0.00 | 0.40 | 0.00 | 0.00 | 0.39 | 0.00 | 0.00 | 0.00 | 0.00 | 0.40 | 0.00 | 0.12 |
| Delay/Veh:   | 0.0  | 23.2 | 0.0  | 0.0  | 22.9 | 0.0  | 0.0  | 0.0  | 0.0  | 11.6 | 0.0  | 9.3  |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 0.0  | 23.2 | 0.0  | 0.0  | 22.9 | 0.0  | 0.0  | 0.0  | 0.0  | 11.6 | 0.0  | 9.3  |
| LOS by Move: | A    | C    | A    | A    | C    | A    | A    | A    | A    | B    | A    | A    |
| HCM2kAvgQ:   | 0    | 6    | 0    | 0    | 6    | 0    | 0    | 0    | 0    | 7    | 0    | 2    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Base Volume Alternative)

Intersection #5 Etiwanda Ave/I-10 EB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.680  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 20.9  
Optimal Cycle: 40 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound  |   |   | West Bound  |   |   |
|-------------|-------------|---|---|-------------|---|---|-------------|---|---|-------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L           | T | R | L           | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Split Phase |   |   | Split Phase |   |   |
| Rights:     | Ignore      |   |   | Ignore      |   |   | Include     |   |   | Include     |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 |
| Lanes:      | 0           | 0 | 3 | 0           | 0 | 2 | 0           | 0 | 0 | 0           | 0 | 0 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 0    | 720  | 323  | 0    | 968  | 164  | 144  | 0    | 583  | 0    | 0    | 0    |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 0    | 720  | 323  | 0    | 968  | 164  | 144  | 0    | 583  | 0    | 0    | 0    |
| User Adj:     | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.00 | 0.95 | 0.95 | 0.00 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 0    | 758  | 0    | 0    | 1019 | 0    | 152  | 0    | 614  | 0    | 0    | 0    |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 0    | 758  | 0    | 0    | 1019 | 0    | 152  | 0    | 614  | 0    | 0    | 0    |
| PCE Adj:      | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 0    | 758  | 0    | 0    | 1019 | 0    | 152  | 0    | 614  | 0    | 0    | 0    |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.91 | 1.00 | 1.00 | 0.95 | 1.00 | 0.97 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 0.00 | 3.00 | 1.00 | 0.00 | 2.00 | 1.00 | 2.00 | 0.00 | 1.00 | 0.00 | 0.00 | 0.00 |
| Final Sat.: | 0    | 4914 | 1800 | 0    | 3420 | 1800 | 3492 | 0    | 1800 | 0    | 0    | 0    |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.00 | 0.15 | 0.00 | 0.00 | 0.30 | 0.00 | 0.04 | 0.00 | 0.34 | 0.00 | 0.00 | 0.00 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      |      |      |      |
| Green/Cycle: | 0.00 | 0.44 | 0.00 | 0.00 | 0.44 | 0.00 | 0.50 | 0.00 | 0.50 | 0.00 | 0.00 | 0.00 |
| Volume/Cap:  | 0.00 | 0.35 | 0.00 | 0.00 | 0.68 | 0.00 | 0.09 | 0.00 | 0.68 | 0.00 | 0.00 | 0.00 |
| Delay/Veh:   | 0.0  | 18.7 | 0.0  | 0.0  | 23.7 | 0.0  | 13.0 | 0.0  | 21.0 | 0.0  | 0.0  | 0.0  |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 0.0  | 18.7 | 0.0  | 0.0  | 23.7 | 0.0  | 13.0 | 0.0  | 21.0 | 0.0  | 0.0  | 0.0  |
| LOS by Move: | A    | B    | A    | A    | C    | A    | B    | A    | C    | A    | A    | A    |
| HCM2kAvgQ:   | 0    | 6    | 0    | 0    | 14   | 0    | 1    | 0    | 15   | 0    | 0    | 0    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Base Volume Alternative)

Intersection #6 Etiwanda Ave/ East Airport Dr-Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.765  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 30.7  
Optimal Cycle: 58 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound  |   |   | West Bound  |   |   |
|-------------|-------------|---|---|-------------|---|---|-------------|---|---|-------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L           | T | R | L           | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Prot+Permit |   |   | Prot+Permit |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include     |   |   | Include     |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 1           | 0 | 1 | 1           | 0 | 1 | 1           | 0 | 1 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 44   | 599  | 183  | 338  | 846  | 256  | 91   | 63   | 36   | 46   | 91   | 345  |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 44   | 599  | 183  | 338  | 846  | 256  | 91   | 63   | 36   | 46   | 91   | 345  |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 46   | 631  | 193  | 356  | 891  | 269  | 96   | 66   | 38   | 48   | 96   | 363  |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 46   | 631  | 193  | 356  | 891  | 269  | 96   | 66   | 38   | 48   | 96   | 363  |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 46   | 631  | 193  | 356  | 891  | 269  | 96   | 66   | 38   | 48   | 96   | 363  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Lanes:      | 1.00 | 1.53 | 0.47 | 1.00 | 1.54 | 0.46 | 1.00 | 1.27 | 0.73 | 1.00 | 1.00 | 1.00 |
| Final Sat.: | 1800 | 2620 | 800  | 1800 | 2626 | 794  | 1800 | 2176 | 1244 | 1800 | 1710 | 1710 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.03 | 0.24 | 0.24 | 0.20 | 0.34 | 0.34 | 0.00 | 0.03 | 0.03 | 0.00 | 0.06 | 0.21 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      |      |      |      |
| Green/Cycle: | 0.04 | 0.31 | 0.31 | 0.26 | 0.53 | 0.53 | 0.07 | 0.18 | 0.18 | 0.16 | 0.28 | 0.28 |
| Volume/Cap:  | 0.64 | 0.77 | 0.77 | 0.77 | 0.64 | 0.64 | 0.77 | 0.17 | 0.17 | 0.17 | 0.20 | 0.77 |
| Delay/Veh:   | 64.5 | 34.3 | 34.3 | 41.7 | 17.3 | 17.3 | 69.8 | 34.4 | 34.4 | 36.3 | 27.7 | 39.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 64.5 | 34.3 | 34.3 | 41.7 | 17.3 | 17.3 | 69.8 | 34.4 | 34.4 | 36.3 | 27.7 | 39.0 |
| LOS by Move: | E    | C    | C    | D    | B    | B    | E    | C    | C    | D    | C    | D    |
| HCM2kAvgQ:   | 3    | 14   | 14   | 12   | 14   | 14   | 5    | 1    | 1    | 1    | 2    | 12   |

Note: Queue reported is the number of cars per lane.



FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Base Volume Alternative)

Intersection #7 Etiwanda Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.556  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 27.4  
Optimal Cycle: 35 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 2 | 0           | 2 | 0 | 1          | 2 | 0 | 0          | 2 | 0 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 208  | 559  | 52   | 115  | 640  | 159  | 145  | 358  | 218  | 75   | 677  | 126  |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 208  | 559  | 52   | 115  | 640  | 159  | 145  | 358  | 218  | 75   | 677  | 126  |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 219  | 588  | 55   | 121  | 674  | 167  | 153  | 377  | 229  | 79   | 713  | 133  |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 219  | 588  | 55   | 121  | 674  | 167  | 153  | 377  | 229  | 79   | 713  | 133  |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 219  | 588  | 55   | 121  | 674  | 167  | 153  | 377  | 229  | 79   | 713  | 133  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 |
| Lanes:      | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 |
| Final Sat.: | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.06 | 0.17 | 0.03 | 0.03 | 0.20 | 0.09 | 0.04 | 0.11 | 0.13 | 0.02 | 0.21 | 0.07 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.11 | 0.39 | 0.39 | 0.08 | 0.35 | 0.35 | 0.08 | 0.38 | 0.38 | 0.07 | 0.37 | 0.37 |
| Volume/Cap:  | 0.56 | 0.44 | 0.08 | 0.44 | 0.56 | 0.26 | 0.56 | 0.29 | 0.33 | 0.33 | 0.56 | 0.20 |
| Delay/Veh:   | 43.8 | 22.8 | 19.3 | 45.1 | 26.6 | 23.2 | 46.9 | 21.4 | 22.0 | 45.2 | 25.2 | 21.3 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 43.8 | 22.8 | 19.3 | 45.1 | 26.6 | 23.2 | 46.9 | 21.4 | 22.0 | 45.2 | 25.2 | 21.3 |
| LOS by Move: | D    | C    | B    | D    | C    | C    | D    | C    | C    | D    | C    | C    |
| HCM2kAvgQ:   | 4    | 7    | 1    | 2    | 9    | 4    | 3    | 4    | 5    | 2    | 9    | 3    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative)

Intersection #8 Etiwanda Ave/Marlay Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.334  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 15.7  
Optimal Cycle: 21 Level Of Service: B

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Permitted  |   |   | Permitted  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 1           | 0 | 2 | 1          | 0 | 1 | 1          | 0 | 1 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 40   | 562  | 117  | 79   | 508  | 41   | 11   | 31   | 32   | 81   | 64   | 96   |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 40   | 562  | 117  | 79   | 508  | 41   | 11   | 31   | 32   | 81   | 64   | 96   |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 42   | 592  | 123  | 83   | 535  | 43   | 12   | 33   | 34   | 85   | 67   | 101  |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 42   | 592  | 123  | 83   | 535  | 43   | 12   | 33   | 34   | 85   | 67   | 101  |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 42   | 592  | 123  | 83   | 535  | 43   | 12   | 33   | 34   | 85   | 67   | 101  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 0.95 | 1.00 | 0.91 | 0.91 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Lanes:      | 1.00 | 1.66 | 0.34 | 1.00 | 2.78 | 0.22 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Sat.: | 1800 | 2831 | 589  | 1800 | 4547 | 367  | 1800 | 1710 | 1710 | 1800 | 1710 | 1710 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.02 | 0.21 | 0.21 | 0.05 | 0.12 | 0.12 | 0.01 | 0.02 | 0.02 | 0.05 | 0.04 | 0.06 |
| Crit Moves:  | **** |      |      | **** |      |      |      |      |      | **** |      |      |
| Green/Cycle: | 0.13 | 0.63 | 0.63 | 0.14 | 0.64 | 0.64 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 |
| Volume/Cap:  | 0.18 | 0.33 | 0.33 | 0.33 | 0.18 | 0.18 | 0.04 | 0.11 | 0.11 | 0.27 | 0.22 | 0.33 |
| Delay/Veh:   | 39.4 | 9.0  | 9.0  | 39.7 | 7.5  | 7.5  | 34.2 | 34.6 | 34.7 | 36.0 | 35.4 | 36.4 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 39.4 | 9.0  | 9.0  | 39.7 | 7.5  | 7.5  | 34.2 | 34.6 | 34.7 | 36.0 | 35.4 | 36.4 |
| LOS by Move: | D    | A    | A    | D    | A    | A    | C    | C    | C    | D    | D    | D    |
| HCM2kAvgQ:   | 1    | 5    | 5    | 3    | 3    | 3    | 0    | 1    | 1    | 2    | 2    | 3    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Base Volume Alternative)

Intersection #9 Etiwanda Ave/Philadelphia Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.291  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 12.1  
Optimal Cycle: 20 Level Of Service: B

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Permitted  |   |   | Permitted  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 1 | 0 | 1          | 0 | 1 | 0          | 1 | 0 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 81   | 702  | 18   | 46   | 472  | 78   | 53   | 13   | 42   | 11   | 7    | 16   |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 81   | 702  | 18   | 46   | 472  | 78   | 53   | 13   | 42   | 11   | 7    | 16   |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 85   | 739  | 19   | 48   | 497  | 82   | 56   | 14   | 44   | 12   | 7    | 17   |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 85   | 739  | 19   | 48   | 497  | 82   | 56   | 14   | 44   | 12   | 7    | 17   |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 85   | 739  | 19   | 48   | 497  | 82   | 56   | 14   | 44   | 12   | 7    | 17   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.91 | 0.91 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 2.57 | 0.43 | 1.00 | 1.00 | 1.00 | 1.00 | 0.30 | 0.70 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 4217 | 697  | 1800 | 1800 | 1800 | 1800 | 548  | 1252 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.05 | 0.22 | 0.01 | 0.03 | 0.12 | 0.12 | 0.03 | 0.01 | 0.02 | 0.01 | 0.01 | 0.01 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.24 | 0.74 | 0.74 | 0.09 | 0.59 | 0.59 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 |
| Volume/Cap:  | 0.20 | 0.29 | 0.01 | 0.29 | 0.20 | 0.20 | 0.29 | 0.07 | 0.23 | 0.06 | 0.13 | 0.13 |
| Delay/Veh:   | 30.6 | 4.3  | 3.4  | 43.3 | 9.3  | 9.3  | 42.1 | 40.4 | 41.6 | 40.3 | 40.8 | 40.8 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 30.6 | 4.3  | 3.4  | 43.3 | 9.3  | 9.3  | 42.1 | 40.4 | 41.6 | 40.3 | 40.8 | 40.8 |
| LOS by Move: | C    | A    | A    | D    | A    | A    | D    | D    | D    | D    | D    | D    |
| HCM2kAvgQ:   | 2    | 4    | 0    | 2    | 3    | 3    | 2    | 0    | 1    | 0    | 1    | 1    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative)

Intersection #10 Etiwanda Ave/SR-60 WB Ramp

Cycle (sec): 100 Critical Vol./Cap.(X): 0.464  
Loss Time (sec): 4 (Y+R=4.0 sec) Average Delay (sec/veh): 15.0  
Optimal Cycle: 21 Level Of Service: B

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound  |   |   | West Bound  |   |   |
|-------------|-------------|---|---|-------------|---|---|-------------|---|---|-------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L           | T | R | L           | T | R |
| Control:    | Permitted   |   |   | Permitted   |   |   | Split Phase |   |   | Split Phase |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include     |   |   | Include     |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 |
| Lanes:      | 0           | 0 | 2 | 0           | 0 | 2 | 0           | 0 | 0 | 1           | 0 | 0 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 0    | 873  | 0    | 0    | 500  | 0    | 0    | 0    | 0    | 245  | 0    | 302  |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 0    | 873  | 0    | 0    | 500  | 0    | 0    | 0    | 0    | 245  | 0    | 302  |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 0    | 919  | 0    | 0    | 526  | 0    | 0    | 0    | 0    | 258  | 0    | 318  |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 0    | 919  | 0    | 0    | 526  | 0    | 0    | 0    | 0    | 258  | 0    | 318  |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 0    | 919  | 0    | 0    | 526  | 0    | 0    | 0    | 0    | 258  | 0    | 318  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 0.00 | 2.00 | 0.00 | 0.00 | 2.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 |
| Final Sat.: | 0    | 3420 | 0    | 0    | 3420 | 0    | 0    | 0    | 0    | 1800 | 0    | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.00 | 0.27 | 0.00 | 0.00 | 0.15 | 0.00 | 0.00 | 0.00 | 0.00 | 0.14 | 0.00 | 0.18 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.00 | 0.58 | 0.00 | 0.00 | 0.58 | 0.00 | 0.00 | 0.00 | 0.00 | 0.38 | 0.00 | 0.38 |
| Volume/Cap:  | 0.00 | 0.46 | 0.00 | 0.00 | 0.27 | 0.00 | 0.00 | 0.00 | 0.00 | 0.38 | 0.00 | 0.46 |
| Delay/Veh:   | 0.0  | 12.3 | 0.0  | 0.0  | 10.5 | 0.0  | 0.0  | 0.0  | 0.0  | 22.7 | 0.0  | 23.8 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 0.0  | 12.3 | 0.0  | 0.0  | 10.5 | 0.0  | 0.0  | 0.0  | 0.0  | 22.7 | 0.0  | 23.8 |
| LOS by Move: | A    | B    | A    | A    | B    | A    | A    | A    | A    | C    | A    | C    |
| HCM2kAvgQ:   | 0    | 9    | 0    | 0    | 4    | 0    | 0    | 0    | 0    | 6    | 0    | 7    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #11 Etiwanda Ave/SR-60 EB Ramp

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: B[ 12.2]

| Approach: | North Bound  | South Bound  | East Bound | West Bound |
|-----------|--------------|--------------|------------|------------|
| Movement: | L - T - R    | L - T - R    | L - T - R  | L - T - R  |
| Control:  | Uncontrolled | Uncontrolled | Stop Sign  | Stop Sign  |
| Rights:   | Include      | Include      | Include    | Include    |
| Lanes:    | 0 0 1 1 0    | 1 0 2 0 0    | 0 0 0 0 0  | 0 0 0 0 0  |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 0    | 896  | 225  | 97   | 620  | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0    | 896  | 225  | 97   | 620  | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 0    | 943  | 237  | 102  | 653  | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| FinalVolume: | 0    | 943  | 237  | 102  | 653  | 0    | 0    | 0    | 0    | 0    | 0    | 0    |

Critical Gap Module:

|                    |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Critical Gap:xxxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx |
| FollowUpTim:xxxxx  | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx |

Capacity Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Cnflct Vol:  | xxxx | xxxx | xxxx | 1180 | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx |
| Potent Cap.: | xxxx | xxxx | xxxx | 599  | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx |
| Move Cap.:   | xxxx | xxxx | xxxx | 599  | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx |
| Volume/Cap:  | xxxx | xxxx | xxxx | 0.17 | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx | xxxx |

Level Of Service Module:

|                   |               |               |               |               |               |               |               |               |               |               |               |               |
|-------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| 2Way95thQ:        | xxxx          | xxxx          | xxxx          | 0.6           | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          |
| Control Del:xxxxx | xxxx          | xxxx          | xxxx          | 12.2          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          |
| LOS by Move:      | *             | *             | *             | B             | *             | *             | *             | *             | *             | *             | *             | *             |
| Movement:         | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT |
| Shared Cap.:      | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          |
| SharedQueue:xxxxx | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          |
| Shrd ConDel:xxxxx | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          |
| Shared LOS:       | *             | *             | *             | *             | *             | *             | *             | *             | *             | *             | *             | *             |
| ApproachDel:      | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        |
| ApproachLOS:      | *             | *             | *             | *             | *             | *             | *             | *             | *             | *             | *             | *             |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Base Volume Alternative)

Intersection #12 Commerce Way/Ontario Mills Pkwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.467

Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 23.7

Optimal Cycle: 30 Level Of Service: C

| Approach:   | North Bound | South Bound | East Bound | West Bound |
|-------------|-------------|-------------|------------|------------|
| Movement:   | L - T - R   | L - T - R   | L - T - R  | L - T - R  |
| Control:    | Protected   | Protected   | Protected  | Protected  |
| Rights:     | Include     | Include     | Include    | Include    |
| Min. Green: | 0 0 0       | 0 0 0       | 0 0 0      | 0 0 0      |
| Lanes:      | 2 0 1 0 1   | 1 0 1 1 0   | 1 0 2 0 1  | 2 0 2 0 1  |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 32   | 102  | 490  | 15   | 65   | 10   | 5    | 114  | 5    | 329  | 251  | 10   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 32   | 102  | 490  | 15   | 65   | 10   | 5    | 114  | 5    | 329  | 251  | 10   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 34   | 107  | 516  | 16   | 68   | 11   | 5    | 120  | 5    | 346  | 264  | 11   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 34   | 107  | 516  | 16   | 68   | 11   | 5    | 120  | 5    | 346  | 264  | 11   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 34   | 107  | 516  | 16   | 68   | 11   | 5    | 120  | 5    | 346  | 264  | 11   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 |
| Lanes:      | 2.00 | 1.00 | 1.00 | 1.00 | 1.73 | 0.27 | 1.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 |
| Final Sat.: | 3492 | 1800 | 1800 | 1800 | 2964 | 456  | 1800 | 3420 | 1800 | 3492 | 3420 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.01 | 0.06 | 0.29 | 0.01 | 0.02 | 0.02 | 0.00 | 0.04 | 0.00 | 0.10 | 0.08 | 0.01 |
| Crit Moves:  | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Green/Cycle: | 0.19 | 0.61 | 0.61 | 0.02 | 0.45 | 0.45 | 0.01 | 0.08 | 0.08 | 0.21 | 0.28 | 0.28 |
| Volume/Cap:  | 0.05 | 0.10 | 0.47 | 0.47 | 0.05 | 0.05 | 0.28 | 0.47 | 0.04 | 0.47 | 0.28 | 0.02 |
| Delay/Veh:   | 33.5 | 8.0  | 10.8 | 58.4 | 15.7 | 15.7 | 57.0 | 45.7 | 43.0 | 34.9 | 28.5 | 26.3 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 33.5 | 8.0  | 10.8 | 58.4 | 15.7 | 15.7 | 57.0 | 45.7 | 43.0 | 34.9 | 28.5 | 26.3 |
| LOS by Move: | C    | A    | B    | E    | B    | B    | E    | D    | D    | C    | C    | C    |
| HCM2kAvgQ:   | 0    | 1    | 9    | 1    | 1    | 1    | 0    | 2    | 0    | 5    | 3    | 0    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Base Volume Alternative)

Intersection #13 Mulberry Ave/Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.263  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 20.8  
Optimal Cycle: 19 Level Of Service: C

| Approach:   | North Bound | South Bound | East Bound | West Bound |
|-------------|-------------|-------------|------------|------------|
| Movement:   | L - T - R   | L - T - R   | L - T - R  | L - T - R  |
| Control:    | Split Phase | Split Phase | Protected  | Protected  |
| Rights:     | Include     | Include     | Include    | Include    |
| Min. Green: | 0 0 0       | 0 0 0       | 0 0 0      | 0 0 0      |
| Lanes:      | 1 0 0 0 1   | 0 0 0 0 0   | 0 0 2 1 0  | 1 0 2 0 0  |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 158  | 0    | 131  | 0    | 0    | 0    | 203  | 81   | 161  | 367  | 0    |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 158  | 0    | 131  | 0    | 0    | 0    | 203  | 81   | 161  | 367  | 0    |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 166  | 0    | 138  | 0    | 0    | 0    | 214  | 85   | 169  | 386  | 0    |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 166  | 0    | 138  | 0    | 0    | 0    | 214  | 85   | 169  | 386  | 0    |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 166  | 0    | 138  | 0    | 0    | 0    | 214  | 85   | 169  | 386  | 0    |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 0.91 | 1.00 | 0.95 | 1.00 |
| Lanes:      | 1.00 | 0.00 | 1.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.14 | 0.86 | 1.00 | 2.00 |
| Final Sat.: | 1800 | 0    | 1800 | 0    | 0    | 0    | 3512 | 1402 | 1800 | 3420 | 0    |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.09 | 0.00 | 0.08 | 0.00 | 0.00 | 0.00 | 0.06 | 0.06 | 0.09 | 0.11 | 0.00 |
| Crit Moves:  | **** |      |      |      |      |      | **** |      | **** |      |      |
| Green/Cycle: | 0.35 | 0.00 | 0.35 | 0.00 | 0.00 | 0.00 | 0.23 | 0.23 | 0.36 | 0.59 | 0.00 |
| Volume/Cap:  | 0.26 | 0.00 | 0.22 | 0.00 | 0.00 | 0.00 | 0.26 | 0.26 | 0.26 | 0.19 | 0.00 |
| Delay/Veh:   | 23.4 | 0.0  | 23.0 | 0.0  | 0.0  | 0.0  | 31.6 | 31.6 | 23.0 | 9.6  | 0.0  |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 23.4 | 0.0  | 23.0 | 0.0  | 0.0  | 0.0  | 31.6 | 31.6 | 23.0 | 9.6  | 0.0  |
| LOS by Move: | C    | A    | C    | A    | A    | A    | C    | C    | C    | A    | A    |
| HCM2kAvgQ:   | 4    | 0    | 3    | 0    | 0    | 0    | 3    | 3    | 4    | 3    | 0    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Base Volume Alternative)

Intersection #14 Mulberry Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.235  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 18.6  
Optimal Cycle: 18 Level Of Service: B

| Approach:   | North Bound | South Bound | East Bound | West Bound |
|-------------|-------------|-------------|------------|------------|
| Movement:   | L - T - R   | L - T - R   | L - T - R  | L - T - R  |
| Control:    | Protected   | Protected   | Permitted  | Permitted  |
| Rights:     | Include     | Include     | Include    | Include    |
| Min. Green: | 0 0 0       | 0 0 0       | 0 0 0      | 0 0 0      |
| Lanes:      | 1 0 1 0 1   | 1 0 0 1 0   | 0 1 0 0 1  | 0 0 1 0 0  |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 80   | 240  | 51   | 25   | 171  | 17   | 2    | 10   | 24   | 52   | 14   | 43   |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 80   | 240  | 51   | 25   | 171  | 17   | 2    | 10   | 24   | 52   | 14   | 43   |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 84   | 253  | 54   | 26   | 180  | 18   | 2    | 11   | 25   | 55   | 15   | 45   |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 84   | 253  | 54   | 26   | 180  | 18   | 2    | 11   | 25   | 55   | 15   | 45   |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 84   | 253  | 54   | 26   | 180  | 18   | 2    | 11   | 25   | 55   | 15   | 45   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 0.09 | 0.17 | 0.83 | 1.00 | 0.48 | 0.13 | 0.39 |
| Final Sat.: | 1800 | 1800 | 1800 | 1800 | 1637 | 163  | 300  | 1500 | 1800 | 859  | 231  | 710  |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.05 | 0.14 | 0.03 | 0.01 | 0.11 | 0.11 | 0.01 | 0.01 | 0.01 | 0.06 | 0.06 | 0.06 |
| Crit Moves:  | **** |      |      |      | **** |      |      |      |      | **** |      |      |
| Green/Cycle: | 0.20 | 0.61 | 0.61 | 0.06 | 0.47 | 0.47 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 |
| Volume/Cap:  | 0.23 | 0.23 | 0.05 | 0.23 | 0.23 | 0.23 | 0.03 | 0.03 | 0.05 | 0.23 | 0.23 | 0.23 |
| Delay/Veh:   | 34.0 | 9.2  | 8.1  | 45.6 | 16.0 | 16.0 | 26.7 | 26.7 | 26.9 | 28.6 | 28.6 | 28.6 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 34.0 | 9.2  | 8.1  | 45.6 | 16.0 | 16.0 | 26.7 | 26.7 | 26.9 | 28.6 | 28.6 | 28.6 |
| LOS by Move: | C    | A    | A    | D    | B    | B    | C    | C    | C    | C    | C    | C    |
| HCM2kAvgQ:   | 2    | 4    | 1    | 1    | 4    | 4    | 0    | 0    | 1    | 3    | 3    | 3    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
AM PEAK HOUR

## Level Of Service Computation Report

## 2000 HCM Operations Method (Base Volume Alternative)

Intersection #15 Mulberry Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.505  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 27.9  
Optimal Cycle: 32 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 2 | 0           | 1 | 0 | 2          | 0 | 1 | 1          | 0 | 2 |

## Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 417  | 378  | 222  | 8    | 217  | 61   | 84   | 227  | 72   | 205  | 723  | 35   |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 417  | 378  | 222  | 8    | 217  | 61   | 84   | 227  | 72   | 205  | 723  | 35   |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 439  | 398  | 234  | 8    | 228  | 64   | 88   | 239  | 76   | 216  | 761  | 37   |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 439  | 398  | 234  | 8    | 228  | 64   | 88   | 239  | 76   | 216  | 761  | 37   |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 439  | 398  | 234  | 8    | 228  | 64   | 88   | 239  | 76   | 216  | 761  | 37   |

## Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 |
| Lanes:      | 2.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 3492 | 3420 | 1800 | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 |

## Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.13 | 0.12 | 0.13 | 0.00 | 0.07 | 0.04 | 0.05 | 0.07 | 0.04 | 0.12 | 0.22 | 0.02 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.25 | 0.37 | 0.37 | 0.01 | 0.13 | 0.13 | 0.10 | 0.20 | 0.20 | 0.34 | 0.44 | 0.44 |
| Volume/Cap:  | 0.50 | 0.32 | 0.35 | 0.35 | 0.50 | 0.27 | 0.50 | 0.35 | 0.21 | 0.35 | 0.50 | 0.05 |
| Delay/Veh:   | 32.7 | 22.7 | 23.3 | 57.7 | 41.2 | 39.6 | 45.2 | 34.9 | 33.9 | 25.1 | 20.4 | 16.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 32.7 | 22.7 | 23.3 | 57.7 | 41.2 | 39.6 | 45.2 | 34.9 | 33.9 | 25.1 | 20.4 | 16.0 |
| LOS by Move: | C    | C    | C    | E    | D    | D    | D    | C    | C    | C    | C    | B    |
| HCM2kAvgQ:   | 6    | 5    | 5    | 1    | 4    | 2    | 3    | 4    | 2    | 5    | 9    | 1    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
AM PEAK HOUR

## Level Of Service Computation Report

## 2000 HCM Operations Method (Base Volume Alternative)

Intersection #16 Mulberry Ave/Marlay Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.220  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 17.9  
Optimal Cycle: 22 Level Of Service: B

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 1 | 0 | 1          | 0 | 1 | 1          | 0 | 1 |

## Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 62   | 468  | 34   | 7    | 277  | 53   | 41   | 14   | 42   | 41   | 52   | 52   |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 62   | 468  | 34   | 7    | 277  | 53   | 41   | 14   | 42   | 41   | 52   | 52   |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 65   | 493  | 36   | 7    | 292  | 56   | 43   | 15   | 44   | 43   | 55   | 55   |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 65   | 493  | 36   | 7    | 292  | 56   | 43   | 15   | 44   | 43   | 55   | 55   |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 65   | 493  | 36   | 7    | 292  | 56   | 43   | 15   | 44   | 43   | 55   | 55   |

## Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |

## Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.04 | 0.14 | 0.02 | 0.00 | 0.09 | 0.03 | 0.02 | 0.01 | 0.02 | 0.02 | 0.03 | 0.03 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.20 | 0.65 | 0.65 | 0.02 | 0.47 | 0.47 | 0.11 | 0.13 | 0.13 | 0.12 | 0.14 | 0.14 |
| Volume/Cap:  | 0.18 | 0.22 | 0.03 | 0.22 | 0.18 | 0.07 | 0.22 | 0.07 | 0.20 | 0.20 | 0.22 | 0.22 |
| Delay/Veh:   | 33.4 | 7.0  | 6.1  | 51.7 | 15.3 | 14.4 | 41.2 | 38.7 | 39.7 | 39.9 | 38.8 | 38.8 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 33.4 | 7.0  | 6.1  | 51.7 | 15.3 | 14.4 | 41.2 | 38.7 | 39.7 | 39.9 | 38.8 | 38.8 |
| LOS by Move: | C    | A    | A    | D    | B    | B    | D    | D    | D    | D    | D    | D    |
| HCM2kAvgQ:   | 2    | 3    | 0    | 0    | 3    | 1    | 1    | 0    | 1    | 1    | 2    | 2    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
AM PEAK HOUR

## Level Of Service Computation Report

## 2000 HCM Operations Method (Base Volume Alternative)

Intersection #17 Mulberry Ave/Philadelphia Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.421  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 9.1  
Optimal Cycle: 24 Level Of Service: A

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Permitted  |   |   | Permitted  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 1 | 0 | 1          | 0 | 1 | 0          | 1 | 0 |

## Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 96   | 857  | 19   | 10   | 977  | 33   | 28   | 1    | 52   | 66   | 5    | 19   |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 96   | 857  | 19   | 10   | 977  | 33   | 28   | 1    | 52   | 66   | 5    | 19   |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 101  | 902  | 20   | 11   | 1028 | 35   | 29   | 1    | 55   | 69   | 5    | 20   |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 101  | 902  | 20   | 11   | 1028 | 35   | 29   | 1    | 55   | 69   | 5    | 20   |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 101  | 902  | 20   | 11   | 1028 | 35   | 29   | 1    | 55   | 69   | 5    | 20   |

## Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.21 | 0.79 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 | 1800 | 1800 | 1800 | 1800 | 375  | 1425 |

## Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.06 | 0.26 | 0.01 | 0.01 | 0.30 | 0.02 | 0.02 | 0.00 | 0.03 | 0.04 | 0.01 | 0.01 |
| Crit Moves:  | **** |      |      | **** |      |      |      |      |      | **** |      |      |
| Green/Cycle: | 0.13 | 0.83 | 0.83 | 0.02 | 0.71 | 0.71 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 |
| Volume/Cap:  | 0.42 | 0.32 | 0.01 | 0.32 | 0.42 | 0.03 | 0.18 | 0.01 | 0.33 | 0.42 | 0.15 | 0.15 |
| Delay/Veh:   | 41.0 | 2.0  | 1.5  | 53.9 | 5.9  | 4.2  | 42.5 | 41.3 | 43.7 | 44.6 | 42.3 | 42.3 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 41.0 | 2.0  | 1.5  | 53.9 | 5.9  | 4.2  | 42.5 | 41.3 | 43.7 | 44.6 | 42.3 | 42.3 |
| LOS by Move: | D    | A    | A    | D    | A    | A    | D    | D    | D    | D    | D    | D    |
| HCM2kAvgQ:   | 3    | 4    | 0    | 1    | 7    | 0    | 1    | 0    | 2    | 3    | 1    | 1    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
AM PEAK HOUR

## Level Of Service Computation Report

## 2000 HCM Operations Method (Base Volume Alternative)

Intersection #18 Mulberry Ave/SR-60 WB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.802  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 20.7  
Optimal Cycle: 59 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound  |   |   | West Bound  |   |   |
|-------------|-------------|---|---|-------------|---|---|-------------|---|---|-------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L           | T | R | L           | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Split Phase |   |   | Split Phase |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include     |   |   | Include     |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 0 | 1 | 0           | 0 | 0 | 0           | 1 | 0 |

## Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 235  | 708  | 0    | 0    | 491  | 770  | 0    | 0    | 0    | 123  | 1    | 244  |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 235  | 708  | 0    | 0    | 491  | 770  | 0    | 0    | 0    | 123  | 1    | 244  |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 247  | 745  | 0    | 0    | 517  | 811  | 0    | 0    | 0    | 129  | 1    | 257  |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 247  | 745  | 0    | 0    | 517  | 811  | 0    | 0    | 0    | 129  | 1    | 257  |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 247  | 745  | 0    | 0    | 517  | 811  | 0    | 0    | 0    | 129  | 1    | 257  |

## Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 0.00 | 0.00 | 1.00 | 1.00 | 0.00 | 0.00 | 0.00 | 0.99 | 0.01 | 1.00 |
| Final Sat.: | 1800 | 3420 | 0    | 0    | 1710 | 1710 | 0    | 0    | 0    | 1785 | 15   | 1800 |

## Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.14 | 0.22 | 0.00 | 0.00 | 0.30 | 0.47 | 0.00 | 0.00 | 0.00 | 0.07 | 0.07 | 0.14 |
| Crit Moves:  | **** |      |      |      |      | **** |      |      |      | **** |      |      |
| Green/Cycle: | 0.17 | 0.76 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.00 | 0.00 | 0.18 | 0.18 | 0.18 |
| Volume/Cap:  | 0.80 | 0.29 | 0.00 | 0.00 | 0.51 | 0.80 | 0.00 | 0.00 | 0.00 | 0.41 | 0.41 | 0.80 |
| Delay/Veh:   | 53.8 | 3.7  | 0.0  | 0.0  | 12.2 | 18.8 | 0.0  | 0.0  | 0.0  | 37.3 | 37.3 | 53.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 53.8 | 3.7  | 0.0  | 0.0  | 12.2 | 18.8 | 0.0  | 0.0  | 0.0  | 37.3 | 37.3 | 53.0 |
| LOS by Move: | D    | A    | A    | A    | B    | B    | A    | A    | A    | D    | D    | D    |
| HCM2kAvgQ:   | 10   | 4    | 0    | 0    | 10   | 22   | 0    | 0    | 0    | 4    | 4    | 10   |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Base Volume Alternative)

Intersection #19 Mulberry Ave/SR-60 EB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.612  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 24.0  
Optimal Cycle: 34 Level Of Service: C

| Approach:                 | North Bound    | South Bound    | East Bound     | West Bound     |
|---------------------------|----------------|----------------|----------------|----------------|
| Movement:                 | L - T - R      | L - T - R      | L - T - R      | L - T - R      |
| Control:                  | Protected      | Protected      | Split Phase    | Split Phase    |
| Rights:                   | Include        | Include        | Include        | Include        |
| Min. Green:               | 0 0 0          | 0 0 0          | 0 0 0          | 0 0 0          |
| Lanes:                    | 0 0 1 1 0      | 1 0 2 0 0      | 1 0 1 0 0      | 0 0 0 0 0      |
| Volume Module:            |                |                |                |                |
| Base Vol:                 | 0 548 93       | 164 425 0      | 378 3 290      | 0 0 0          |
| Growth Adj:               | 1.00 1.00 1.00 | 1.00 1.00 1.00 | 1.00 1.00 1.00 | 1.00 1.00 1.00 |
| Initial Bse:              | 0 548 93       | 164 425 0      | 378 3 290      | 0 0 0          |
| User Adj:                 | 1.00 1.00 1.00 | 1.00 1.00 1.00 | 1.00 1.00 1.00 | 1.00 1.00 1.00 |
| PHF Adj:                  | 0.95 0.95 0.95 | 0.95 0.95 0.95 | 0.95 0.95 0.95 | 0.95 0.95 0.95 |
| PHF Volume:               | 0 577 98       | 173 447 0      | 398 3 305      | 0 0 0          |
| Reduct Vol:               | 0 0 0          | 0 0 0          | 0 0 0          | 0 0 0          |
| Reduced Vol:              | 0 577 98       | 173 447 0      | 398 3 305      | 0 0 0          |
| PCE Adj:                  | 1.00 1.00 1.00 | 1.00 1.00 1.00 | 1.00 1.00 1.00 | 1.00 1.00 1.00 |
| MLF Adj:                  | 1.00 1.00 1.00 | 1.00 1.00 1.00 | 1.00 1.00 1.00 | 1.00 1.00 1.00 |
| FinalVolume:              | 0 577 98       | 173 447 0      | 398 3 305      | 0 0 0          |
| Saturation Flow Module:   |                |                |                |                |
| Sat/Lane:                 | 1800 1800 1800 | 1800 1800 1800 | 1800 1800 1800 | 1800 1800 1800 |
| Adjustment:               | 1.00 0.95 0.95 | 1.00 0.95 1.00 | 1.00 1.00 1.00 | 1.00 1.00 1.00 |
| Lanes:                    | 0.00 1.71 0.29 | 1.00 2.00 0.00 | 1.39 0.01 0.60 | 0.00 0.00 0.00 |
| Final Sat.:               | 0 2924 496     | 1800 3420 0    | 2506 11 1083   | 0 0 0          |
| Capacity Analysis Module: |                |                |                |                |
| Vol/Sat:                  | 0.00 0.20 0.20 | 0.10 0.13 0.00 | 0.16 0.28 0.28 | 0.00 0.00 0.00 |
| Crit Moves:               | ****           | ****           | ****           |                |
| Green/Cycle:              | 0.00 0.32 0.32 | 0.16 0.48 0.00 | 0.46 0.46 0.46 | 0.00 0.00 0.00 |
| Volume/Cap:               | 0.00 0.61 0.61 | 0.61 0.27 0.00 | 0.34 0.61 0.61 | 0.00 0.00 0.00 |
| Delay/Veh:                | 0.0 29.6 29.6  | 43.2 15.7 0.0  | 17.4 21.2 21.2 | 0.0 0.0 0.0    |
| User DelAdj:              | 1.00 1.00 1.00 | 1.00 1.00 1.00 | 1.00 1.00 1.00 | 1.00 1.00 1.00 |
| AdjDel/Veh:               | 0.0 29.6 29.6  | 43.2 15.7 0.0  | 17.4 21.2 21.2 | 0.0 0.0 0.0    |
| LOS by Move:              | A C C          | D B A          | B C C          | A A A          |
| HCM2kAvgQ:                | 0 10 10        | 6 4 0          | 6 12 12        | 0 0 0          |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #20 Banana Ave/San Bernardino Ave

Average Delay (sec/veh): 1.0 Worst Case Level Of Service: A[ 9.7]

| Approach:                | North Bound      | South Bound      | East Bound       | West Bound       |
|--------------------------|------------------|------------------|------------------|------------------|
| Movement:                | L - T - R        | L - T - R        | L - T - R        | L - T - R        |
| Control:                 | Stop Sign        | Stop Sign        | Uncontrolled     | Uncontrolled     |
| Rights:                  | Include          | Include          | Include          | Include          |
| Lanes:                   | 0 0 1! 0 0       | 0 0 0 0 0        | 0 0 2 0 1        | 1 0 2 0 0        |
| Volume Module:           |                  |                  |                  |                  |
| Base Vol:                | 7 0 36           | 0 0 0            | 0 244 5          | 25 315 0         |
| Growth Adj:              | 1.00 1.00 1.00   | 1.00 1.00 1.00   | 1.00 1.00 1.00   | 1.00 1.00 1.00   |
| Initial Bse:             | 7 0 36           | 0 0 0            | 0 244 5          | 25 315 0         |
| User Adj:                | 1.00 1.00 1.00   | 1.00 1.00 1.00   | 1.00 1.00 1.00   | 1.00 1.00 1.00   |
| PHF Adj:                 | 0.95 0.95 0.95   | 0.95 0.95 0.95   | 0.95 0.95 0.95   | 0.95 0.95 0.95   |
| PHF Volume:              | 7 0 38           | 0 0 0            | 0 257 5          | 26 332 0         |
| Reduct Vol:              | 0 0 0            | 0 0 0            | 0 0 0            | 0 0 0            |
| FinalVolume:             | 7 0 38           | 0 0 0            | 0 257 5          | 26 332 0         |
| Critical Gap Module:     |                  |                  |                  |                  |
| Critical Gp:             | 6.8 6.5 6.9      | xxxxx xxxx xxxxx | xxxxx xxxx xxxxx | 4.1 xxxx xxxxx   |
| FollowUpTim:             | 3.5 4.0 3.3      | xxxxx xxxx xxxxx | xxxxx xxxx xxxxx | 2.2 xxxx xxxxx   |
| Capacity Module:         |                  |                  |                  |                  |
| Cnflct Vol:              | 475 641 128      | xxxxx xxxx xxxxx | xxxxx xxxx xxxxx | 262 xxxx xxxxx   |
| Potent Cap.:             | 523 395 904      | xxxxx xxxx xxxxx | xxxxx xxxx xxxxx | 1314 xxxx xxxxx  |
| Move Cap.:               | 515 388 904      | xxxxx xxxx xxxxx | xxxxx xxxx xxxxx | 1314 xxxx xxxxx  |
| Volume/Cap:              | 0.01 0.00 0.04   | xxxxx xxxx xxxxx | xxxxx xxxx xxxxx | 0.02 xxxx xxxxx  |
| Level Of Service Module: |                  |                  |                  |                  |
| 2Way95thQ:               | xxxx xxxx xxxxx  | xxxx xxxx xxxxx  | xxxx xxxx xxxxx  | 0.1 xxxx xxxxx   |
| Control Del:             | xxxxx xxxx xxxxx | xxxxx xxxx xxxxx | xxxxx xxxx xxxxx | 7.8 xxxx xxxxx   |
| LOS by Move:             | * * *            | * * *            | * * *            | A * *            |
| Movement:                | LT - LTR - RT    | LT - LTR - RT    | LT - LTR - RT    | LT - LTR - RT    |
| Shared Cap.:             | xxxx 805 xxxxx   | xxxx xxxx xxxxx  | xxxx xxxx xxxxx  | xxxx xxxx xxxxx  |
| SharedQueue:             | xxxxx 0.2 xxxxx  | xxxxx xxxx xxxxx | xxxxx xxxx xxxxx | xxxxx xxxx xxxxx |
| Shrd ConDel:             | xxxxx 9.7 xxxxx  | xxxxx xxxx xxxxx | xxxxx xxxx xxxxx | xxxxx xxxx xxxxx |
| Shared LOS:              | * A * *          | * * *            | * * *            | * * *            |
| ApproachDel:             | 9.7              | xxxxxx           | xxxxxx           | xxxxxx           |
| ApproachLOS:             | A                | *                | *                | *                |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #21 Banana Ave/Valley Blvd

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: C [ 19.5]

Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Stop Sign Stop Sign Uncontrolled Uncontrolled  
Rights: Include Include Include Include  
Lanes: 0 0 1! 0 0 0 0 1! 0 0 1 0 2 0 1 1 0 1 1 0

Volume Module:

Base Vol: 4 0 1 14 0 22 50 424 18 12 609 40  
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
Initial Bse: 4 0 1 14 0 22 50 424 18 12 609 40  
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95  
PHF Volume: 4 0 1 15 0 23 53 446 19 13 641 42  
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
FinalVolume: 4 0 1 15 0 23 53 446 19 13 641 42

Critical Gap Module:

Critical Gap: 7.5 6.5 6.9 7.5 6.5 6.9 4.1 xxxx xxxxx 4.1 xxxx xxxxx  
FollowUpTim: 3.5 4.0 3.3 3.5 4.0 3.3 2.2 xxxx xxxxx 2.2 xxxx xxxxx

Capacity Module:

Cnflct Vol: 897 1260 223 1016 1258 342 683 xxxx xxxxx 465 xxxx xxxxx  
Potent Cap.: 238 172 786 195 172 660 919 xxxx xxxxx 1107 xxxx xxxxx  
Move Cap.: 217 160 786 185 161 660 919 xxxx xxxxx 1107 xxxx xxxxx  
Volume/Cap: 0.02 0.00 0.00 0.08 0.00 0.04 0.06 xxxx xxxxx 0.01 xxxx xxxxx

Level Of Service Module:

2Way95thQ: xxxx xxxx xxxxx xxxx xxxx xxxxx 0.2 xxxx xxxxx 0.0 xxxx xxxxx  
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx 9.2 xxxx xxxxx 8.3 xxxx xxxxx  
LOS by Move: \* \* \* \* \* A \* \* \* A \* \* \*  
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT  
Shared Cap.: xxxx 254 xxxxx xxxx 330 xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx  
SharedQueue:xxxxx 0.1 xxxxx xxxxx 0.4 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx  
Shrd ConDel:xxxxx 19.5 xxxxx xxxxx 17.3 xxxxx xxxxx xxxx xxxxx xxxx xxxx xxxxx  
Shared LOS: \* C \* \* C \* \* \* \*  
ApproachDel: 19.5 17.3 xxxxxx xxxxxx  
ApproachLOS: C C \* \*

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Base Volume Alternative)

Intersection #22 Cherry Ave/San Bernardino Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.356

Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 24.0

Optimal Cycle: 26 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected  
Rights: Include Ignore Ignore Include  
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0  
Lanes: 1 0 2 1 0 1 0 3 0 1 1 0 2 0 1 1 0 1 1 0

Volume Module:

Base Vol: 45 595 68 63 753 142 137 60 60 173 129 65  
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
Initial Bse: 45 595 68 63 753 142 137 60 60 173 129 65  
User Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 0.00 1.00 1.00 1.00  
PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.00 0.95 0.95 0.00 0.95 0.95 0.95  
PHF Volume: 47 626 72 66 793 0 144 63 0 182 136 68  
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
Reduced Vol: 47 626 72 66 793 0 144 63 0 182 136 68  
PCE Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 0.00 1.00 1.00 1.00  
MLF Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 0.00 1.00 1.00 1.00  
FinalVolume: 47 626 72 66 793 0 144 63 0 182 136 68

Saturation Flow Module:

Sat/Lane: 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800  
Adjustment: 1.00 0.91 0.91 1.00 0.91 1.00 1.00 0.95 1.00 1.00 0.95 0.95  
Lanes: 1.00 2.69 0.31 1.00 3.00 1.00 1.00 2.00 1.00 1.00 1.33 0.67  
Final Sat.: 1800 4410 504 1800 4914 1800 1800 3420 1800 1800 2274 1146

Capacity Analysis Module:

Vol/Sat: 0.03 0.14 0.14 0.04 0.16 0.00 0.08 0.02 0.00 0.10 0.06 0.06  
Crit Moves: \*\*\*\* \*\*\*\* \*\*\*\*  
Green/Cycle: 0.07 0.42 0.42 0.11 0.45 0.00 0.23 0.06 0.00 0.33 0.17 0.17  
Volume/Cap: 0.36 0.34 0.34 0.34 0.36 0.00 0.36 0.30 0.00 0.30 0.36 0.36  
Delay/Veh: 45.7 19.8 19.8 42.3 17.9 0.0 33.2 45.8 0.0 25.1 37.2 37.2  
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
AdjDel/Veh: 45.7 19.8 19.8 42.3 17.9 0.0 33.2 45.8 0.0 25.1 37.2 37.2  
LOS by Move: D B B D B A C D A C D D  
HCM2kAvgQ: 2 5 5 2 6 0 4 1 0 4 3 3

Note: Queue reported is the number of cars per lane.



FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Base Volume Alternative)

Intersection #23 Cherry Ave/Valley Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.661  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 30.9  
Optimal Cycle: 44 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected  
Rights: Include Include Include Include  
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0  
Lanes: 1 0 2 0 1 1 0 2 0 1 1 0 2 0 1

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 152  | 614  | 232  | 93   | 702  | 127  | 86   | 195  | 151  | 368  | 715  | 107  |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 152  | 614  | 232  | 93   | 702  | 127  | 86   | 195  | 151  | 368  | 715  | 107  |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 160  | 646  | 244  | 98   | 739  | 134  | 91   | 205  | 159  | 387  | 753  | 113  |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 160  | 646  | 244  | 98   | 739  | 134  | 91   | 205  | 159  | 387  | 753  | 113  |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 160  | 646  | 244  | 98   | 739  | 134  | 91   | 205  | 159  | 387  | 753  | 113  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.09 | 0.19 | 0.14 | 0.05 | 0.22 | 0.07 | 0.05 | 0.06 | 0.09 | 0.22 | 0.22 | 0.06 |
| Crit Moves:  | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Green/Cycle: | 0.13 | 0.36 | 0.36 | 0.10 | 0.33 | 0.33 | 0.09 | 0.13 | 0.13 | 0.33 | 0.37 | 0.37 |
| Volume/Cap:  | 0.66 | 0.53 | 0.38 | 0.53 | 0.66 | 0.23 | 0.59 | 0.45 | 0.66 | 0.66 | 0.59 | 0.17 |
| Delay/Veh:   | 47.8 | 25.8 | 24.2 | 45.4 | 30.4 | 24.7 | 49.9 | 40.6 | 47.9 | 31.8 | 25.9 | 21.1 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 47.8 | 25.8 | 24.2 | 45.4 | 30.4 | 24.7 | 49.9 | 40.6 | 47.9 | 31.8 | 25.9 | 21.1 |
| LOS by Move: | D    | C    | C    | D    | C    | C    | D    | D    | D    | C    | C    | C    |
| HCM2kAvgQ:   | 6    | 9    | 6    | 4    | 11   | 3    | 4    | 4    | 6    | 11   | 10   | 2    |

Note: Queue reported is the number of cars per lane.

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FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Base Volume Alternative)

Intersection #26 Cherry Ave/Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.692  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 30.5  
Optimal Cycle: 41 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected  
Rights: Include Include Include Include  
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0  
Lanes: 1 0 2 0 1 1 0 1 1 0 1 0 2 0 1

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 28   | 474  | 16   | 420  | 347  | 557  | 211  | 148  | 13   | 33   | 321  | 232  |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 28   | 474  | 16   | 420  | 347  | 557  | 211  | 148  | 13   | 33   | 321  | 232  |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 29   | 499  | 17   | 442  | 365  | 586  | 222  | 156  | 14   | 35   | 338  | 244  |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 29   | 499  | 17   | 442  | 365  | 586  | 222  | 156  | 14   | 35   | 338  | 244  |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 29   | 499  | 17   | 442  | 365  | 586  | 222  | 156  | 14   | 35   | 338  | 244  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 1710 | 1710 | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.02 | 0.15 | 0.01 | 0.25 | 0.21 | 0.34 | 0.12 | 0.05 | 0.01 | 0.02 | 0.10 | 0.14 |
| Crit Moves:  | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Green/Cycle: | 0.03 | 0.21 | 0.21 | 0.35 | 0.54 | 0.54 | 0.18 | 0.26 | 0.26 | 0.11 | 0.20 | 0.20 |
| Volume/Cap:  | 0.64 | 0.69 | 0.04 | 0.69 | 0.40 | 0.64 | 0.69 | 0.17 | 0.03 | 0.17 | 0.50 | 0.69 |
| Delay/Veh:   | 73.7 | 39.4 | 31.5 | 30.8 | 13.6 | 17.0 | 44.9 | 28.6 | 27.4 | 40.7 | 36.5 | 43.2 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 73.7 | 39.4 | 31.5 | 30.8 | 13.6 | 17.0 | 44.9 | 28.6 | 27.4 | 40.7 | 36.5 | 43.2 |
| LOS by Move: | E    | D    | C    | C    | B    | B    | D    | C    | C    | D    | D    | D    |
| HCM2kAvgQ:   | 2    | 9    | 0    | 13   | 7    | 14   | 8    | 2    | 0    | 1    | 5    | 8    |

Note: Queue reported is the number of cars per lane.

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FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Base Volume Alternative)

Intersection #27 Cherry Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.277  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 20.0  
Optimal Cycle: 19 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Permitted  |   |   | Permitted  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 1           | 0 | 2 | 0          | 1 | 0 | 0          | 1 | 0 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 17   | 454  | 10   | 41   | 358  | 162  | 222  | 43   | 67   | 8    | 91   | 19   |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 17   | 454  | 10   | 41   | 358  | 162  | 222  | 43   | 67   | 8    | 91   | 19   |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 18   | 478  | 11   | 43   | 377  | 171  | 234  | 45   | 71   | 8    | 96   | 20   |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 18   | 478  | 11   | 43   | 377  | 171  | 234  | 45   | 71   | 8    | 96   | 20   |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 18   | 478  | 11   | 43   | 377  | 171  | 234  | 45   | 71   | 8    | 96   | 20   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 2.94 | 0.06 | 1.00 | 2.07 | 0.93 | 1.00 | 0.39 | 0.61 | 0.08 | 0.92 | 1.00 |
| Final Sat.: | 1800 | 4808 | 106  | 1800 | 3383 | 1531 | 1710 | 668  | 1042 | 145  | 1655 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.01 | 0.10 | 0.10 | 0.02 | 0.11 | 0.11 | 0.14 | 0.07 | 0.07 | 0.06 | 0.06 | 0.01 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.04 | 0.36 | 0.36 | 0.09 | 0.41 | 0.41 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 |
| Volume/Cap:  | 0.27 | 0.28 | 0.28 | 0.28 | 0.27 | 0.27 | 0.28 | 0.14 | 0.14 | 0.12 | 0.12 | 0.02 |
| Delay/Veh:   | 49.1 | 22.9 | 22.9 | 43.7 | 19.7 | 19.7 | 14.9 | 13.8 | 13.8 | 13.6 | 13.6 | 13.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 49.1 | 22.9 | 22.9 | 43.7 | 19.7 | 19.7 | 14.9 | 13.8 | 13.8 | 13.6 | 13.6 | 13.0 |
| LOS by Move: | D    | C    | C    | D    | B    | B    | B    | B    | B    | B    | B    | B    |
| HCM2kAvgQ:   | 1    | 4    | 4    | 1    | 4    | 4    | 4    | 2    | 2    | 2    | 2    | 0    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Base Volume Alternative)

Intersection #28 Cherry Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.622  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 28.8  
Optimal Cycle: 40 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 2 | 0           | 2 | 0 | 2          | 0 | 2 | 2          | 0 | 2 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 387  | 402  | 69   | 151  | 402  | 174  | 161  | 496  | 224  | 85   | 920  | 121  |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 387  | 402  | 69   | 151  | 402  | 174  | 161  | 496  | 224  | 85   | 920  | 121  |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 407  | 423  | 73   | 159  | 423  | 183  | 169  | 522  | 236  | 89   | 968  | 127  |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 407  | 423  | 73   | 159  | 423  | 183  | 169  | 522  | 236  | 89   | 968  | 127  |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 407  | 423  | 73   | 159  | 423  | 183  | 169  | 522  | 236  | 89   | 968  | 127  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.91 | 0.91 | 0.97 | 0.95 | 1.00 |
| Lanes:      | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 2.07 | 0.93 | 2.00 | 2.00 | 1.00 |
| Final Sat.: | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 | 3492 | 3385 | 1529 | 3492 | 3420 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.12 | 0.12 | 0.04 | 0.05 | 0.12 | 0.10 | 0.05 | 0.15 | 0.15 | 0.03 | 0.28 | 0.07 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.19 | 0.28 | 0.28 | 0.10 | 0.20 | 0.20 | 0.08 | 0.46 | 0.46 | 0.08 | 0.46 | 0.46 |
| Volume/Cap:  | 0.62 | 0.44 | 0.14 | 0.44 | 0.62 | 0.51 | 0.62 | 0.34 | 0.34 | 0.34 | 0.62 | 0.16 |
| Delay/Veh:   | 39.2 | 29.7 | 26.9 | 42.9 | 38.4 | 37.0 | 49.1 | 17.5 | 17.5 | 44.6 | 21.5 | 16.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 39.2 | 29.7 | 26.9 | 42.9 | 38.4 | 37.0 | 49.1 | 17.5 | 17.5 | 44.6 | 21.5 | 16.0 |
| LOS by Move: | D    | C    | C    | D    | D    | D    | D    | B    | B    | D    | C    | B    |
| HCM2kAvgQ:   | 7    | 6    | 2    | 3    | 7    | 6    | 4    | 5    | 5    | 2    | 12   | 2    |

Note: Queue reported is the number of cars per lane.

Lanes, Volumes, Timings  
3: VALLEY BLVD & FONTANA

AM PEAK HOUR

6/25/2009

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL2                                                                              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                                | WBR2                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | NBR2                                                                                |
| Lane Configurations     |                                                                                   |  |  |  |  |  |                                                                                    |  |                                                                                     |  |                                                                                     |  |
| Volume (vph)            | 72                                                                                | 82                                                                                | 331                                                                               | 8                                                                                 | 4                                                                                 | 392                                                                               | 62                                                                                 | 16                                                                                  | 25                                                                                  | 13                                                                                  | 5                                                                                   | 10                                                                                  |
| Ideal Flow (vphpl)      | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Lane Util. Factor       | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 0.91                                                                              | 0.91                                                                               | 0.91                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Frt                     |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   | 0.979                                                                             |                                                                                    | 0.850                                                                               |                                                                                     | 0.983                                                                               |                                                                                     | 0.850                                                                               |
| Flt Protected           |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                    |                                                                                     |                                                                                     | 0.972                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)       | 0                                                                                 | 1710                                                                              | 3420                                                                              | 1530                                                                              | 1710                                                                              | 3207                                                                              | 0                                                                                  | 1392                                                                                | 0                                                                                   | 1720                                                                                | 0                                                                                   | 1530                                                                                |
| Flt Permitted           |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                    |                                                                                     |                                                                                     | 0.794                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)       | 0                                                                                 | 1710                                                                              | 3420                                                                              | 1530                                                                              | 1710                                                                              | 3207                                                                              | 0                                                                                  | 1392                                                                                | 0                                                                                   | 1405                                                                                | 0                                                                                   | 1530                                                                                |
| Right Turn on Red       |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                    | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)       |                                                                                   |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   |                                                                                    | 15                                                                                  |                                                                                     |                                                                                     |                                                                                     | 11                                                                                  |
| Link Speed (mph)        |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                    |                                                                                     |                                                                                     | 30                                                                                  |                                                                                     |                                                                                     |
| Link Distance (ft)      |                                                                                   |                                                                                   | 807                                                                               |                                                                                   |                                                                                   | 830                                                                               |                                                                                    |                                                                                     |                                                                                     | 743                                                                                 |                                                                                     |                                                                                     |
| Travel Time (s)         |                                                                                   |                                                                                   | 18.3                                                                              |                                                                                   |                                                                                   | 18.9                                                                              |                                                                                    |                                                                                     |                                                                                     | 16.9                                                                                |                                                                                     |                                                                                     |
| Peak Hour Factor        | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                               | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                |
| Heavy Vehicles (%)      | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                 | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Shared Lane Traffic (%) |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 10%                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)   | 0                                                                                 | 162                                                                               | 348                                                                               | 8                                                                                 | 4                                                                                 | 480                                                                               | 0                                                                                  | 15                                                                                  | 0                                                                                   | 45                                                                                  | 0                                                                                   | 11                                                                                  |
| Turn Type               | Prot                                                                              | Prot                                                                              |                                                                                   | Perm                                                                              | Prot                                                                              |                                                                                   |                                                                                    | Perm                                                                                | Perm                                                                                |                                                                                     |                                                                                     | Perm                                                                                |
| Protected Phases        | 7                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 3                                                                                 | 8                                                                                 |                                                                                    |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |                                                                                     |
| Permitted Phases        |                                                                                   |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   |                                                                                    | 8                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |
| Detector Phase          | 7                                                                                 | 7                                                                                 | 4                                                                                 | 4                                                                                 | 3                                                                                 | 8                                                                                 |                                                                                    | 8                                                                                   | 2                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |                                                                                    | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 |                                                                                     | 4.0                                                                                 |
| Minimum Split (s)       | 8.0                                                                               | 8.0                                                                               | 20.0                                                                              | 20.0                                                                              | 8.0                                                                               | 20.0                                                                              |                                                                                    | 20.0                                                                                | 20.0                                                                                | 20.0                                                                                |                                                                                     | 20.0                                                                                |
| Total Split (s)         | 12.0                                                                              | 12.0                                                                              | 24.0                                                                              | 24.0                                                                              | 8.0                                                                               | 20.0                                                                              | 0.0                                                                                | 20.0                                                                                | 21.0                                                                                | 21.0                                                                                | 0.0                                                                                 | 21.0                                                                                |
| Total Split (%)         | 16.0%                                                                             | 16.0%                                                                             | 32.0%                                                                             | 32.0%                                                                             | 10.7%                                                                             | 26.7%                                                                             | 0.0%                                                                               | 26.7%                                                                               | 28.0%                                                                               | 28.0%                                                                               | 0.0%                                                                                | 28.0%                                                                               |
| Maximum Green (s)       | 8.0                                                                               | 8.0                                                                               | 20.0                                                                              | 20.0                                                                              | 4.0                                                                               | 16.0                                                                              |                                                                                    | 16.0                                                                                | 17.0                                                                                | 17.0                                                                                |                                                                                     | 17.0                                                                                |
| Yellow Time (s)         | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               |                                                                                    | 3.5                                                                                 | 3.5                                                                                 | 3.5                                                                                 |                                                                                     | 3.5                                                                                 |
| All-Red Time (s)        | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               |                                                                                    | 0.5                                                                                 | 0.5                                                                                 | 0.5                                                                                 |                                                                                     | 0.5                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               | Lag                                                                               | Lead                                                                              | Lag                                                                               |                                                                                    | Lag                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               |                                                                                    | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                    | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |                                                                                     | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              |                                                                                    | None                                                                                | None                                                                                | None                                                                                |                                                                                     | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               |                                                                                    | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |                                                                                     | 5.0                                                                                 |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 11.0                                                                              | 11.0                                                                              |                                                                                   | 11.0                                                                              |                                                                                    | 11.0                                                                                | 11.0                                                                                | 11.0                                                                                |                                                                                     | 11.0                                                                                |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                    | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |
| Act Effect Green (s)    |                                                                                   | 8.2                                                                               | 24.9                                                                              | 24.9                                                                              | 4.1                                                                               | 14.0                                                                              |                                                                                    | 14.0                                                                                |                                                                                     | 9.7                                                                                 |                                                                                     | 9.7                                                                                 |
| Actuated g/C Ratio      |                                                                                   | 0.13                                                                              | 0.39                                                                              | 0.39                                                                              | 0.06                                                                              | 0.22                                                                              |                                                                                    | 0.22                                                                                |                                                                                     | 0.15                                                                                |                                                                                     | 0.15                                                                                |
| v/c Ratio               |                                                                                   | 0.74                                                                              | 0.26                                                                              | 0.01                                                                              | 0.04                                                                              | 0.69                                                                              |                                                                                    | 0.05                                                                                |                                                                                     | 0.21                                                                                |                                                                                     | 0.05                                                                                |
| Control Delay           |                                                                                   | 53.6                                                                              | 16.1                                                                              | 10.5                                                                              | 32.8                                                                              | 29.7                                                                              |                                                                                    | 12.0                                                                                |                                                                                     | 27.4                                                                                |                                                                                     | 13.8                                                                                |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                    | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |
| Total Delay             |                                                                                   | 53.6                                                                              | 16.1                                                                              | 10.5                                                                              | 32.8                                                                              | 29.7                                                                              |                                                                                    | 12.0                                                                                |                                                                                     | 27.4                                                                                |                                                                                     | 13.8                                                                                |
| LOS                     |                                                                                   | D                                                                                 | B                                                                                 | B                                                                                 | C                                                                                 | C                                                                                 |                                                                                    | B                                                                                   |                                                                                     | C                                                                                   |                                                                                     | B                                                                                   |
| Approach Delay          |                                                                                   |                                                                                   | 27.8                                                                              |                                                                                   |                                                                                   | 29.2                                                                              |                                                                                    |                                                                                     |                                                                                     | 24.7                                                                                |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                    |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |                                                                                     |
| Queue Length 50th (ft)  |                                                                                   | 67                                                                                | 47                                                                                | 0                                                                                 | 2                                                                                 | 98                                                                                |                                                                                    | 0                                                                                   |                                                                                     | 17                                                                                  |                                                                                     | 0                                                                                   |

Lanes, Volumes, Timings  
3: VALLEY BLVD & FONTANA

AM PEAK HOUR

6/25/2009

|                         |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | SBL2                                                                              | SBL                                                                               | SBT                                                                               | SBR                                                                               | SWL2                                                                              | SWL                                                                               | SWR                                                                                | SWR2                                                                                |
| Lane Configurations     |                                                                                   |                                                                                   |  |  |                                                                                   |  |                                                                                    |                                                                                     |
| Volume (vph)            | 1                                                                                 | 75                                                                                | 4                                                                                 | 78                                                                                | 9                                                                                 | 22                                                                                | 317                                                                                | 5                                                                                   |
| Ideal Flow (vphpl)      | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                |
| Lane Util. Factor       | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                |
| Frt                     |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   | 0.877                                                                             |                                                                                    |                                                                                     |
| Flt Protected           |                                                                                   |                                                                                   | 0.955                                                                             |                                                                                   |                                                                                   | 0.996                                                                             |                                                                                    |                                                                                     |
| Satd. Flow (prot)       | 0                                                                                 | 0                                                                                 | 1719                                                                              | 1530                                                                              | 0                                                                                 | 1572                                                                              | 0                                                                                  | 0                                                                                   |
| Flt Permitted           |                                                                                   |                                                                                   | 0.703                                                                             |                                                                                   |                                                                                   | 0.996                                                                             |                                                                                    |                                                                                     |
| Satd. Flow (perm)       | 0                                                                                 | 0                                                                                 | 1265                                                                              | 1530                                                                              | 0                                                                                 | 1572                                                                              | 0                                                                                  | 0                                                                                   |
| Right Turn on Red       |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                    | No                                                                                  |
| Satd. Flow (RTOR)       |                                                                                   |                                                                                   |                                                                                   | 82                                                                                |                                                                                   |                                                                                   |                                                                                    |                                                                                     |
| Link Speed (mph)        |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                    |                                                                                     |
| Link Distance (ft)      |                                                                                   |                                                                                   | 792                                                                               |                                                                                   |                                                                                   | 998                                                                               |                                                                                    |                                                                                     |
| Travel Time (s)         |                                                                                   |                                                                                   | 18.0                                                                              |                                                                                   |                                                                                   | 22.7                                                                              |                                                                                    |                                                                                     |
| Peak Hour Factor        | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                               | 0.95                                                                                |
| Heavy Vehicles (%)      | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                 | 0%                                                                                  |
| Shared Lane Traffic (%) |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |
| Lane Group Flow (vph)   | 0                                                                                 | 0                                                                                 | 84                                                                                | 82                                                                                | 0                                                                                 | 371                                                                               | 0                                                                                  | 0                                                                                   |
| Turn Type               | Perm                                                                              | Perm                                                                              |                                                                                   | Perm                                                                              | Perm                                                                              |                                                                                   |                                                                                    |                                                                                     |
| Protected Phases        |                                                                                   |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                    |                                                                                     |
| Permitted Phases        | 2                                                                                 | 2                                                                                 |                                                                                   | 2                                                                                 | 6                                                                                 |                                                                                   |                                                                                    |                                                                                     |
| Detector Phase          | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 | 6                                                                                 | 6                                                                                 |                                                                                    |                                                                                     |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |
| Minimum Initial (s)     | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |                                                                                    |                                                                                     |
| Minimum Split (s)       | 20.0                                                                              | 20.0                                                                              | 20.0                                                                              | 20.0                                                                              | 20.0                                                                              | 20.0                                                                              |                                                                                    |                                                                                     |
| Total Split (s)         | 21.0                                                                              | 21.0                                                                              | 21.0                                                                              | 21.0                                                                              | 22.0                                                                              | 22.0                                                                              | 0.0                                                                                | 0.0                                                                                 |
| Total Split (%)         | 28.0%                                                                             | 28.0%                                                                             | 28.0%                                                                             | 28.0%                                                                             | 29.3%                                                                             | 29.3%                                                                             | 0.0%                                                                               | 0.0%                                                                                |
| Maximum Green (s)       | 17.0                                                                              | 17.0                                                                              | 17.0                                                                              | 17.0                                                                              | 18.0                                                                              | 18.0                                                                              |                                                                                    |                                                                                     |
| Yellow Time (s)         | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               |                                                                                    |                                                                                     |
| All-Red Time (s)        | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               |                                                                                    |                                                                                     |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |
| Total Lost Time (s)     | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                | 4.0                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                    |                                                                                     |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              |                                                                                    |                                                                                     |
| Walk Time (s)           | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                    |                                                                                     |
| Flash Dont Walk (s)     | 11.0                                                                              | 11.0                                                                              | 11.0                                                                              | 11.0                                                                              | 11.0                                                                              | 11.0                                                                              |                                                                                    |                                                                                     |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                    |                                                                                     |
| Act Effect Green (s)    |                                                                                   |                                                                                   | 9.7                                                                               | 9.7                                                                               |                                                                                   | 18.4                                                                              |                                                                                    |                                                                                     |
| Actuated g/C Ratio      |                                                                                   |                                                                                   | 0.15                                                                              | 0.15                                                                              |                                                                                   | 0.29                                                                              |                                                                                    |                                                                                     |
| v/c Ratio               |                                                                                   |                                                                                   | 0.44                                                                              | 0.27                                                                              |                                                                                   | 0.82                                                                              |                                                                                    |                                                                                     |
| Control Delay           |                                                                                   |                                                                                   | 33.5                                                                              | 9.1                                                                               |                                                                                   | 42.3                                                                              |                                                                                    |                                                                                     |
| Queue Delay             |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               |                                                                                    |                                                                                     |
| Total Delay             |                                                                                   |                                                                                   | 33.5                                                                              | 9.1                                                                               |                                                                                   | 42.3                                                                              |                                                                                    |                                                                                     |
| LOS                     |                                                                                   |                                                                                   | C                                                                                 | A                                                                                 |                                                                                   | D                                                                                 |                                                                                    |                                                                                     |
| Approach Delay          |                                                                                   |                                                                                   | 21.5                                                                              |                                                                                   |                                                                                   | 42.3                                                                              |                                                                                    |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                    |                                                                                     |
| Queue Length 50th (ft)  |                                                                                   |                                                                                   | 33                                                                                | 0                                                                                 |                                                                                   | 147                                                                               |                                                                                    |                                                                                     |

Lanes, Volumes, Timings  
3: VALLEY BLVD & FONTANA

AM PEAK HOUR

6/25/2009

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL2                                                                              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                                | WBR2                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | NBR2                                                                                |
| Queue Length 95th (ft)  |                                                                                   | #178                                                                              | 102                                                                               | 10                                                                                | 11                                                                                | 162                                                                               |                                                                                    | 15                                                                                  |                                                                                     | 43                                                                                  |                                                                                     | 12                                                                                  |
| Internal Link Dist (ft) |                                                                                   |                                                                                   | 727                                                                               |                                                                                   |                                                                                   | 750                                                                               |                                                                                    |                                                                                     |                                                                                     | 663                                                                                 |                                                                                     |                                                                                     |
| Turn Bay Length (ft)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 219                                                                               | 1327                                                                              | 598                                                                               | 109                                                                               | 820                                                                               |                                                                                    | 367                                                                                 |                                                                                     | 382                                                                                 |                                                                                     | 424                                                                                 |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 0                                                                                   |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.74                                                                              | 0.26                                                                              | 0.01                                                                              | 0.04                                                                              | 0.59                                                                              |                                                                                    | 0.04                                                                                |                                                                                     | 0.12                                                                                |                                                                                     | 0.03                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 75

Actuated Cycle Length: 64.1

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.82

Intersection Signal Delay: 30.8

Intersection LOS: C

Intersection Capacity Utilization 70.2%

ICU Level of Service C

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 3: VALLEY BLVD & FONTANA

|                                                                                                                                                                            |                                                                                        |                                                                                        |                                                                                         |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
|   Ø2 |  Ø6 |  Ø3 |  Ø4  |
| 21 s                                                                                                                                                                       | 22 s                                                                                   | 8 s                                                                                    | 24 s                                                                                    |
|                                                                                                                                                                            |                                                                                        |  Ø7 |  Ø8 |
|                                                                                                                                                                            |                                                                                        | 12 s                                                                                   | 20 s                                                                                    |

Lanes, Volumes, Timings  
3: VALLEY BLVD & FONTANA

AM PEAK HOUR  
6/25/2009

|                         |  |     |      |      |      |      |     |      |
|-------------------------|------------------------------------------------------------------------------------|-----|------|------|------|------|-----|------|
| Lane Group              | SBL2                                                                               | SBL | SBT  | SBR  | SWL2 | SWL  | SWR | SWR2 |
| Queue Length 95th (ft)  |                                                                                    |     | 71   | 33   |      | #328 |     |      |
| Internal Link Dist (ft) |                                                                                    |     | 712  |      |      | 918  |     |      |
| Turn Bay Length (ft)    |                                                                                    |     |      |      |      |      |     |      |
| Base Capacity (vph)     |                                                                                    |     | 344  | 475  |      | 452  |     |      |
| Starvation Cap Reductn  |                                                                                    |     | 0    | 0    |      | 0    |     |      |
| Spillback Cap Reductn   |                                                                                    |     | 0    | 0    |      | 0    |     |      |
| Storage Cap Reductn     |                                                                                    |     | 0    | 0    |      | 0    |     |      |
| Reduced v/c Ratio       |                                                                                    |     | 0.24 | 0.17 |      | 0.82 |     |      |
| Intersection Summary    |                                                                                    |     |      |      |      |      |     |      |

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #30 Beech Ave/Valley Blvd

Average Delay (sec/veh): 2.1 Worst Case Level Of Service: C[ 15.9]

Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Stop Sign Stop Sign Uncontrolled Uncontrolled  
Rights: Include Include Include Include  
Lanes: 0 1 0 0 1 0 1 0 0 1 1 0 1 1 0 1 0 2 0 1

Volume Module:

Base Vol: 4 2 12 68 3 20 8 376 9 20 348 50  
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
Initial Bse: 4 2 12 68 3 20 8 376 9 20 348 50  
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95  
PHF Volume: 4 2 13 72 3 21 8 396 9 21 366 53  
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
FinalVolume: 4 2 13 72 3 21 8 396 9 21 366 53

Critical Gap Module:

Critical Gap: 7.5 6.5 6.9 7.5 6.5 6.9 4.1 xxxx xxxxx 4.1 xxxx xxxxx  
FollowUpTim: 3.5 4.0 3.3 3.5 4.0 3.3 2.2 xxxx xxxxx 2.2 xxxx xxxxx

Capacity Module:

Cnflct Vol: 644 878 203 624 831 183 419 xxxx xxxxx 405 xxxx xxxxx  
Potent Cap.: 362 289 811 374 308 834 1151 xxxx xxxxx 1164 xxxx xxxxx  
Move Cap.: 343 281 811 359 300 834 1151 xxxx xxxxx 1164 xxxx xxxxx  
Volume/Cap: 0.01 0.01 0.02 0.20 0.01 0.03 0.01 xxxx xxxxx 0.02 xxxx xxxxx

Level Of Service Module:

2Way95thQ: xxxx xxxx 0.0 xxxx xxxx 0.1 0.0 xxxx xxxxx 0.1 xxxx xxxxx  
Control Del:xxxxx xxxx 9.5 xxxxx xxxx 9.4 8.2 xxxx xxxxx 8.1 xxxx xxxxx  
LOS by Move: \* \* A \* \* A \* \* A \* \*  
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT  
Shared Cap.: 320 xxxx xxxxx 356 xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx  
SharedQueue: 0.1 xxxx xxxxx 0.8 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx  
Shrd ConDel: 16.5 xxxx xxxxx 17.8 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx  
Shared LOS: C \* C \* \* \* \* \* \* \*  
ApproachDel: 11.8 15.9  
ApproachLOS: B C

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #31 Beech Ave/Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.444

Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): 11.5

Optimal Cycle: 0 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Stop Sign Stop Sign Stop Sign Stop Sign  
Rights: Include Include Include Include  
Lanes: 0 0 1! 0 0 0 0 1! 0 0 1 0 1 1 0 1 0 1 1 0

Volume Module:

Base Vol: 72 8 73 8 0 5 5 427 111 121 381 16  
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
Initial Bse: 72 8 73 8 0 5 5 427 111 121 381 16  
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95  
PHF Volume: 76 8 77 8 0 5 5 449 117 127 401 17  
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
Reduced Vol: 76 8 77 8 0 5 5 449 117 127 401 17  
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
FinalVolume: 76 8 77 8 0 5 5 449 117 127 401 17

Saturation Flow Module:

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
Lanes: 0.47 0.05 0.48 0.62 0.00 0.38 1.00 1.59 0.41 1.00 1.92 0.08  
Final Sat.: 273 30 277 316 0 197 573 1013 272 573 1203 51

Capacity Analysis Module:

Vol/Sat: 0.28 0.28 0.28 0.03 xxxx 0.03 0.01 0.44 0.43 0.22 0.33 0.33  
Crit Moves: \*\*\*\*  
Delay/Veh: 10.9 10.9 10.9 9.5 0.0 9.5 8.9 12.5 11.9 10.6 11.0 11.0  
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
AdjDel/Veh: 10.9 10.9 10.9 9.5 0.0 9.5 8.9 12.5 11.9 10.6 11.0 11.0  
LOS by Move: B B B A \* A A B B B B B  
ApproachDel: 10.9 9.5 12.3 10.9  
Delay Adj: 1.00 1.00 1.00 1.00  
ApprAdjDel: 10.9 9.5 12.3 10.9  
LOS by Appr: B A B B  
AllWayAvgQ: 0.3 0.3 0.3 0.0 0.0 0.0 0.0 0.8 0.7 0.3 0.5 0.5

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
AM PEAK HOUR

## Level Of Service Computation Report

## 2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #32 Beech Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.218  
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 9.3  
Optimal Cycle: 0 Level Of Service: A

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Stop Sign   |   |   | Stop Sign   |   |   | Stop Sign  |   |   | Stop Sign  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 0           | 1 | 0 | 0          | 1 | 0 | 0          | 1 | 0 |

## Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 8    | 122  | 72   | 22   | 55   | 19   | 50   | 126  | 7    | 38   | 97   | 36   |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 8    | 122  | 72   | 22   | 55   | 19   | 50   | 126  | 7    | 38   | 97   | 36   |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 8    | 128  | 76   | 23   | 58   | 20   | 53   | 133  | 7    | 40   | 102  | 38   |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 8    | 128  | 76   | 23   | 58   | 20   | 53   | 133  | 7    | 40   | 102  | 38   |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 8    | 128  | 76   | 23   | 58   | 20   | 53   | 133  | 7    | 40   | 102  | 38   |

## Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.54 | 1.38 | 0.08 | 0.44 | 1.14 | 0.42 |
| Final Sat.: | 541  | 588  | 663  | 518  | 559  | 626  | 324  | 847  | 48   | 264  | 707  | 274  |

## Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.02 | 0.22 | 0.11 | 0.04 | 0.10 | 0.03 | 0.16 | 0.16 | 0.15 | 0.15 | 0.14 | 0.14 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Delay/Veh:   | 9.1  | 10.0 | 8.4  | 9.5  | 9.4  | 8.2  | 9.6  | 9.3  | 9.1  | 9.5  | 9.1  | 8.8  |
| Delay Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 9.1  | 10.0 | 8.4  | 9.5  | 9.4  | 8.2  | 9.6  | 9.3  | 9.1  | 9.5  | 9.1  | 8.8  |
| LOS by Move: | A    | B    | A    | A    | A    | A    | A    | A    | A    | A    | A    | A    |
| ApproachDel: | 9.4  |      |      | 9.2  |      |      | 9.4  |      |      | 9.1  |      |      |
| Delay Adj:   | 1.00 |      |      | 1.00 |      |      | 1.00 |      |      | 1.00 |      |      |
| ApprAdjDel:  | 9.4  |      |      | 9.2  |      |      | 9.4  |      |      | 9.1  |      |      |
| LOS by Appr: | A    |      |      | A    |      |      | A    |      |      | A    |      |      |
| AllWayAvgQ:  | 0.0  | 0.2  | 0.1  | 0.0  | 0.1  | 0.0  | 0.2  | 0.2  | 0.2  | 0.2  | 0.1  | 0.1  |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
AM PEAK HOUR

## Level Of Service Computation Report

## 2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #33 Beech Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.792  
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): 24.7  
Optimal Cycle: 0 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Stop Sign   |   |   | Stop Sign   |   |   | Stop Sign  |   |   | Stop Sign  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 0           | 1 | 0 | 0          | 1 | 0 | 0          | 0 | 1 |

## Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 316  | 38   | 13   | 2    | 5    | 73   | 117  | 412  | 137  | 1    | 303  | 11   |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 316  | 38   | 13   | 2    | 5    | 73   | 117  | 412  | 137  | 1    | 303  | 11   |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 333  | 40   | 14   | 2    | 5    | 77   | 123  | 434  | 144  | 1    | 319  | 12   |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 333  | 40   | 14   | 2    | 5    | 77   | 123  | 434  | 144  | 1    | 319  | 12   |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 333  | 40   | 14   | 2    | 5    | 77   | 123  | 434  | 144  | 1    | 319  | 12   |

## Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.35 | 1.24 | 0.41 | 0.01 | 0.96 | 0.03 |
| Final Sat.: | 420  | 441  | 482  | 338  | 355  | 382  | 174  | 634  | 218  | 2    | 462  | 17   |

## Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.79 | 0.09 | 0.03 | 0.01 | 0.01 | 0.20 | 0.71 | 0.68 | 0.66 | 0.69 | 0.69 | 0.69 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Delay/Veh:   | 34.6 | 11.4 | 10.1 | 12.2 | 11.8 | 12.7 | 24.6 | 22.9 | 21.0 | 24.0 | 24.0 | 24.0 |
| Delay Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 34.6 | 11.4 | 10.1 | 12.2 | 11.8 | 12.7 | 24.6 | 22.9 | 21.0 | 24.0 | 24.0 | 24.0 |
| LOS by Move: | D    | B    | B    | B    | B    | B    | C    | C    | C    | C    | C    | C    |
| ApproachDel: | 31.4 |      |      | 12.6 |      |      | 22.8 |      |      | 24.0 |      |      |
| Delay Adj:   | 1.00 |      |      | 1.00 |      |      | 1.00 |      |      | 1.00 |      |      |
| ApprAdjDel:  | 31.4 |      |      | 12.6 |      |      | 22.8 |      |      | 24.0 |      |      |
| LOS by Appr: | D    |      |      | B    |      |      | C    |      |      | C    |      |      |
| AllWayAvgQ:  | 2.7  | 0.1  | 0.0  | 0.0  | 0.0  | 0.2  | 2.0  | 1.7  | 1.7  | 1.8  | 1.8  | 1.8  |

Note: Queue reported is the number of cars per lane.



FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Base Volume Alternative)

Intersection #34 Citrus Ave/Valley Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.937  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 44.5  
Optimal Cycle: 125 Level Of Service: D

| Approach:   | North Bound | South Bound | East Bound | West Bound |
|-------------|-------------|-------------|------------|------------|
| Movement:   | L - T - R   | L - T - R   | L - T - R  | L - T - R  |
| Control:    | Protected   | Protected   | Protected  | Protected  |
| Rights:     | Include     | Include     | Include    | Include    |
| Min. Green: | 0 0 0       | 0 0 0       | 0 0 0      | 0 0 0      |
| Lanes:      | 1 0 1 1 0   | 1 0 1 1 0   | 2 0 1 1 0  | 2 0 1 1 0  |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 352  | 695  | 122  | 104  | 727  | 35   | 28   | 206  | 491  | 397  | 425  | 83   |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 352  | 695  | 122  | 104  | 727  | 35   | 28   | 206  | 491  | 397  | 425  | 83   |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 371  | 732  | 128  | 109  | 765  | 37   | 29   | 217  | 517  | 418  | 447  | 87   |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 371  | 732  | 128  | 109  | 765  | 37   | 29   | 217  | 517  | 418  | 447  | 87   |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 371  | 732  | 128  | 109  | 765  | 37   | 29   | 217  | 517  | 418  | 447  | 87   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 0.97 | 0.95 | 0.95 | 0.97 | 0.95 | 0.95 |
| Lanes:      | 1.00 | 1.70 | 0.30 | 1.00 | 1.91 | 0.09 | 2.00 | 1.00 | 1.00 | 2.00 | 1.67 | 0.33 |
| Final Sat.: | 1800 | 2909 | 511  | 1800 | 3263 | 157  | 3492 | 1710 | 1710 | 3492 | 2861 | 559  |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.21 | 0.25 | 0.25 | 0.06 | 0.23 | 0.23 | 0.01 | 0.13 | 0.30 | 0.12 | 0.16 | 0.16 |
| Crit Moves:  | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Green/Cycle: | 0.22 | 0.38 | 0.38 | 0.09 | 0.25 | 0.25 | 0.02 | 0.32 | 0.32 | 0.13 | 0.43 | 0.43 |
| Volume/Cap:  | 0.94 | 0.66 | 0.66 | 0.66 | 0.94 | 0.94 | 0.37 | 0.39 | 0.94 | 0.94 | 0.37 | 0.37 |
| Delay/Veh:   | 68.1 | 27.1 | 27.1 | 53.8 | 54.2 | 54.2 | 50.9 | 26.4 | 51.5 | 70.7 | 19.6 | 19.6 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 68.1 | 27.1 | 27.1 | 53.8 | 54.2 | 54.2 | 50.9 | 26.4 | 51.5 | 70.7 | 19.6 | 19.6 |
| LOS by Move: | E    | C    | C    | D    | D    | D    | D    | C    | D    | E    | B    | B    |
| HCM2kAvgQ:   | 16   | 12   | 12   | 5    | 17   | 17   | 1    | 6    | 21   | 10   | 6    | 6    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Base Volume Alternative)

Intersection #37 Citrus Ave/Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.801  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 35.8  
Optimal Cycle: 65 Level Of Service: D

| Approach:   | North Bound | South Bound | East Bound | West Bound |
|-------------|-------------|-------------|------------|------------|
| Movement:   | L - T - R   | L - T - R   | L - T - R  | L - T - R  |
| Control:    | Protected   | Protected   | Protected  | Protected  |
| Rights:     | Include     | Include     | Include    | Include    |
| Min. Green: | 0 0 0       | 0 0 0       | 0 0 0      | 0 0 0      |
| Lanes:      | 1 0 0 1 0   | 1 0 1 0 1   | 1 0 2 0 1  | 1 0 1 1 0  |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 17   | 376  | 62   | 245  | 179  | 505  | 237  | 235  | 7    | 48   | 422  | 224  |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 17   | 376  | 62   | 245  | 179  | 505  | 237  | 235  | 7    | 48   | 422  | 224  |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 18   | 396  | 65   | 258  | 188  | 532  | 249  | 247  | 7    | 51   | 444  | 236  |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 18   | 396  | 65   | 258  | 188  | 532  | 249  | 247  | 7    | 51   | 444  | 236  |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 18   | 396  | 65   | 258  | 188  | 532  | 249  | 247  | 7    | 51   | 444  | 236  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 |
| Lanes:      | 1.00 | 0.86 | 0.14 | 1.00 | 1.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 1.31 | 0.69 |
| Final Sat.: | 1800 | 1545 | 255  | 1800 | 1800 | 1800 | 1800 | 3420 | 1800 | 1800 | 2234 | 1186 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.01 | 0.26 | 0.26 | 0.14 | 0.10 | 0.30 | 0.14 | 0.07 | 0.00 | 0.03 | 0.20 | 0.20 |
| Crit Moves:  | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Green/Cycle: | 0.02 | 0.32 | 0.32 | 0.18 | 0.48 | 0.48 | 0.17 | 0.30 | 0.30 | 0.12 | 0.25 | 0.25 |
| Volume/Cap:  | 0.61 | 0.80 | 0.80 | 0.80 | 0.22 | 0.61 | 0.80 | 0.24 | 0.01 | 0.24 | 0.80 | 0.80 |
| Delay/Veh:   | 81.6 | 39.0 | 39.0 | 52.7 | 15.1 | 20.3 | 53.4 | 26.3 | 24.4 | 40.6 | 40.7 | 40.7 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 81.6 | 39.0 | 39.0 | 52.7 | 15.1 | 20.3 | 53.4 | 26.3 | 24.4 | 40.6 | 40.7 | 40.7 |
| LOS by Move: | F    | D    | D    | D    | B    | C    | D    | C    | C    | D    | D    | D    |
| HCM2kAvgQ:   | 1    | 15   | 15   | 10   | 3    | 12   | 10   | 3    | 0    | 2    | 12   | 12   |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #38 Citrus Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.533  
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): 12.3  
Optimal Cycle: 0 Level Of Service: B

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Stop Sign   |   |   | Stop Sign   |   |   | Stop Sign  |   |   | Stop Sign  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 0           | 0 | 1 | 0           | 0 | 1 | 0          | 1 | 0 | 0          | 1 | 0 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 11   | 280  | 37   | 18   | 155  | 33   | 49   | 103  | 0    | 20   | 178  | 21   |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 11   | 280  | 37   | 18   | 155  | 33   | 49   | 103  | 0    | 20   | 178  | 21   |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 12   | 295  | 39   | 19   | 163  | 35   | 52   | 108  | 0    | 21   | 187  | 22   |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 12   | 295  | 39   | 19   | 163  | 35   | 52   | 108  | 0    | 21   | 187  | 22   |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 12   | 295  | 39   | 19   | 163  | 35   | 52   | 108  | 0    | 21   | 187  | 22   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 0.03 | 0.86 | 0.11 | 0.09 | 0.75 | 0.16 | 0.32 | 0.68 | 0.00 | 0.10 | 0.90 | 1.00 |
| Final Sat.: | 22   | 553  | 73   | 54   | 461  | 98   | 178  | 375  | 0    | 55   | 485  | 608  |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.53 | 0.53 | 0.53 | 0.35 | 0.35 | 0.35 | 0.29 | 0.29 | xxxx | 0.39 | 0.39 | 0.04 |
| Crit Moves:  | ***  | ***  | ***  | ***  | ***  | ***  | ***  | ***  | ***  | ***  | ***  | ***  |
| Delay/Veh:   | 13.7 | 13.7 | 13.7 | 11.2 | 11.2 | 11.2 | 11.1 | 11.1 | 0.0  | 12.4 | 12.4 | 8.4  |
| Delay Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 13.7 | 13.7 | 13.7 | 11.2 | 11.2 | 11.2 | 11.1 | 11.1 | 0.0  | 12.4 | 12.4 | 8.4  |
| LOS by Move: | B    | B    | B    | B    | B    | B    | B    | B    | *    | B    | B    | A    |
| ApproachDel: | 13.7 |      |      | 11.2 |      |      | 11.1 |      |      | 12.1 |      |      |
| Delay Adj:   | 1.00 |      |      | 1.00 |      |      | 1.00 |      |      | 1.00 |      |      |
| ApprAdjDel:  | 13.7 |      |      | 11.2 |      |      | 11.1 |      |      | 12.1 |      |      |
| LOS by Appr: | B    |      |      | B    |      |      | B    |      |      | B    |      |      |
| AllWayAvgQ:  | 1.0  | 1.0  | 1.0  | 0.5  | 0.5  | 0.5  | 0.3  | 0.3  | 0.3  | 0.5  | 0.5  | 0.0  |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #39 Citrus Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.587  
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): 17.3  
Optimal Cycle: 0 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Stop Sign   |   |   | Stop Sign   |   |   | Stop Sign  |   |   | Stop Sign  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 0           | 0 | 1 | 1          | 0 | 2 | 1          | 0 | 1 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 71   | 174  | 240  | 40   | 63   | 51   | 119  | 422  | 23   | 99   | 347  | 35   |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 71   | 174  | 240  | 40   | 63   | 51   | 119  | 422  | 23   | 99   | 347  | 35   |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 75   | 183  | 253  | 42   | 66   | 54   | 125  | 444  | 24   | 104  | 365  | 37   |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 75   | 183  | 253  | 42   | 66   | 54   | 125  | 444  | 24   | 104  | 365  | 37   |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 75   | 183  | 253  | 42   | 66   | 54   | 125  | 444  | 24   | 104  | 365  | 37   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 1.00 | 1.00 | 1.00 | 0.55 | 0.45 | 1.00 | 2.84 | 0.16 | 1.00 | 1.82 | 0.18 |
| Final Sat.: | 368  | 394  | 430  | 362  | 220  | 178  | 382  | 1157 | 64   | 372  | 728  | 74   |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.20 | 0.46 | 0.59 | 0.12 | 0.30 | 0.30 | 0.33 | 0.38 | 0.38 | 0.28 | 0.50 | 0.50 |
| Crit Moves:  | ***  | ***  | ***  | ***  | ***  | ***  | ***  | ***  | ***  | ***  | ***  | ***  |
| Delay/Veh:   | 14.1 | 18.3 | 20.7 | 13.1 | 14.4 | 14.4 | 15.8 | 16.0 | 15.8 | 15.2 | 19.1 | 18.9 |
| Delay Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 14.1 | 18.3 | 20.7 | 13.1 | 14.4 | 14.4 | 15.8 | 16.0 | 15.8 | 15.2 | 19.1 | 18.9 |
| LOS by Move: | B    | C    | C    | B    | B    | B    | C    | C    | C    | C    | C    | C    |
| ApproachDel: | 18.9 |      |      | 14.0 |      |      | 16.0 |      |      | 18.3 |      |      |
| Delay Adj:   | 1.00 |      |      | 1.00 |      |      | 1.00 |      |      | 1.00 |      |      |
| ApprAdjDel:  | 18.9 |      |      | 14.0 |      |      | 16.0 |      |      | 18.3 |      |      |
| LOS by Appr: | C    |      |      | B    |      |      | C    |      |      | C    |      |      |
| AllWayAvgQ:  | 0.2  | 0.7  | 1.2  | 0.1  | 0.4  | 0.4  | 0.4  | 0.6  | 0.5  | 0.3  | 0.9  | 0.9  |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
AM PEAK HOUR

## Level Of Service Computation Report

## 2000 HCM Operations Method (Base Volume Alternative)

## Intersection #40 Sierra Ave/Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.495  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 23.7  
Optimal Cycle: 32 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Ovl        |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 3 | 0           | 1 | 2 | 0          | 2 | 0 | 1          | 2 | 0 |

## Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 102  | 1006 | 50   | 409  | 555  | 277  | 200  | 103  | 45   | 25   | 182  | 366  |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 102  | 1006 | 50   | 409  | 555  | 277  | 200  | 103  | 45   | 25   | 182  | 366  |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 107  | 1059 | 53   | 431  | 584  | 292  | 211  | 108  | 47   | 26   | 192  | 385  |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 107  | 1059 | 53   | 431  | 584  | 292  | 211  | 108  | 47   | 26   | 192  | 385  |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 107  | 1059 | 53   | 431  | 584  | 292  | 211  | 108  | 47   | 26   | 192  | 385  |

## Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.91 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 0.88 |
| Lanes:      | 2.00 | 3.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 2.00 |
| Final Sat.: | 3492 | 4914 | 1800 | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 | 3492 | 3420 | 3168 |

## Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.03 | 0.22 | 0.03 | 0.12 | 0.17 | 0.16 | 0.06 | 0.03 | 0.03 | 0.01 | 0.06 | 0.12 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.10 | 0.44 | 0.44 | 0.25 | 0.58 | 0.58 | 0.12 | 0.19 | 0.19 | 0.05 | 0.11 | 0.36 |
| Volume/Cap:  | 0.29 | 0.49 | 0.07 | 0.49 | 0.29 | 0.28 | 0.49 | 0.17 | 0.14 | 0.17 | 0.49 | 0.34 |
| Delay/Veh:   | 41.8 | 20.5 | 16.4 | 32.6 | 10.7 | 10.7 | 41.9 | 34.0 | 33.9 | 46.4 | 42.6 | 23.3 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 41.8 | 20.5 | 16.4 | 32.6 | 10.7 | 10.7 | 41.9 | 34.0 | 33.9 | 46.4 | 42.6 | 23.3 |
| LOS by Move: | D    | C    | B    | C    | B    | B    | D    | C    | C    | D    | D    | C    |
| HCM2kAvgQ:   | 2    | 9    | 1    | 6    | 5    | 4    | 4    | 2    | 1    | 1    | 4    | 5    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
AM PEAK HOUR

## Level Of Service Computation Report

## 2000 HCM Operations Method (Base Volume Alternative)

## Intersection #41 Sierra Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.338  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 20.8  
Optimal Cycle: 25 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 3 | 0           | 1 | 2 | 0          | 2 | 0 | 1          | 2 | 0 |

## Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 80   | 868  | 31   | 59   | 451  | 75   | 131  | 64   | 51   | 50   | 100  | 54   |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 80   | 868  | 31   | 59   | 451  | 75   | 131  | 64   | 51   | 50   | 100  | 54   |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 84   | 914  | 33   | 62   | 475  | 79   | 138  | 67   | 54   | 53   | 105  | 57   |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 84   | 914  | 33   | 62   | 475  | 79   | 138  | 67   | 54   | 53   | 105  | 57   |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 84   | 914  | 33   | 62   | 475  | 79   | 138  | 67   | 54   | 53   | 105  | 57   |

## Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.91 | 1.00 | 0.97 | 0.91 | 0.91 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 |
| Lanes:      | 2.00 | 3.00 | 1.00 | 2.00 | 2.57 | 0.43 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 3492 | 4914 | 1800 | 3492 | 4213 | 701  | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 |

## Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.02 | 0.19 | 0.02 | 0.02 | 0.11 | 0.11 | 0.08 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.11 | 0.55 | 0.55 | 0.05 | 0.50 | 0.50 | 0.23 | 0.16 | 0.16 | 0.16 | 0.09 | 0.09 |
| Volume/Cap:  | 0.23 | 0.34 | 0.03 | 0.34 | 0.23 | 0.23 | 0.34 | 0.12 | 0.19 | 0.19 | 0.34 | 0.35 |
| Delay/Veh:   | 41.2 | 12.5 | 10.3 | 46.8 | 14.3 | 14.3 | 32.9 | 36.1 | 36.6 | 36.9 | 43.3 | 43.9 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 41.2 | 12.5 | 10.3 | 46.8 | 14.3 | 14.3 | 32.9 | 36.1 | 36.6 | 36.9 | 43.3 | 43.9 |
| LOS by Move: | D    | B    | B    | D    | B    | B    | C    | D    | D    | D    | D    | D    |
| HCM2kAvgQ:   | 1    | 6    | 0    | 1    | 3    | 3    | 4    | 1    | 2    | 1    | 2    | 2    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Base Volume Alternative)

Intersection #42 Sierra Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.507  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 31.1  
Optimal Cycle: 32 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound  |   |   | West Bound  |   |   |
|-------------|-------------|---|---|-------------|---|---|-------------|---|---|-------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L           | T | R | L           | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Split Phase |   |   | Split Phase |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include     |   |   | Include     |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 1 | 0 | 1           | 1 | 1 | 0           | 1 | 0 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 138  | 554  | 79   | 38   | 352  | 158  | 338  | 297  | 106  | 115  | 252  | 111  |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 138  | 554  | 79   | 38   | 352  | 158  | 338  | 297  | 106  | 115  | 252  | 111  |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 145  | 583  | 83   | 40   | 371  | 166  | 356  | 313  | 112  | 121  | 265  | 117  |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 145  | 583  | 83   | 40   | 371  | 166  | 356  | 313  | 112  | 121  | 265  | 117  |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 145  | 583  | 83   | 40   | 371  | 166  | 356  | 313  | 112  | 121  | 265  | 117  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 1.60 | 1.40 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Sat.: | 1800 | 3420 | 1800 | 3492 | 3420 | 1800 | 2731 | 2399 | 1800 | 1800 | 1800 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.08 | 0.17 | 0.05 | 0.01 | 0.11 | 0.09 | 0.13 | 0.13 | 0.06 | 0.07 | 0.15 | 0.06 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.16 | 0.35 | 0.35 | 0.02 | 0.21 | 0.21 | 0.26 | 0.26 | 0.26 | 0.29 | 0.29 | 0.29 |
| Volume/Cap:  | 0.51 | 0.49 | 0.13 | 0.49 | 0.51 | 0.43 | 0.51 | 0.51 | 0.24 | 0.23 | 0.51 | 0.22 |
| Delay/Veh:   | 40.0 | 25.8 | 22.3 | 52.8 | 35.3 | 34.9 | 32.1 | 32.1 | 29.7 | 27.2 | 30.3 | 27.1 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 40.0 | 25.8 | 22.3 | 52.8 | 35.3 | 34.9 | 32.1 | 32.1 | 29.7 | 27.2 | 30.3 | 27.1 |
| LOS by Move: | D    | C    | C    | D    | D    | C    | C    | C    | C    | C    | C    | C    |
| HCM2kAvgQ:   | 5    | 8    | 2    | 1    | 6    | 5    | 7    | 7    | 3    | 3    | 7    | 3    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Base Volume Alternative)

Intersection #43 Armstrong Rd/Sierra Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.330  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 17.3  
Optimal Cycle: 25 Level Of Service: B

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Ignore     |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 0 | 1           | 0 | 0 | 1          | 0 | 2 | 1          | 0 | 1 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 572  | 136  | 18   | 11   | 171  | 21   | 9    | 6    | 459  | 29   | 23   | 13   |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 572  | 136  | 18   | 11   | 171  | 21   | 9    | 6    | 459  | 29   | 23   | 13   |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.00 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 602  | 143  | 19   | 12   | 180  | 22   | 9    | 6    | 0    | 31   | 24   | 14   |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 602  | 143  | 19   | 12   | 180  | 22   | 9    | 6    | 0    | 31   | 24   | 14   |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 602  | 143  | 19   | 12   | 180  | 22   | 9    | 6    | 0    | 31   | 24   | 14   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 |
| Lanes:      | 2.00 | 0.88 | 0.12 | 1.00 | 0.89 | 0.11 | 1.00 | 2.00 | 1.00 | 1.00 | 1.28 | 0.72 |
| Final Sat.: | 3492 | 1590 | 210  | 1800 | 1603 | 197  | 1800 | 3420 | 1800 | 1800 | 2185 | 1235 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.17 | 0.09 | 0.09 | 0.01 | 0.11 | 0.11 | 0.01 | 0.00 | 0.00 | 0.02 | 0.01 | 0.01 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.52 | 0.81 | 0.81 | 0.06 | 0.34 | 0.34 | 0.02 | 0.01 | 0.00 | 0.05 | 0.04 | 0.04 |
| Volume/Cap:  | 0.33 | 0.11 | 0.11 | 0.11 | 0.33 | 0.33 | 0.29 | 0.33 | 0.00 | 0.33 | 0.29 | 0.29 |
| Delay/Veh:   | 13.9 | 2.1  | 2.1  | 45.2 | 24.8 | 24.8 | 53.2 | 59.4 | 0.0  | 47.9 | 47.9 | 47.9 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 13.9 | 2.1  | 2.1  | 45.2 | 24.8 | 24.8 | 53.2 | 59.4 | 0.0  | 47.9 | 47.9 | 47.9 |
| LOS by Move: | B    | A    | A    | D    | C    | C    | D    | E    | A    | D    | D    | D    |
| HCM2kAvgQ:   | 5    | 1    | 1    | 0    | 5    | 5    | 1    | 0    | 0    | 1    | 1    | 1    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Base Volume Alternative)

Intersection #44 Armstrong Rd/SR-60 WB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.645  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 23.8  
Optimal Cycle: 37 Level Of Service: C

| Approach:   | North Bound | South Bound | East Bound  | West Bound  |
|-------------|-------------|-------------|-------------|-------------|
| Movement:   | L - T - R   | L - T - R   | L - T - R   | L - T - R   |
| Control:    | Protected   | Protected   | Split Phase | Split Phase |
| Rights:     | Include     | Include     | Include     | Include     |
| Min. Green: | 0 0 0       | 0 0 0       | 0 0 0       | 0 0 0       |
| Lanes:      | 1 0 2 0 0   | 0 0 1 1 0   | 0 0 0 0 0   | 1 0 0 1 0   |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 202  | 512  | 0    | 0    | 611  | 240  | 0    | 0    | 199  | 9    | 378  |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 202  | 512  | 0    | 0    | 611  | 240  | 0    | 0    | 199  | 9    | 378  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 213  | 539  | 0    | 0    | 643  | 253  | 0    | 0    | 209  | 9    | 398  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 213  | 539  | 0    | 0    | 643  | 253  | 0    | 0    | 209  | 9    | 398  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 213  | 539  | 0    | 0    | 643  | 253  | 0    | 0    | 209  | 9    | 398  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 0.00 | 0.00 | 1.44 | 0.56 | 0.00 | 0.00 | 0.00 | 1.00 | 0.02 |
| Final Sat.: | 1800 | 3420 | 0    | 0    | 2455 | 965  | 0    | 0    | 0    | 1800 | 42   |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.12 | 0.16 | 0.00 | 0.00 | 0.26 | 0.26 | 0.00 | 0.00 | 0.00 | 0.12 | 0.23 |
| Crit Moves:  | **** |      |      |      | **** |      |      |      |      |      | **** |
| Green/Cycle: | 0.18 | 0.59 | 0.00 | 0.00 | 0.41 | 0.41 | 0.00 | 0.00 | 0.00 | 0.35 | 0.35 |
| Volume/Cap:  | 0.65 | 0.27 | 0.00 | 0.00 | 0.65 | 0.65 | 0.00 | 0.00 | 0.00 | 0.33 | 0.65 |
| Delay/Veh:   | 42.2 | 10.1 | 0.0  | 0.0  | 25.0 | 25.0 | 0.0  | 0.0  | 0.0  | 24.2 | 29.5 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 42.2 | 10.1 | 0.0  | 0.0  | 25.0 | 25.0 | 0.0  | 0.0  | 0.0  | 24.2 | 29.5 |
| LOS by Move: | D    | B    | A    | A    | C    | C    | A    | A    | A    | C    | C    |
| HCM2kAvgQ:   | 7    | 4    | 0    | 0    | 12   | 12   | 0    | 0    | 0    | 5    | 11   |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #45 Armstrong Rd/SR-60 EB Ramps

Average Delay (sec/veh): 16.2 Worst Case Level Of Service: F[118.0]

| Approach: | North Bound  | South Bound  | East Bound | West Bound |
|-----------|--------------|--------------|------------|------------|
| Movement: | L - T - R    | L - T - R    | L - T - R  | L - T - R  |
| Control:  | Uncontrolled | Uncontrolled | Stop Sign  | Stop Sign  |
| Rights:   | Include      | Include      | Include    | Include    |
| Lanes:    | 0 0 1 1 0    | 1 0 2 0 0    | 0 1 0 1 0  | 0 0 0 0 0  |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 0    | 638  | 363  | 300  | 485  | 0    | 88   | 1    | 151  | 0    | 0    |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0    | 638  | 363  | 300  | 485  | 0    | 88   | 1    | 151  | 0    | 0    |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 0    | 672  | 382  | 316  | 511  | 0    | 93   | 1    | 159  | 0    | 0    |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| FinalVolume: | 0    | 672  | 382  | 316  | 511  | 0    | 93   | 1    | 159  | 0    | 0    |

Critical Gap Module:

|                    |      |       |       |     |      |       |     |     |     |       |      |       |
|--------------------|------|-------|-------|-----|------|-------|-----|-----|-----|-------|------|-------|
| Critical Gap:xxxxx | xxxx | xxxx  | xxxxx | 4.1 | xxxx | xxxxx | 6.8 | 6.5 | 6.9 | xxxxx | xxxx | xxxxx |
| FollowUpTim:xxxxx  | xxxx | xxxxx | xxxxx | 2.2 | xxxx | xxxxx | 3.5 | 4.0 | 3.3 | xxxxx | xxxx | xxxxx |

Capacity Module:

|              |      |      |       |      |      |       |      |      |      |      |      |       |
|--------------|------|------|-------|------|------|-------|------|------|------|------|------|-------|
| Cnflct Vol:  | xxxx | xxxx | xxxxx | 1054 | xxxx | xxxxx | 1478 | 2196 | 255  | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | xxxxx | 668  | xxxx | xxxxx | 119  | 46   | 750  | xxxx | xxxx | xxxxx |
| Move Cap.:   | xxxx | xxxx | xxxxx | 668  | xxxx | xxxxx | 75   | 24   | 750  | xxxx | xxxx | xxxxx |
| Volume/Cap:  | xxxx | xxxx | xxxx  | 0.47 | xxxx | xxxx  | 1.24 | 0.04 | 0.21 | xxxx | xxxx | xxxx  |

Level Of Service Module:

|                   |               |               |               |               |               |               |               |               |               |               |               |               |
|-------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| 2Way95thQ:        | xxxx          | xxxx          | xxxxx         | 2.5           | xxxx          | xxxxx         | xxxx          | xxxx          | xxxxx         | xxxx          | xxxx          | xxxxx         |
| Control Del:xxxxx | xxxx          | xxxxx         | xxxxx         | 15.1          | xxxx          | xxxxx         | xxxxx         | xxxx          | xxxxx         | xxxxx         | xxxx          | xxxxx         |
| LOS by Move:      | *             | *             | *             | C             | *             | *             | *             | *             | *             | *             | *             | *             |
| Movement:         | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT |
| Shared Cap.:      | xxxx          | xxxx          | xxxxx         | xxxx          | xxxx          | xxxxx         | 73            | xxxx          | 626           | xxxx          | xxxx          | xxxxx         |
| SharedQueue:xxxxx | xxxx          | xxxxx         | xxxxx         | xxxxx         | xxxx          | xxxxx         | 7.4           | xxxx          | 1.0           | xxxxx         | xxxx          | xxxxx         |
| Shrd ConDel:xxxxx | xxxx          | xxxxx         | xxxxx         | xxxxx         | xxxx          | xxxxx         | 297.9         | xxxx          | 12.7          | xxxxx         | xxxx          | xxxxx         |
| Shared LOS:       | *             | *             | *             | *             | *             | *             | F             | *             | B             | *             | *             | *             |
| ApproachDel:      | xxxxxx        |               |               | xxxxxx        |               |               | 118.0         |               |               | xxxxxx        |               |               |
| ApproachLOS:      | *             |               |               | *             |               |               | F             |               |               | *             |               |               |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
PM PEAK HOUR

## Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative)

## Intersection #1 I-15 SB Ramps/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.744  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 24.9  
Optimal Cycle: 48 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |   |
| Control:    | Split Phase |   |   | Split Phase |   |   | Protected  |   |   | Protected  |   |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |   |
| Lanes:      | 0           | 0 | 0 | 1           | 0 | 1 | 0          | 0 | 3 | 0          | 1 | 2 | 0 |

## Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 0    | 0    | 0    | 405  | 27   | 376  | 0    | 938  | 554  | 435  | 419  | 0    |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 0    | 0    | 0    | 405  | 27   | 376  | 0    | 938  | 554  | 435  | 419  | 0    |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 0    | 0    | 0    | 426  | 28   | 396  | 0    | 987  | 583  | 458  | 441  | 0    |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 0    | 0    | 0    | 426  | 28   | 396  | 0    | 987  | 583  | 458  | 441  | 0    |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 0    | 0    | 0    | 426  | 28   | 396  | 0    | 987  | 583  | 458  | 441  | 0    |

## Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 1.00 | 0.97 | 0.91 | 1.00 |
| Lanes:      | 0.00 | 0.00 | 0.00 | 1.49 | 0.06 | 1.45 | 0.00 | 3.00 | 1.00 | 2.00 | 3.00 | 0.00 |
| Final Sat.: | 0    | 0    | 0    | 2673 | 116  | 2611 | 0    | 4914 | 1800 | 3492 | 4914 | 0    |

## Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.00 | 0.00 | 0.00 | 0.16 | 0.24 | 0.15 | 0.00 | 0.20 | 0.32 | 0.13 | 0.09 | 0.00 |
| Crit Moves:  |      |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.00 | 0.00 | 0.00 | 0.33 | 0.33 | 0.33 | 0.00 | 0.44 | 0.44 | 0.18 | 0.61 | 0.00 |
| Volume/Cap:  | 0.00 | 0.00 | 0.00 | 0.49 | 0.74 | 0.46 | 0.00 | 0.46 | 0.74 | 0.74 | 0.15 | 0.00 |
| Delay/Veh:   | 0.0  | 0.0  | 0.0  | 27.1 | 32.5 | 26.8 | 0.0  | 20.1 | 27.4 | 43.9 | 8.3  | 0.0  |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 0.0  | 0.0  | 0.0  | 27.1 | 32.5 | 26.8 | 0.0  | 20.1 | 27.4 | 43.9 | 8.3  | 0.0  |
| LOS by Move: | A    | A    | A    | C    | C    | C    | A    | C    | C    | D    | A    | A    |
| HCM2kAvgQ:   | 0    | 0    | 0    | 7    | 13   | 7    | 0    | 8    | 16   | 9    | 2    | 0    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
PM PEAK HOUR

## Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative)

## Intersection #2 I-15 NB Ramps/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.851  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 21.7  
Optimal Cycle: 72 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Split Phase |   |   | Split Phase |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 0           | 1 | 0 | 2          | 0 | 3 | 0          | 0 | 1 |

## Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 134  | 1    | 202  | 0    | 0    | 0    | 614  | 730  | 0    | 0    | 706  | 883  |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 134  | 1    | 202  | 0    | 0    | 0    | 614  | 730  | 0    | 0    | 706  | 883  |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 141  | 1    | 213  | 0    | 0    | 0    | 646  | 768  | 0    | 0    | 743  | 929  |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 141  | 1    | 213  | 0    | 0    | 0    | 646  | 768  | 0    | 0    | 743  | 929  |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 141  | 1    | 213  | 0    | 0    | 0    | 646  | 768  | 0    | 0    | 743  | 929  |

## Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.97 | 0.91 | 1.00 | 1.00 | 0.91 | 1.00 |
| Lanes:      | 1.39 | 0.01 | 1.60 | 0.00 | 0.00 | 0.00 | 2.00 | 3.00 | 0.00 | 0.00 | 3.00 | 1.00 |
| Final Sat.: | 2514 | 11   | 2876 | 0    | 0    | 0    | 3492 | 4914 | 0    | 0    | 4914 | 1800 |

## Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.06 | 0.10 | 0.07 | 0.00 | 0.00 | 0.00 | 0.19 | 0.16 | 0.00 | 0.00 | 0.15 | 0.52 |
| Crit Moves:  |      |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.12 | 0.12 | 0.12 | 0.00 | 0.00 | 0.00 | 0.22 | 0.82 | 0.00 | 0.00 | 0.61 | 0.61 |
| Volume/Cap:  | 0.48 | 0.85 | 0.64 | 0.00 | 0.00 | 0.00 | 0.85 | 0.19 | 0.00 | 0.00 | 0.25 | 0.85 |
| Delay/Veh:   | 41.9 | 58.7 | 44.6 | 0.0  | 0.0  | 0.0  | 46.7 | 1.9  | 0.0  | 0.0  | 9.2  | 22.6 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 41.9 | 58.7 | 44.6 | 0.0  | 0.0  | 0.0  | 46.7 | 1.9  | 0.0  | 0.0  | 9.2  | 22.6 |
| LOS by Move: | D    | E    | D    | A    | A    | A    | D    | A    | A    | A    | A    | C    |
| HCM2kAvgQ:   | 4    | 8    | 5    | 0    | 0    | 0    | 13   | 2    | 0    | 0    | 4    | 26   |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Base Volume Alternative)

Intersection #3 Etiwanda Ave/San Bernardino Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.558  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 26.3  
Optimal Cycle: 35 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 2 | 0           | 1 | 1 | 0          | 2 | 0 | 1          | 2 | 0 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 242  | 694  | 52   | 42   | 603  | 113  | 274  | 407  | 348  | 55   | 178  | 21   |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 242  | 694  | 52   | 42   | 603  | 113  | 274  | 407  | 348  | 55   | 178  | 21   |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 255  | 731  | 55   | 44   | 635  | 119  | 288  | 428  | 366  | 58   | 187  | 22   |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 255  | 731  | 55   | 44   | 635  | 119  | 288  | 428  | 366  | 58   | 187  | 22   |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 255  | 731  | 55   | 44   | 635  | 119  | 288  | 428  | 366  | 58   | 187  | 22   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 0.95 | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 0.95 |
| Lanes:      | 2.00 | 2.00 | 1.00 | 2.00 | 1.68 | 0.32 | 2.00 | 2.00 | 1.00 | 2.00 | 1.79 | 0.21 |
| Final Sat.: | 3492 | 3420 | 1800 | 3492 | 2880 | 540  | 3492 | 3420 | 1800 | 3492 | 3059 | 361  |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.07 | 0.21 | 0.03 | 0.01 | 0.22 | 0.22 | 0.08 | 0.13 | 0.20 | 0.02 | 0.06 | 0.06 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.13 | 0.50 | 0.50 | 0.03 | 0.39 | 0.39 | 0.23 | 0.36 | 0.36 | 0.03 | 0.17 | 0.17 |
| Volume/Cap:  | 0.56 | 0.43 | 0.06 | 0.43 | 0.56 | 0.56 | 0.36 | 0.34 | 0.56 | 0.56 | 0.36 | 0.36 |
| Delay/Veh:   | 42.3 | 16.3 | 13.1 | 50.6 | 24.0 | 24.0 | 32.9 | 23.2 | 26.4 | 54.5 | 37.3 | 37.3 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 42.3 | 16.3 | 13.1 | 50.6 | 24.0 | 24.0 | 32.9 | 23.2 | 26.4 | 54.5 | 37.3 | 37.3 |
| LOS by Move: | D    | B    | B    | D    | C    | C    | C    | C    | C    | D    | D    | D    |
| HCM2kAvgQ:   | 5    | 8    | 1    | 1    | 10   | 10   | 4    | 5    | 9    | 2    | 3    | 3    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Base Volume Alternative)

Intersection #4 Etiwanda Ave/I-10 WB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.334  
Loss Time (sec): 4 (Y+R=4.0 sec) Average Delay (sec/veh): 10.3  
Optimal Cycle: 17 Level Of Service: B

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound  |   |   | West Bound  |   |   |
|-------------|-------------|---|---|-------------|---|---|-------------|---|---|-------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L           | T | R | L           | T | R |
| Control:    | Permitted   |   |   | Permitted   |   |   | Split Phase |   |   | Split Phase |   |   |
| Rights:     | Ignore      |   |   | Ignore      |   |   | Include     |   |   | Include     |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 |
| Lanes:      | 0           | 0 | 2 | 0           | 0 | 3 | 0           | 0 | 0 | 1           | 0 | 0 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 0    | 761  | 537  | 0    | 903  | 212  | 0    | 0    | 0    | 148  | 0    | 237  |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 0    | 761  | 537  | 0    | 903  | 212  | 0    | 0    | 0    | 148  | 0    | 237  |
| User Adj:     | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.00 | 0.95 | 0.95 | 0.00 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 0    | 801  | 0    | 0    | 951  | 0    | 0    | 0    | 0    | 156  | 0    | 249  |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 0    | 801  | 0    | 0    | 951  | 0    | 0    | 0    | 0    | 156  | 0    | 249  |
| PCE Adj:      | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 0    | 801  | 0    | 0    | 951  | 0    | 0    | 0    | 0    | 156  | 0    | 249  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.88 |
| Lanes:      | 0.00 | 2.00 | 1.00 | 0.00 | 3.00 | 1.00 | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 2.00 |
| Final Sat.: | 0    | 3420 | 1800 | 0    | 4914 | 1800 | 0    | 0    | 0    | 1800 | 0    | 3168 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.00 | 0.23 | 0.00 | 0.00 | 0.19 | 0.00 | 0.00 | 0.00 | 0.00 | 0.09 | 0.00 | 0.08 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.00 | 0.70 | 0.00 | 0.00 | 0.70 | 0.00 | 0.00 | 0.00 | 0.00 | 0.26 | 0.00 | 0.26 |
| Volume/Cap:  | 0.00 | 0.33 | 0.00 | 0.00 | 0.28 | 0.00 | 0.00 | 0.00 | 0.00 | 0.33 | 0.00 | 0.30 |
| Delay/Veh:   | 0.0  | 5.9  | 0.0  | 0.0  | 5.6  | 0.0  | 0.0  | 0.0  | 0.0  | 30.5 | 0.0  | 30.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 0.0  | 5.9  | 0.0  | 0.0  | 5.6  | 0.0  | 0.0  | 0.0  | 0.0  | 30.5 | 0.0  | 30.0 |
| LOS by Move: | A    | A    | A    | A    | A    | A    | A    | A    | A    | C    | A    | C    |
| HCM2kAvgQ:   | 0    | 5    | 0    | 0    | 4    | 0    | 0    | 0    | 0    | 4    | 0    | 4    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Base Volume Alternative)

Intersection #5 Etiwanda Ave/I-10 EB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.430  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 13.0  
Optimal Cycle: 24 Level Of Service: B

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound  |   |   | West Bound  |   |   |
|-------------|-------------|---|---|-------------|---|---|-------------|---|---|-------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L           | T | R | L           | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Split Phase |   |   | Split Phase |   |   |
| Rights:     | Ignore      |   |   | Ignore      |   |   | Include     |   |   | Include     |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 |
| Lanes:      | 0           | 0 | 3 | 0           | 0 | 2 | 0           | 0 | 0 | 0           | 0 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 0    | 1041 | 714  | 0    | 839  | 252  | 126  | 0    | 250  | 0    | 0    | 0    |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0    | 1041 | 714  | 0    | 839  | 252  | 126  | 0    | 250  | 0    | 0    | 0    |
| User Adj:    | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.00 | 0.95 | 0.95 | 0.00 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 0    | 1096 | 0    | 0    | 883  | 0    | 133  | 0    | 263  | 0    | 0    | 0    |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 0    | 1096 | 0    | 0    | 883  | 0    | 133  | 0    | 263  | 0    | 0    | 0    |
| PCE Adj:     | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 0    | 1096 | 0    | 0    | 883  | 0    | 133  | 0    | 263  | 0    | 0    | 0    |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.91 | 1.00 | 1.00 | 0.95 | 1.00 | 0.97 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 0.00 | 3.00 | 1.00 | 0.00 | 2.00 | 1.00 | 2.00 | 0.00 | 1.00 | 0.00 | 0.00 | 0.00 |
| Final Sat.: | 0    | 4914 | 1800 | 0    | 3420 | 1800 | 3492 | 0    | 1800 | 0    | 0    | 0    |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.00 | 0.22 | 0.00 | 0.00 | 0.26 | 0.00 | 0.04 | 0.00 | 0.15 | 0.00 | 0.00 | 0.00 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      |      |      |      |
| Green/Cycle: | 0.00 | 0.60 | 0.00 | 0.00 | 0.60 | 0.00 | 0.34 | 0.00 | 0.34 | 0.00 | 0.00 | 0.00 |
| Volume/Cap:  | 0.00 | 0.37 | 0.00 | 0.00 | 0.43 | 0.00 | 0.11 | 0.00 | 0.43 | 0.00 | 0.00 | 0.00 |
| Delay/Veh:   | 0.0  | 10.4 | 0.0  | 0.0  | 10.9 | 0.0  | 22.7 | 0.0  | 26.0 | 0.0  | 0.0  | 0.0  |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 0.0  | 10.4 | 0.0  | 0.0  | 10.9 | 0.0  | 22.7 | 0.0  | 26.0 | 0.0  | 0.0  | 0.0  |
| LOS by Move: | A    | B    | A    | A    | B    | A    | C    | A    | C    | A    | A    | A    |
| HCM2kAvgQ:   | 0    | 6    | 0    | 0    | 8    | 0    | 1    | 0    | 6    | 0    | 0    | 0    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Base Volume Alternative)

Intersection #6 Etiwanda Ave/ East Airport Dr-Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 1.000  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 57.7  
Optimal Cycle: 180 Level Of Service: E

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound  |   |   | West Bound  |   |   |
|-------------|-------------|---|---|-------------|---|---|-------------|---|---|-------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L           | T | R | L           | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Prot+Permit |   |   | Prot+Permit |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include     |   |   | Include     |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 1           | 0 | 1 | 1           | 0 | 1 | 1           | 0 | 1 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 26   | 839  | 30   | 188  | 713  | 74   | 316  | 97   | 72   | 69   | 93   | 582  |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 26   | 839  | 30   | 188  | 713  | 74   | 316  | 97   | 72   | 69   | 93   | 582  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 27   | 883  | 32   | 198  | 751  | 78   | 333  | 102  | 76   | 73   | 98   | 613  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 27   | 883  | 32   | 198  | 751  | 78   | 333  | 102  | 76   | 73   | 98   | 613  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 27   | 883  | 32   | 198  | 751  | 78   | 333  | 102  | 76   | 73   | 98   | 613  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Lanes:      | 1.00 | 1.93 | 0.07 | 1.00 | 1.81 | 0.19 | 1.00 | 1.15 | 0.85 | 1.00 | 1.00 | 1.00 |
| Final Sat.: | 1800 | 3302 | 118  | 1800 | 3098 | 322  | 1800 | 1963 | 1457 | 1800 | 1710 | 1710 |

Capacity Analysis Module:

|              |      |      |      |       |      |      |      |      |      |      |      |      |
|--------------|------|------|------|-------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.02 | 0.27 | 0.27 | 0.11  | 0.24 | 0.24 | 0.00 | 0.05 | 0.05 | 0.00 | 0.06 | 0.36 |
| Crit Moves:  | **** |      |      | ****  |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.02 | 0.27 | 0.27 | 0.11  | 0.35 | 0.35 | 0.18 | 0.31 | 0.31 | 0.24 | 0.36 | 0.36 |
| Volume/Cap:  | 0.68 | 1.00 | 1.00 | 1.00  | 0.68 | 0.68 | 1.00 | 0.17 | 0.17 | 0.17 | 0.16 | 1.00 |
| Delay/Veh:   | 87.4 | 66.5 | 66.5 | 108.6 | 29.1 | 29.1 | 90.3 | 25.5 | 25.5 | 30.5 | 21.9 | 66.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 87.4 | 66.5 | 66.5 | 108.6 | 29.1 | 29.1 | 90.3 | 25.5 | 25.5 | 30.5 | 21.9 | 66.0 |
| LOS by Move: | F    | E    | E    | F     | C    | C    | F    | C    | C    | C    | C    | E    |
| HCM2kAvgQ:   | 2    | 21   | 21   | 10    | 12   | 12   | 16   | 2    | 2    | 2    | 2    | 27   |

Note: Queue reported is the number of cars per lane.



FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Base Volume Alternative)

Intersection #7 Etiwanda Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.710  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 31.1  
Optimal Cycle: 50 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 2 | 0           | 2 | 0 | 1          | 2 | 0 | 0          | 2 | 0 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 323  | 595  | 140  | 390  | 771  | 231  | 169  | 964  | 355  | 71   | 561  | 100  |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 323  | 595  | 140  | 390  | 771  | 231  | 169  | 964  | 355  | 71   | 561  | 100  |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 340  | 626  | 147  | 411  | 812  | 243  | 178  | 1015 | 374  | 75   | 591  | 105  |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 340  | 626  | 147  | 411  | 812  | 243  | 178  | 1015 | 374  | 75   | 591  | 105  |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 340  | 626  | 147  | 411  | 812  | 243  | 178  | 1015 | 374  | 75   | 591  | 105  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 |
| Lanes:      | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 |
| Final Sat.: | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.10 | 0.18 | 0.08 | 0.12 | 0.24 | 0.14 | 0.05 | 0.30 | 0.21 | 0.02 | 0.17 | 0.06 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.14 | 0.29 | 0.29 | 0.18 | 0.33 | 0.33 | 0.10 | 0.42 | 0.42 | 0.03 | 0.35 | 0.35 |
| Volume/Cap:  | 0.71 | 0.64 | 0.29 | 0.64 | 0.71 | 0.40 | 0.50 | 0.71 | 0.50 | 0.71 | 0.50 | 0.17 |
| Delay/Veh:   | 46.1 | 32.5 | 28.0 | 39.8 | 31.1 | 26.1 | 43.6 | 25.7 | 21.9 | 68.1 | 26.2 | 22.8 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 46.1 | 32.5 | 28.0 | 39.8 | 31.1 | 26.1 | 43.6 | 25.7 | 21.9 | 68.1 | 26.2 | 22.8 |
| LOS by Move: | D    | C    | C    | D    | C    | C    | D    | C    | C    | E    | C    | C    |
| HCM2kAvgQ:   | 7    | 10   | 4    | 7    | 13   | 6    | 3    | 15   | 9    | 2    | 8    | 2    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Base Volume Alternative)

Intersection #8 Etiwanda Ave/Marlay Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.331  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 14.6  
Optimal Cycle: 21 Level Of Service: B

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Permitted  |   |   | Permitted  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 1           | 0 | 2 | 1          | 0 | 1 | 1          | 0 | 1 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 18   | 590  | 79   | 61   | 659  | 15   | 31   | 41   | 61   | 74   | 77   | 113  |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 18   | 590  | 79   | 61   | 659  | 15   | 31   | 41   | 61   | 74   | 77   | 113  |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 19   | 621  | 83   | 64   | 694  | 16   | 33   | 43   | 64   | 78   | 81   | 119  |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 19   | 621  | 83   | 64   | 694  | 16   | 33   | 43   | 64   | 78   | 81   | 119  |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 19   | 621  | 83   | 64   | 694  | 16   | 33   | 43   | 64   | 78   | 81   | 119  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 0.95 | 1.00 | 0.91 | 0.91 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Lanes:      | 1.00 | 1.76 | 0.24 | 1.00 | 2.93 | 0.07 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Sat.: | 1800 | 3016 | 404  | 1800 | 4805 | 109  | 1800 | 1710 | 1710 | 1800 | 1710 | 1710 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.01 | 0.21 | 0.21 | 0.04 | 0.14 | 0.14 | 0.02 | 0.03 | 0.04 | 0.04 | 0.05 | 0.07 |
| Crit Moves:  | **** |      |      | **** |      |      |      |      |      | **** |      |      |
| Green/Cycle: | 0.05 | 0.62 | 0.62 | 0.11 | 0.68 | 0.68 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 | 0.21 |
| Volume/Cap:  | 0.21 | 0.33 | 0.33 | 0.33 | 0.21 | 0.21 | 0.09 | 0.12 | 0.18 | 0.21 | 0.23 | 0.33 |
| Delay/Veh:   | 46.8 | 9.1  | 9.1  | 42.3 | 6.0  | 6.0  | 31.9 | 32.1 | 32.6 | 32.9 | 32.9 | 33.8 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 46.8 | 9.1  | 9.1  | 42.3 | 6.0  | 6.0  | 31.9 | 32.1 | 32.6 | 32.9 | 32.9 | 33.8 |
| LOS by Move: | D    | A    | A    | D    | A    | A    | C    | C    | C    | C    | C    | C    |
| HCM2kAvgQ:   | 1    | 5    | 5    | 2    | 3    | 3    | 1    | 1    | 2    | 2    | 2    | 3    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Base Volume Alternative)

Intersection #9 Etiwanda Ave/Philadelphia Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.283  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 12.9  
Optimal Cycle: 20 Level Of Service: B

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Permitted  |   |   | Permitted  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 1 | 0 | 1          | 0 | 1 | 0          | 1 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 43   | 539  | 6    | 2    | 766  | 44   | 115  | 4    | 87   | 21   | 10   | 78   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 43   | 539  | 6    | 2    | 766  | 44   | 115  | 4    | 87   | 21   | 10   | 78   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 45   | 567  | 6    | 2    | 806  | 46   | 121  | 4    | 92   | 22   | 11   | 82   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 45   | 567  | 6    | 2    | 806  | 46   | 121  | 4    | 92   | 22   | 11   | 82   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 45   | 567  | 6    | 2    | 806  | 46   | 121  | 4    | 92   | 22   | 11   | 82   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.91 | 0.91 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 2.84 | 0.16 | 1.00 | 1.00 | 1.00 | 1.00 | 0.11 | 0.89 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 4647 | 267  | 1800 | 1800 | 1800 | 1800 | 205  | 1595 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.03 | 0.17 | 0.00 | 0.00 | 0.17 | 0.17 | 0.07 | 0.00 | 0.05 | 0.01 | 0.05 | 0.05 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      |      |      |      |
| Green/Cycle: | 0.09 | 0.70 | 0.70 | 0.00 | 0.61 | 0.61 | 0.24 | 0.24 | 0.24 | 0.24 | 0.24 | 0.24 |
| Volume/Cap:  | 0.28 | 0.24 | 0.01 | 0.24 | 0.28 | 0.28 | 0.28 | 0.01 | 0.21 | 0.05 | 0.22 | 0.22 |
| Delay/Veh:   | 43.5 | 5.5  | 4.6  | 63.0 | 9.1  | 9.1  | 31.5 | 29.1 | 30.9 | 29.5 | 30.9 | 30.9 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 43.5 | 5.5  | 4.6  | 63.0 | 9.1  | 9.1  | 31.5 | 29.1 | 30.9 | 29.5 | 30.9 | 30.9 |
| LOS by Move: | D    | A    | A    | E    | A    | A    | C    | C    | C    | C    | C    | C    |
| HCM2kAvgQ:   | 2    | 3    | 0    | 0    | 4    | 4    | 3    | 0    | 2    | 1    | 2    | 2    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Base Volume Alternative)

Intersection #10 Etiwanda Ave/SR-60 WB Ramp

Cycle (sec): 100 Critical Vol./Cap.(X): 0.532  
Loss Time (sec): 4 (Y+R=4.0 sec) Average Delay (sec/veh): 12.2  
Optimal Cycle: 24 Level Of Service: B

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound  |   |   | West Bound  |   |   |
|-------------|-------------|---|---|-------------|---|---|-------------|---|---|-------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L           | T | R | L           | T | R |
| Control:    | Permitted   |   |   | Permitted   |   |   | Split Phase |   |   | Split Phase |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include     |   |   | Include     |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 |
| Lanes:      | 0           | 0 | 2 | 0           | 0 | 2 | 0           | 0 | 0 | 1           | 0 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 0    | 453  | 0    | 0    | 1174 | 0    | 0    | 0    | 0    | 255  | 0    | 149  |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0    | 453  | 0    | 0    | 1174 | 0    | 0    | 0    | 0    | 255  | 0    | 149  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 0    | 477  | 0    | 0    | 1236 | 0    | 0    | 0    | 0    | 268  | 0    | 157  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 0    | 477  | 0    | 0    | 1236 | 0    | 0    | 0    | 0    | 268  | 0    | 157  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 0    | 477  | 0    | 0    | 1236 | 0    | 0    | 0    | 0    | 268  | 0    | 157  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 0.00 | 2.00 | 0.00 | 0.00 | 2.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 |
| Final Sat.: | 0    | 3420 | 0    | 0    | 3420 | 0    | 0    | 0    | 0    | 1800 | 0    | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.00 | 0.14 | 0.00 | 0.00 | 0.36 | 0.00 | 0.00 | 0.00 | 0.00 | 0.15 | 0.00 | 0.09 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      |      |      |      |
| Green/Cycle: | 0.00 | 0.68 | 0.00 | 0.00 | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 0.28 | 0.00 | 0.28 |
| Volume/Cap:  | 0.00 | 0.21 | 0.00 | 0.00 | 0.53 | 0.00 | 0.00 | 0.00 | 0.00 | 0.53 | 0.00 | 0.31 |
| Delay/Veh:   | 0.0  | 6.0  | 0.0  | 0.0  | 8.3  | 0.0  | 0.0  | 0.0  | 0.0  | 31.5 | 0.0  | 28.7 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 0.0  | 6.0  | 0.0  | 0.0  | 8.3  | 0.0  | 0.0  | 0.0  | 0.0  | 31.5 | 0.0  | 28.7 |
| LOS by Move: | A    | A    | A    | A    | A    | A    | A    | A    | A    | C    | A    | C    |
| HCM2kAvgQ:   | 0    | 3    | 0    | 0    | 10   | 0    | 0    | 0    | 0    | 7    | 0    | 4    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #11 Etiwanda Ave/SR-60 EB Ramp

Average Delay (sec/veh): 1.7 Worst Case Level Of Service: B[ 12.1]

| Approach: | North Bound  | South Bound  | East Bound | West Bound |
|-----------|--------------|--------------|------------|------------|
| Movement: | L - T - R    | L - T - R    | L - T - R  | L - T - R  |
| Control:  | Uncontrolled | Uncontrolled | Stop Sign  | Stop Sign  |
| Rights:   | Include      | Include      | Include    | Include    |
| Lanes:    | 0 0 1 1 0    | 1 0 2 0 0    | 0 0 0 0 0  | 0 0 0 0 0  |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 0    | 447  | 316  | 310  | 1090 | 0    | 0    | 0    | 0    | 0    | 0    |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0    | 447  | 316  | 310  | 1090 | 0    | 0    | 0    | 0    | 0    | 0    |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 0    | 471  | 333  | 326  | 1147 | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| FinalVolume: | 0    | 471  | 333  | 326  | 1147 | 0    | 0    | 0    | 0    | 0    | 0    |

Critical Gap Module:

|                    |      |      |      |     |      |       |       |      |       |       |      |       |
|--------------------|------|------|------|-----|------|-------|-------|------|-------|-------|------|-------|
| Critical Gap:xxxxx | xxxx | xxxx | xxxx | 4.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim:xxxxx  | xxxx | xxxx | xxxx | 2.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |

Capacity Module:

|              |      |      |      |      |      |       |      |      |       |      |      |       |
|--------------|------|------|------|------|------|-------|------|------|-------|------|------|-------|
| Cnflct Vol:  | xxxx | xxxx | xxxx | 803  | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | xxxx | 830  | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.:   | xxxx | xxxx | xxxx | 830  | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Volume/Cap:  | xxxx | xxxx | xxxx | 0.39 | xxxx | xxxx  | xxxx | xxxx | xxxx  | xxxx | xxxx | xxxx  |

Level Of Service Module:

|                   |               |               |               |               |               |               |               |               |               |               |               |               |
|-------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| 2Way95thQ:        | xxxx          | xxxx          | xxxx          | 1.9           | xxxx          | xxxxx         | xxxx          | xxxx          | xxxxx         | xxxx          | xxxx          | xxxxx         |
| Control Del:xxxxx | xxxx          | xxxx          | xxxx          | 12.1          | xxxx          | xxxxx         | xxxx          | xxxx          | xxxxx         | xxxx          | xxxx          | xxxxx         |
| LOS by Move:      | *             | *             | *             | B             | *             | *             | *             | *             | *             | *             | *             | *             |
| Movement:         | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT |
| Shared Cap.:      | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          |
| SharedQueue:      | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          |
| Shrd ConDel:      | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          |
| Shared LOS:       | *             | *             | *             | *             | *             | *             | *             | *             | *             | *             | *             | *             |
| ApproachDel:      | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        |
| ApproachLOS:      | *             | *             | *             | *             | *             | *             | *             | *             | *             | *             | *             | *             |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Base Volume Alternative)

Intersection #12 Commerce Way/Ontario Mills Pkwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.746

Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 28.5

Optimal Cycle: 55 Level Of Service: C

| Approach:   | North Bound | South Bound | East Bound | West Bound |
|-------------|-------------|-------------|------------|------------|
| Movement:   | L - T - R   | L - T - R   | L - T - R  | L - T - R  |
| Control:    | Protected   | Protected   | Protected  | Protected  |
| Rights:     | Include     | Include     | Include    | Include    |
| Min. Green: | 0 0 0       | 0 0 0       | 0 0 0      | 0 0 0      |
| Lanes:      | 2 0 1 0 1   | 1 0 1 1 0   | 1 0 2 0 1  | 2 0 2 0 1  |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 16   | 159  | 798  | 24   | 121  | 16   | 232  | 11   | 446  | 301  | 18   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 16   | 159  | 798  | 24   | 121  | 16   | 232  | 11   | 446  | 301  | 18   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 17   | 167  | 840  | 25   | 127  | 17   | 244  | 12   | 469  | 317  | 19   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 17   | 167  | 840  | 25   | 127  | 17   | 244  | 12   | 469  | 317  | 19   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 17   | 167  | 840  | 25   | 127  | 17   | 244  | 12   | 469  | 317  | 19   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 1.00 | 0.97 | 0.95 |
| Lanes:      | 2.00 | 1.00 | 1.00 | 1.00 | 1.77 | 0.23 | 1.00 | 2.00 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 3492 | 1800 | 1800 | 1800 | 3021 | 399  | 1800 | 3420 | 1800 | 3492 | 1800 |

Capacity Analysis Module:

|              |      |      |      |       |      |      |      |      |      |      |      |      |
|--------------|------|------|------|-------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.00 | 0.09 | 0.47 | 0.01  | 0.04 | 0.04 | 0.01 | 0.07 | 0.01 | 0.13 | 0.09 | 0.01 |
| Crit Moves:  | **** | **** | **** | ****  | **** | **** | **** | **** | **** | **** | **** | **** |
| Green/Cycle: | 0.07 | 0.63 | 0.63 | 0.02  | 0.58 | 0.58 | 0.03 | 0.10 | 0.10 | 0.18 | 0.25 | 0.25 |
| Volume/Cap:  | 0.07 | 0.15 | 0.75 | 0.75  | 0.07 | 0.07 | 0.37 | 0.75 | 0.07 | 0.75 | 0.37 | 0.04 |
| Delay/Veh:   | 44.0 | 7.8  | 15.9 | 110.3 | 9.3  | 9.3  | 53.0 | 53.1 | 41.3 | 43.7 | 31.2 | 28.4 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 44.0 | 7.8  | 15.9 | 110.3 | 9.3  | 9.3  | 53.0 | 53.1 | 41.3 | 43.7 | 31.2 | 28.4 |
| LOS by Move: | D    | A    | B    | F     | A    | A    | D    | D    | D    | D    | C    | C    |
| HCM2kAvgQ:   | 0    | 2    | 19   | 2     | 1    | 1    | 1    | 6    | 0    | 9    | 4    | 0    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
PM PEAK HOUR

## Level Of Service Computation Report

## 2000 HCM Operations Method (Base Volume Alternative)

## Intersection #13 Mulberry Ave/Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.252  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 19.9  
Optimal Cycle: 19 Level Of Service: B

| Approach:   | North Bound | South Bound | East Bound | West Bound |
|-------------|-------------|-------------|------------|------------|
| Movement:   | L - T - R   | L - T - R   | L - T - R  | L - T - R  |
| Control:    | Split Phase | Split Phase | Protected  | Protected  |
| Rights:     | Include     | Include     | Include    | Include    |
| Min. Green: | 0 0 0       | 0 0 0       | 0 0 0      | 0 0 0      |
| Lanes:      | 1 0 0 0 1   | 0 0 0 0 0   | 0 0 2 1 0  | 1 0 2 0 0  |

## Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 145  | 0    | 107  | 0    | 0    | 0    | 258  | 81   | 136  | 404  | 0    |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 145  | 0    | 107  | 0    | 0    | 0    | 258  | 81   | 136  | 404  | 0    |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 153  | 0    | 113  | 0    | 0    | 0    | 272  | 85   | 143  | 425  | 0    |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 153  | 0    | 113  | 0    | 0    | 0    | 272  | 85   | 143  | 425  | 0    |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 153  | 0    | 113  | 0    | 0    | 0    | 272  | 85   | 143  | 425  | 0    |

## Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 0.91 | 1.00 | 0.95 | 1.00 |
| Lanes:      | 1.00 | 0.00 | 1.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.28 | 0.72 | 1.00 | 2.00 |
| Final Sat.: | 1800 | 0    | 1800 | 0    | 0    | 0    | 0    | 3740 | 1174 | 1800 | 3420 |

## Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.08 | 0.00 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.07 | 0.07 | 0.08 | 0.12 |
| Crit Moves:  | **** |      |      |      |      |      |      | **** |      | **** |      |
| Green/Cycle: | 0.34 | 0.00 | 0.34 | 0.00 | 0.00 | 0.00 | 0.00 | 0.29 | 0.29 | 0.32 | 0.60 |
| Volume/Cap:  | 0.25 | 0.00 | 0.19 | 0.00 | 0.00 | 0.00 | 0.00 | 0.25 | 0.25 | 0.25 | 0.21 |
| Delay/Veh:   | 24.3 | 0.0  | 23.6 | 0.0  | 0.0  | 0.0  | 0.0  | 27.4 | 27.4 | 25.7 | 9.0  |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 24.3 | 0.0  | 23.6 | 0.0  | 0.0  | 0.0  | 0.0  | 27.4 | 27.4 | 25.7 | 9.0  |
| LOS by Move: | C    | A    | C    | A    | A    | A    | A    | C    | C    | C    | A    |
| HCM2kAvgQ:   | 3    | 0    | 2    | 0    | 0    | 0    | 0    | 3    | 3    | 3    | 3    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
PM PEAK HOUR

## Level Of Service Computation Report

## 2000 HCM Operations Method (Base Volume Alternative)

## Intersection #14 Mulberry Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.249  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 17.5  
Optimal Cycle: 19 Level Of Service: B

| Approach:   | North Bound | South Bound | East Bound | West Bound |
|-------------|-------------|-------------|------------|------------|
| Movement:   | L - T - R   | L - T - R   | L - T - R  | L - T - R  |
| Control:    | Protected   | Protected   | Permitted  | Permitted  |
| Rights:     | Include     | Include     | Include    | Include    |
| Min. Green: | 0 0 0       | 0 0 0       | 0 0 0      | 0 0 0      |
| Lanes:      | 1 0 1 0 1   | 1 0 0 1 0   | 0 1 0 0 1  | 0 0 1 0 0  |

## Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 8    | 180  | 44   | 29   | 226  | 7    | 8    | 13   | 66   | 62   | 13   | 84   |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 8    | 180  | 44   | 29   | 226  | 7    | 8    | 13   | 66   | 62   | 13   | 84   |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 8    | 189  | 46   | 31   | 238  | 7    | 8    | 14   | 69   | 65   | 14   | 88   |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 8    | 189  | 46   | 31   | 238  | 7    | 8    | 14   | 69   | 65   | 14   | 88   |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 8    | 189  | 46   | 31   | 238  | 7    | 8    | 14   | 69   | 65   | 14   | 88   |

## Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 1.00 | 1.00 | 1.00 | 0.97 | 0.03 | 0.38 | 0.62 | 1.00 | 0.39 | 0.08 | 0.53 |
| Final Sat.: | 1800 | 1800 | 1800 | 1800 | 1746 | 54   | 686  | 1114 | 1800 | 702  | 147  | 951  |

## Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.00 | 0.11 | 0.03 | 0.02 | 0.14 | 0.14 | 0.01 | 0.01 | 0.04 | 0.09 | 0.09 | 0.09 |
| Crit Moves:  | **** |      |      |      | **** |      |      |      |      | **** |      |      |
| Green/Cycle: | 0.02 | 0.49 | 0.49 | 0.08 | 0.55 | 0.55 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 | 0.37 |
| Volume/Cap:  | 0.25 | 0.22 | 0.05 | 0.22 | 0.25 | 0.25 | 0.03 | 0.03 | 0.10 | 0.25 | 0.25 | 0.25 |
| Delay/Veh:   | 52.2 | 14.8 | 13.5 | 44.0 | 12.0 | 12.0 | 19.9 | 19.9 | 20.5 | 21.8 | 21.8 | 21.8 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 52.2 | 14.8 | 13.5 | 44.0 | 12.0 | 12.0 | 19.9 | 19.9 | 20.5 | 21.8 | 21.8 | 21.8 |
| LOS by Move: | D    | B    | B    | D    | B    | B    | B    | B    | C    | C    | C    | C    |
| HCM2kAvgQ:   | 1    | 3    | 1    | 1    | 4    | 4    | 0    | 0    | 1    | 4    | 4    | 4    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Base Volume Alternative)

Intersection #15 Mulberry Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.908  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 37.5  
Optimal Cycle: 104 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 2 | 0           | 1 | 0 | 2          | 0 | 1 | 1          | 0 | 2 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 129  | 278  | 338  | 55   | 427  | 188  | 149  | 1232 | 417  | 387  | 758  | 49   |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 129  | 278  | 338  | 55   | 427  | 188  | 149  | 1232 | 417  | 387  | 758  | 49   |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 136  | 293  | 356  | 58   | 449  | 198  | 157  | 1297 | 439  | 407  | 798  | 52   |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 136  | 293  | 356  | 58   | 449  | 198  | 157  | 1297 | 439  | 407  | 798  | 52   |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 136  | 293  | 356  | 58   | 449  | 198  | 157  | 1297 | 439  | 407  | 798  | 52   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 |
| Lanes:      | 2.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 3492 | 3420 | 1800 | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 |

Capacity Analysis Module:

|              |      |      |      |       |      |      |      |      |      |      |      |      |
|--------------|------|------|------|-------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.04 | 0.09 | 0.20 | 0.03  | 0.13 | 0.11 | 0.09 | 0.38 | 0.24 | 0.23 | 0.23 | 0.03 |
| Crit Moves:  | **** |      |      | ****  |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.06 | 0.22 | 0.22 | 0.04  | 0.20 | 0.20 | 0.18 | 0.42 | 0.42 | 0.25 | 0.49 | 0.49 |
| Volume/Cap:  | 0.67 | 0.39 | 0.91 | 0.91  | 0.67 | 0.56 | 0.48 | 0.91 | 0.58 | 0.91 | 0.48 | 0.06 |
| Delay/Veh:   | 54.8 | 33.8 | 62.5 | 128.7 | 40.0 | 38.5 | 37.8 | 36.1 | 23.6 | 58.5 | 17.5 | 13.7 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 54.8 | 33.8 | 62.5 | 128.7 | 40.0 | 38.5 | 37.8 | 36.1 | 23.6 | 58.5 | 17.5 | 13.7 |
| LOS by Move: | D    | C    | E    | F     | D    | D    | D    | D    | C    | E    | B    | B    |
| HCM2kAvgQ:   | 3    | 4    | 14   | 4     | 8    | 6    | 5    | 24   | 11   | 16   | 9    | 1    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Base Volume Alternative)

Intersection #16 Mulberry Ave/Marlay Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.387  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 21.1  
Optimal Cycle: 27 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 1 | 0 | 1          | 0 | 1 | 1          | 0 | 1 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 40   | 377  | 70   | 47   | 688  | 37   | 93   | 125  | 142  | 65   | 21   | 25   |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 40   | 377  | 70   | 47   | 688  | 37   | 93   | 125  | 142  | 65   | 21   | 25   |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 42   | 397  | 74   | 49   | 724  | 39   | 98   | 132  | 149  | 68   | 22   | 26   |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 42   | 397  | 74   | 49   | 724  | 39   | 98   | 132  | 149  | 68   | 22   | 26   |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 42   | 397  | 74   | 49   | 724  | 39   | 98   | 132  | 149  | 68   | 22   | 26   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.02 | 0.12 | 0.04 | 0.03 | 0.21 | 0.02 | 0.05 | 0.07 | 0.08 | 0.04 | 0.01 | 0.01 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.06 | 0.49 | 0.49 | 0.12 | 0.55 | 0.55 | 0.25 | 0.21 | 0.21 | 0.10 | 0.07 | 0.07 |
| Volume/Cap:  | 0.39 | 0.24 | 0.08 | 0.24 | 0.39 | 0.04 | 0.22 | 0.34 | 0.39 | 0.39 | 0.19 | 0.22 |
| Delay/Veh:   | 47.5 | 14.7 | 13.5 | 40.7 | 13.2 | 10.5 | 30.3 | 33.8 | 34.3 | 43.7 | 44.9 | 45.2 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 47.5 | 14.7 | 13.5 | 40.7 | 13.2 | 10.5 | 30.3 | 33.8 | 34.3 | 43.7 | 44.9 | 45.2 |
| LOS by Move: | D    | B    | B    | D    | B    | B    | C    | C    | C    | D    | D    | D    |
| HCM2kAvgQ:   | 2    | 4    | 1    | 2    | 7    | 1    | 2    | 4    | 4    | 2    | 1    | 1    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Base Volume Alternative)

Intersection #17 Mulberry Ave/Philadelphia Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.406  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 8.0  
Optimal Cycle: 23 Level Of Service: A

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Permitted  |   |   | Permitted  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 1 | 0 | 1          | 0 | 1 | 0          | 1 | 0 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 30   | 1023 | 74   | 18   | 1026 | 42   | 63   | 18   | 83   | 48   | 15   | 9    |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 30   | 1023 | 74   | 18   | 1026 | 42   | 63   | 18   | 83   | 48   | 15   | 9    |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 32   | 1077 | 78   | 19   | 1080 | 44   | 66   | 19   | 87   | 51   | 16   | 9    |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 32   | 1077 | 78   | 19   | 1080 | 44   | 66   | 19   | 87   | 51   | 16   | 9    |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 32   | 1077 | 78   | 19   | 1080 | 44   | 66   | 19   | 87   | 51   | 16   | 9    |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.63 | 0.37 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 | 1800 | 1800 | 1800 | 1800 | 1125 | 675  |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.02 | 0.31 | 0.04 | 0.01 | 0.32 | 0.02 | 0.04 | 0.01 | 0.05 | 0.03 | 0.01 | 0.01 |
| Crit Moves:  | **** |      |      | **** |      |      |      |      | **** |      |      |      |
| Green/Cycle: | 0.04 | 0.79 | 0.79 | 0.03 | 0.78 | 0.78 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 |
| Volume/Cap:  | 0.41 | 0.40 | 0.05 | 0.40 | 0.41 | 0.03 | 0.31 | 0.09 | 0.41 | 0.23 | 0.12 | 0.12 |
| Delay/Veh:   | 50.0 | 3.2  | 2.2  | 53.2 | 3.7  | 2.6  | 41.1 | 39.4 | 42.0 | 40.4 | 39.6 | 39.6 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 50.0 | 3.2  | 2.2  | 53.2 | 3.7  | 2.6  | 41.1 | 39.4 | 42.0 | 40.4 | 39.6 | 39.6 |
| LOS by Move: | D    | A    | A    | D    | A    | A    | D    | D    | D    | D    | D    | D    |
| HCM2kAvgQ:   | 1    | 5    | 1    | 1    | 6    | 0    | 2    | 1    | 3    | 2    | 1    | 1    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative)

Intersection #18 Mulberry Ave/SR-60 WB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.753  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 21.3  
Optimal Cycle: 49 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound  |   |   | West Bound  |   |   |
|-------------|-------------|---|---|-------------|---|---|-------------|---|---|-------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L           | T | R | L           | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Split Phase |   |   | Split Phase |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include     |   |   | Include     |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 0 | 1 | 0           | 0 | 0 | 0           | 1 | 0 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 341  | 1046 | 0    | 0    | 605  | 565  | 0    | 0    | 0    | 123  | 1    | 253  |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 341  | 1046 | 0    | 0    | 605  | 565  | 0    | 0    | 0    | 123  | 1    | 253  |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 359  | 1101 | 0    | 0    | 637  | 595  | 0    | 0    | 0    | 129  | 1    | 266  |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 359  | 1101 | 0    | 0    | 637  | 595  | 0    | 0    | 0    | 129  | 1    | 266  |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 359  | 1101 | 0    | 0    | 637  | 595  | 0    | 0    | 0    | 129  | 1    | 266  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 0.00 | 0.00 | 1.03 | 0.97 | 0.00 | 0.00 | 0.00 | 0.99 | 0.01 | 1.00 |
| Final Sat.: | 1800 | 3420 | 0    | 0    | 1768 | 1652 | 0    | 0    | 0    | 1785 | 15   | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.20 | 0.32 | 0.00 | 0.00 | 0.36 | 0.36 | 0.00 | 0.00 | 0.00 | 0.07 | 0.07 | 0.15 |
| Crit Moves:  | **** |      |      | **** |      |      |      |      |      | **** |      |      |
| Green/Cycle: | 0.26 | 0.74 | 0.00 | 0.00 | 0.48 | 0.48 | 0.00 | 0.00 | 0.00 | 0.20 | 0.20 | 0.20 |
| Volume/Cap:  | 0.75 | 0.43 | 0.00 | 0.00 | 0.75 | 0.75 | 0.00 | 0.00 | 0.00 | 0.37 | 0.37 | 0.75 |
| Delay/Veh:   | 40.4 | 5.0  | 0.0  | 0.0  | 23.3 | 23.3 | 0.0  | 0.0  | 0.0  | 35.5 | 35.5 | 46.7 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 40.4 | 5.0  | 0.0  | 0.0  | 23.3 | 23.3 | 0.0  | 0.0  | 0.0  | 35.5 | 35.5 | 46.7 |
| LOS by Move: | D    | A    | A    | A    | C    | C    | A    | A    | A    | D    | D    | D    |
| HCM2kAvgQ:   | 12   | 7    | 0    | 0    | 17   | 17   | 0    | 0    | 0    | 4    | 4    | 9    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Base Volume Alternative)

Intersection #19 Mulberry Ave/SR-60 EB Ramps

|                  |                 |                          |       |
|------------------|-----------------|--------------------------|-------|
| Cycle (sec):     | 100             | Critical Vol./Cap.(X):   | 0.834 |
| Loss Time (sec): | 6 (Y+R=4.0 sec) | Average Delay (sec/veh): | 29.5  |
| Optimal Cycle:   | 67              | Level Of Service:        | C     |

| Approach:   | North Bound |   |   |   | South Bound |   |   |   | East Bound  |   |   |   | West Bound  |   |   |  |
|-------------|-------------|---|---|---|-------------|---|---|---|-------------|---|---|---|-------------|---|---|--|
| Movement:   | L           | T | R |   | L           | T | R |   | L           | T | R |   | L           | T | R |  |
| Control:    | Protected   |   |   |   | Protected   |   |   |   | Split Phase |   |   |   | Split Phase |   |   |  |
| Rights:     | Include     |   |   |   | Include     |   |   |   | Include     |   |   |   | Include     |   |   |  |
| Min. Green: | 0           | 0 | 1 | 0 | 1           | 0 | 2 | 0 | 0           | 0 | 0 | 1 | 0           | 0 | 0 |  |
| Lanes:      | 0           | 0 | 1 | 1 | 0           | 0 | 2 | 0 | 0           | 1 | 0 | 1 | 0           | 0 | 0 |  |

|                |      |      |      |      |      |      |      |      |      |      |      |      |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Volume Module: |      |      |      |      |      |      |      |      |      |      |      |      |
| Base Vol:      | 0    | 634  | 157  | 235  | 496  | 0    | 745  | 0    | 317  | 0    | 0    | 0    |
| Growth Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:   | 0    | 634  | 157  | 235  | 496  | 0    | 745  | 0    | 317  | 0    | 0    | 0    |
| User Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:       | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:    | 0    | 667  | 165  | 247  | 522  | 0    | 784  | 0    | 334  | 0    | 0    | 0    |
| Reduct Vol:    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:   | 0    | 667  | 165  | 247  | 522  | 0    | 784  | 0    | 334  | 0    | 0    | 0    |
| PCE Adj:       | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:       | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume:   | 0    | 667  | 165  | 247  | 522  | 0    | 784  | 0    | 334  | 0    | 0    | 0    |

|                         |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Saturation Flow Module: |      |      |      |      |      |      |      |      |      |      |      |      |
| Sat/Lane:               | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment:             | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:                  | 0.00 | 1.60 | 0.40 | 1.00 | 2.00 | 0.00 | 1.54 | 0.00 | 0.46 | 0.00 | 0.00 | 0.00 |
| Final Sat.:             | 0    | 2741 | 679  | 1800 | 3420 | 0    | 2772 | 0    | 828  | 0    | 0    | 0    |

|                           |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Capacity Analysis Module: |      |      |      |      |      |      |      |      |      |      |      |      |
| Vol/Sat:                  | 0.00 | 0.24 | 0.24 | 0.14 | 0.15 | 0.00 | 0.28 | 0.00 | 0.40 | 0.00 | 0.00 | 0.00 |
| Crit Moves:               | ***  |      |      | ***  |      |      |      |      | ***  |      |      |      |
| Green/Cycle:              | 0.00 | 0.29 | 0.29 | 0.16 | 0.46 | 0.00 | 0.48 | 0.00 | 0.48 | 0.00 | 0.00 | 0.00 |
| Volume/Cap:               | 0.00 | 0.83 | 0.83 | 0.83 | 0.33 | 0.00 | 0.59 | 0.00 | 0.83 | 0.00 | 0.00 | 0.00 |
| Delay/Veh:                | 0.0  | 39.3 | 39.3 | 58.5 | 17.6 | 0.0  | 19.1 | 0.0  | 27.0 | 0.0  | 0.0  | 0.0  |
| User DelAdj:              | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:               | 0.0  | 39.3 | 39.3 | 58.5 | 17.6 | 0.0  | 19.1 | 0.0  | 27.0 | 0.0  | 0.0  | 0.0  |
| LOS by Move:              | A    | D    | D    | E    | B    | A    | B    | A    | C    | A    | A    | A    |
| HCM2kAvgQ:                | 0    | 15   | 15   | 10   | 5    | 0    | 12   | 0    | 22   | 0    | 0    | 0    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #20 Banana Ave/San Bernardino Ave

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: B[ 12.0]

| Approach: | North Bound |   |   |   | South Bound |   |   |   | East Bound   |   |   |   | West Bound   |   |   |   |   |
|-----------|-------------|---|---|---|-------------|---|---|---|--------------|---|---|---|--------------|---|---|---|---|
| Movement: | L           | - | T | R | L           | - | T | R | L            | - | T | R | L            | - | T | R |   |
| Control:  | Stop Sign   |   |   |   | Stop Sign   |   |   |   | Uncontrolled |   |   |   | Uncontrolled |   |   |   |   |
| Rights:   | Include     |   |   |   | Include     |   |   |   | Include      |   |   |   | Include      |   |   |   |   |
| Lanes:    | 0           | 0 | 1 | 0 | 0           | 0 | 0 | 0 | 0            | 0 | 2 | 0 | 1            | 1 | 0 | 2 | 0 |

| Volume Module: |      |      |      |      |      |      |      |      |      |      |      |      |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:      | 6    | 0    | 42   | 0    | 0    | 0    | 0    | 652  | 12   | 9    | 331  | 0    |
| Growth Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:   | 6    | 0    | 42   | 0    | 0    | 0    | 0    | 652  | 12   | 9    | 331  | 0    |
| User Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:       | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:    | 6    | 0    | 44   | 0    | 0    | 0    | 0    | 686  | 13   | 9    | 348  | 0    |
| Reduct Vol:    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| FinalVolume:   | 6    | 0    | 44   | 0    | 0    | 0    | 0    | 686  | 13   | 9    | 348  | 0    |

|                      |     |     |     |       |       |       |       |       |       |     |       |       |
|----------------------|-----|-----|-----|-------|-------|-------|-------|-------|-------|-----|-------|-------|
| Critical Gap Module: |     |     |     |       |       |       |       |       |       |     |       |       |
| Critical Gp:         | 6.8 | 6.5 | 6.9 | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | 4.1 | xxxxx | xxxxx |
| FollowUpTim:         | 3.5 | 4.0 | 3.3 | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | 2.2 | xxxxx | xxxxx |

```
Capacity Module:
Cnflct Vol:  879 1054   343 xxxx xxxx xxxxx xxxx xxxx xxxxx 699 xxxx xxxxx
Potent Cap.: 291 228   659 xxxx xxxx xxxxx xxxx xxxx xxxxx 907 xxxx xxxxx
Move Cap.:   288 225   659 xxxx xxxx xxxxx xxxx xxxx xxxxx 907 xxxx xxxxx
Volume/Cap: 0.02 0.00 0.07 xxxx xxxx xxxx xxxx xxxx xxxx 0.01 xxxx xxxx
```

```

Level Of Service Module:
2Way95thQ:  xxxx  xxxx  xxxxxx  xxxx  xxxx  xxxxxx  xxxx  xxxx  xxxxxx  0.0  xxxx  xxxxxx
Control Del:  xxxxxx  xxxx  xxxxxx  xxxxxx  xxxx  xxxxxx  xxxxxx  xxxx  xxxxxx  9.0  xxxx  xxxxxx
LOS by Move:  *      *      *      *      *      *      *      *      *      A      *      *
Movement:
  LT - LTR - RT  LT - LTR - RT  LT - LTR - RT  LT - LTR - RT  LT - LTR - RT
Shared Cap.:  xxxx  568  xxxxxx  xxxx  xxxx  xxxxxx  xxxx  xxxx  xxxxxx  xxxx  xxxx  xxxxxx
SharedQueue:  xxxxxx  0.3  xxxxxx  xxxxxx  xxxx  xxxxxx  xxxxxx  xxxx  xxxxxx  xxxxxx  xxxx  xxxxxx
Shrd Condel:  xxxxxx  12.0  xxxxxx  xxxxxx  xxxx  xxxxxx  xxxxxx  xxxx  xxxxxx  xxxxxx  xxxx  xxxxxx
Shared LOS:   *      B      *      *      *      *      *      *      *      *      *      *
ApproachDel:  12.0      xxxxxx      xxxxxx      xxxxxx
ApproachLOS:  B      *      *      *

```

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #21 Banana Ave/Valley Blvd

Average Delay (sec/veh): 2.0 Worst Case Level Of Service: E[ 40.3]

Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Stop Sign Stop Sign Uncontrolled Uncontrolled  
Rights: Include Include Include Include  
Lanes: 0 0 1! 0 0 0 0 1! 0 0 1 0 2 0 1 1 0 1 1 0

Volume Module:  
Base Vol: 15 0 15 27 0 34 50 1023 12 8 577 36  
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
Initial Bse: 15 0 15 27 0 34 50 1023 12 8 577 36  
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95  
PHF Volume: 16 0 16 28 0 36 53 1077 13 8 607 38  
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
FinalVolume: 16 0 16 28 0 36 53 1077 13 8 607 38

Critical Gap Module:  
Critical Gap: 7.5 6.5 6.9 7.5 6.5 6.9 4.1 xxxx xxxxx 4.1 xxxx xxxxx  
FollowUpTim: 3.5 4.0 3.3 3.5 4.0 3.3 2.2 xxxx xxxxx 2.2 xxxx xxxxx

Capacity Module:  
Cnflct Vol: 1503 1844 538 1287 1838 323 645 xxxx xxxxx 1089 xxxx xxxxx  
Potent Cap.: 85 76 492 123 76 679 950 xxxx xxxxx 648 xxxx xxxxx  
Move Cap.: 77 71 492 113 71 679 950 xxxx xxxxx 648 xxxx xxxxx  
Volume/Cap: 0.21 0.00 0.03 0.25 0.00 0.05 0.06 xxxx xxxxx 0.01 xxxx xxxxx

Level Of Service Module:  
2Way95thQ: xxxx xxxx xxxxx xxxx xxxx xxxxx 0.2 xxxx xxxxx 0.0 xxxx xxxxx  
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx 9.0 xxxx xxxxx 10.6 xxxx xxxxx  
LOS by Move: \* \* \* \* \* A \* \* \* B \* \* \*  
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT  
Shared Cap.: xxxx 133 xxxxx xxxx 212 xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx  
SharedQueue:xxxxx 0.9 xxxxx xxxxx 1.2 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx  
Shrd ConDel:xxxxx 40.3 xxxxx xxxxx 29.3 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx  
Shared LOS: \* E \* \* D \* \* \* \* \*  
ApproachDel: 40.3 29.3 xxxxxx xxxxxx  
ApproachLOS: E D \* \*

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Base Volume Alternative)

Intersection #22 Cherry Ave/San Bernardino Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.520

Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 26.6

Optimal Cycle: 33 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected  
Rights: Include Ignore Ignore Include  
Min. Green: 0 0 0 0 0 0 0 0 0 0  
Lanes: 1 0 2 1 0 1 0 3 0 1 1 0 2 0 1 1 0 1 1 0

Volume Module:  
Base Vol: 19 834 87 58 731 143 315 426 88 119 157 48  
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
Initial Bse: 19 834 87 58 731 143 315 426 88 119 157 48  
User Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 0.00 1.00 1.00 1.00  
PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.00 0.95 0.95 0.00 0.95 0.95 0.95  
PHF Volume: 20 878 92 61 769 0 332 448 0 125 165 51  
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
Reduced Vol: 20 878 92 61 769 0 332 448 0 125 165 51  
PCE Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 0.00 1.00 1.00 1.00  
MLF Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 0.00 1.00 1.00 1.00  
FinalVolume: 20 878 92 61 769 0 332 448 0 125 165 51

Saturation Flow Module:  
Sat/Lane: 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800  
Adjustment: 1.00 0.91 0.91 1.00 0.91 1.00 1.00 0.95 1.00 1.00 0.95 0.95  
Lanes: 1.00 2.72 0.28 1.00 3.00 1.00 1.00 2.00 1.00 1.00 1.53 0.47  
Final Sat.: 1800 4450 464 1800 4914 1800 1800 3420 1800 1800 2619 801

Capacity Analysis Module:  
Vol/Sat: 0.01 0.20 0.20 0.03 0.16 0.00 0.18 0.13 0.00 0.07 0.06 0.06  
Crit Moves: \*\*\*\* \*\*\*\* \*\*\*\*  
Green/Cycle: 0.03 0.38 0.38 0.07 0.42 0.00 0.35 0.31 0.00 0.16 0.12 0.12  
Volume/Cap: 0.38 0.52 0.52 0.52 0.38 0.00 0.52 0.42 0.00 0.42 0.52 0.52  
Delay/Veh: 52.1 24.3 24.3 49.3 20.4 0.0 26.3 27.6 0.0 38.5 42.4 42.4  
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
AdjDel/Veh: 52.1 24.3 24.3 49.3 20.4 0.0 26.3 27.6 0.0 38.5 42.4 42.4  
LOS by Move: D C C D C A C C A D D D  
HCM2kAvgQ: 1 9 9 3 6 0 8 6 0 4 4 4

Note: Queue reported is the number of cars per lane.



FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Base Volume Alternative)

\*\*\*\*\*  
Intersection #23 Cherry Ave/Valley Blvd  
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.692  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 34.2  
Optimal Cycle: 47 Level Of Service: C  
\*\*\*\*\*

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |   |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |   |
| Lanes:      | 1           | 0 | 2 | 0           | 1 | 1 | 0          | 2 | 0 | 1          | 1 | 0 | 2 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 118  | 531  | 306  | 139  | 632  | 127  | 124  | 699  | 197  | 275  | 408  | 63   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 118  | 531  | 306  | 139  | 632  | 127  | 124  | 699  | 197  | 275  | 408  | 63   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 124  | 559  | 322  | 146  | 665  | 134  | 131  | 736  | 207  | 289  | 429  | 66   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 124  | 559  | 322  | 146  | 665  | 134  | 131  | 736  | 207  | 289  | 429  | 66   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 124  | 559  | 322  | 146  | 665  | 134  | 131  | 736  | 207  | 289  | 429  | 66   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.07 | 0.16 | 0.18 | 0.08 | 0.19 | 0.07 | 0.07 | 0.22 | 0.12 | 0.16 | 0.13 | 0.04 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.10 | 0.26 | 0.26 | 0.12 | 0.28 | 0.28 | 0.20 | 0.31 | 0.31 | 0.23 | 0.34 | 0.34 |
| Volume/Cap:  | 0.70 | 0.63 | 0.69 | 0.69 | 0.70 | 0.27 | 0.36 | 0.69 | 0.37 | 0.69 | 0.36 | 0.11 |
| Delay/Veh:   | 55.4 | 34.3 | 37.9 | 51.8 | 34.7 | 28.5 | 35.2 | 32.2 | 27.2 | 40.0 | 24.8 | 22.4 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 55.4 | 34.3 | 37.9 | 51.8 | 34.7 | 28.5 | 35.2 | 32.2 | 27.2 | 40.0 | 24.8 | 22.4 |
| LOS by Move: | E    | C    | D    | D    | C    | C    | D    | C    | C    | D    | C    | C    |
| HCM2kAvgQ:   | 5    | 9    | 10   | 6    | 11   | 3    | 4    | 11   | 5    | 9    | 5    | 1    |

Note: Queue reported is the number of cars per lane.

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FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Base Volume Alternative)

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Intersection #26 Cherry Ave/Slover Ave  
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.659  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 29.8  
Optimal Cycle: 38 Level Of Service: C  
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| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 1 | 1 | 0          | 1 | 1 | 0          | 2 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 34   | 405  | 23   | 245  | 392  | 304  | 307  | 724  | 52   | 44   | 280  | 294  |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 34   | 405  | 23   | 245  | 392  | 304  | 307  | 724  | 52   | 44   | 280  | 294  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 36   | 426  | 24   | 258  | 413  | 320  | 323  | 762  | 55   | 46   | 295  | 309  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 36   | 426  | 24   | 258  | 413  | 320  | 323  | 762  | 55   | 46   | 295  | 309  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 36   | 426  | 24   | 258  | 413  | 320  | 323  | 762  | 55   | 46   | 295  | 309  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 1.13 | 0.87 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 1926 | 1494 | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.02 | 0.12 | 0.01 | 0.14 | 0.21 | 0.21 | 0.18 | 0.22 | 0.03 | 0.03 | 0.09 | 0.17 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.03 | 0.19 | 0.19 | 0.22 | 0.37 | 0.37 | 0.27 | 0.48 | 0.48 | 0.06 | 0.26 | 0.26 |
| Volume/Cap:  | 0.58 | 0.66 | 0.07 | 0.66 | 0.58 | 0.58 | 0.66 | 0.47 | 0.06 | 0.47 | 0.33 | 0.66 |
| Delay/Veh:   | 60.1 | 40.1 | 33.4 | 39.8 | 25.7 | 25.7 | 35.5 | 17.7 | 14.1 | 49.2 | 30.1 | 36.4 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 60.1 | 40.1 | 33.4 | 39.8 | 25.7 | 25.7 | 35.5 | 17.7 | 14.1 | 49.2 | 30.1 | 36.4 |
| LOS by Move: | E    | D    | C    | D    | C    | C    | D    | B    | B    | D    | C    | D    |
| HCM2kAvgQ:   | 2    | 7    | 1    | 8    | 10   | 10   | 10   | 8    | 1    | 2    | 4    | 9    |

Note: Queue reported is the number of cars per lane.

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FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Base Volume Alternative)

Intersection #27 Cherry Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.229  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 13.3  
Optimal Cycle: 18 Level Of Service: B

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Permitted  |   |   | Permitted  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 1           | 0 | 2 | 0          | 1 | 0 | 0          | 1 | 0 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 12   | 399  | 6    | 17   | 575  | 59   | 117  | 29   | 8    | 7    | 20   | 34   |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 12   | 399  | 6    | 17   | 575  | 59   | 117  | 29   | 8    | 7    | 20   | 34   |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 13   | 420  | 6    | 18   | 605  | 62   | 123  | 31   | 8    | 7    | 21   | 36   |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 13   | 420  | 6    | 18   | 605  | 62   | 123  | 31   | 8    | 7    | 21   | 36   |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 13   | 420  | 6    | 18   | 605  | 62   | 123  | 31   | 8    | 7    | 21   | 36   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 2.96 | 0.04 | 1.00 | 2.72 | 0.28 | 1.00 | 0.78 | 0.22 | 0.26 | 0.74 | 1.00 |
| Final Sat.: | 1800 | 4841 | 73   | 1800 | 4457 | 457  | 1710 | 1340 | 370  | 467  | 1333 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.01 | 0.09 | 0.09 | 0.01 | 0.14 | 0.14 | 0.07 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      |      |      |      |
| Green/Cycle: | 0.03 | 0.56 | 0.56 | 0.06 | 0.59 | 0.59 | 0.32 | 0.32 | 0.32 | 0.32 | 0.32 | 0.32 |
| Volume/Cap:  | 0.23 | 0.15 | 0.15 | 0.15 | 0.23 | 0.23 | 0.23 | 0.07 | 0.07 | 0.05 | 0.05 | 0.06 |
| Delay/Veh:   | 49.4 | 10.6 | 10.6 | 44.8 | 9.6  | 9.6  | 25.4 | 24.0 | 24.0 | 23.9 | 23.9 | 24.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 49.4 | 10.6 | 10.6 | 44.8 | 9.6  | 9.6  | 25.4 | 24.0 | 24.0 | 23.9 | 23.9 | 24.0 |
| LOS by Move: | D    | B    | B    | D    | A    | A    | C    | C    | C    | C    | C    | C    |
| HCM2kAvgQ:   | 1    | 2    | 2    | 1    | 3    | 3    | 3    | 1    | 1    | 1    | 1    | 1    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Base Volume Alternative)

Intersection #28 Cherry Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.492  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 25.5  
Optimal Cycle: 31 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 2 | 0           | 2 | 0 | 2          | 0 | 2 | 1          | 0 | 2 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 183  | 260  | 40   | 123  | 423  | 105  | 138  | 813  | 213  | 87   | 734  | 69   |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 183  | 260  | 40   | 123  | 423  | 105  | 138  | 813  | 213  | 87   | 734  | 69   |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 193  | 274  | 42   | 129  | 445  | 111  | 145  | 856  | 224  | 92   | 773  | 73   |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 193  | 274  | 42   | 129  | 445  | 111  | 145  | 856  | 224  | 92   | 773  | 73   |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 193  | 274  | 42   | 129  | 445  | 111  | 145  | 856  | 224  | 92   | 773  | 73   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.91 | 0.91 | 0.97 | 0.95 | 1.00 |
| Lanes:      | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 2.38 | 0.62 | 2.00 | 2.00 | 1.00 |
| Final Sat.: | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 | 3492 | 3894 | 1020 | 3492 | 3420 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.06 | 0.08 | 0.02 | 0.04 | 0.13 | 0.06 | 0.04 | 0.22 | 0.22 | 0.03 | 0.23 | 0.04 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      |      |      |      |
| Green/Cycle: | 0.11 | 0.26 | 0.26 | 0.12 | 0.26 | 0.26 | 0.08 | 0.49 | 0.49 | 0.06 | 0.46 | 0.46 |
| Volume/Cap:  | 0.49 | 0.31 | 0.09 | 0.31 | 0.49 | 0.23 | 0.49 | 0.45 | 0.45 | 0.45 | 0.49 | 0.09 |
| Delay/Veh:   | 42.7 | 30.2 | 28.3 | 40.7 | 31.5 | 29.1 | 45.0 | 17.1 | 17.1 | 47.2 | 19.2 | 15.3 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 42.7 | 30.2 | 28.3 | 40.7 | 31.5 | 29.1 | 45.0 | 17.1 | 17.1 | 47.2 | 19.2 | 15.3 |
| LOS by Move: | D    | C    | C    | D    | C    | C    | D    | B    | B    | D    | B    | B    |
| HCM2kAvgQ:   | 3    | 4    | 1    | 2    | 6    | 3    | 3    | 8    | 8    | 2    | 9    | 1    |

Note: Queue reported is the number of cars per lane.

Lanes, Volumes, Timings  
3: VALLEY BLVD & FONTANA AVE

PM PEAK HOUR

6/25/2009

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL2                                                                              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                                | WBR2                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | NBR2                                                                                |
| Lane Configurations     |                                                                                   |  |  |  |  |  |                                                                                    |  |                                                                                     |  |                                                                                     |  |
| Volume (vph)            | 55                                                                                | 268                                                                               | 597                                                                               | 24                                                                                | 23                                                                                | 535                                                                               | 64                                                                                 | 19                                                                                  | 5                                                                                   | 5                                                                                   | 4                                                                                   | 11                                                                                  |
| Ideal Flow (vphpl)      | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (ft)     |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                 | 100                                                                               |                                                                                   | 0                                                                                  |                                                                                     | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |
| Storage Lanes           |                                                                                   | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                  |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (ft)       |                                                                                   | 25                                                                                |                                                                                   | 25                                                                                | 25                                                                                |                                                                                   | 25                                                                                 |                                                                                     | 25                                                                                  |                                                                                     | 25                                                                                  |                                                                                     |
| Lane Util. Factor       | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 0.91                                                                              | 0.91                                                                               | 0.91                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Frt                     |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   | 0.984                                                                             |                                                                                    | 0.850                                                                               |                                                                                     | 0.957                                                                               |                                                                                     | 0.850                                                                               |
| Flt Protected           |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                    |                                                                                     |                                                                                     | 0.982                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)       | 0                                                                                 | 1710                                                                              | 3420                                                                              | 1530                                                                              | 1710                                                                              | 3224                                                                              | 0                                                                                  | 1392                                                                                | 0                                                                                   | 1692                                                                                | 0                                                                                   | 1530                                                                                |
| Flt Permitted           |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                    |                                                                                     |                                                                                     | 0.891                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)       | 0                                                                                 | 1710                                                                              | 3420                                                                              | 1530                                                                              | 1710                                                                              | 3224                                                                              | 0                                                                                  | 1392                                                                                | 0                                                                                   | 1535                                                                                | 0                                                                                   | 1530                                                                                |
| Right Turn on Red       |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                    | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)       |                                                                                   |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                   |                                                                                    | 18                                                                                  |                                                                                     |                                                                                     |                                                                                     | 12                                                                                  |
| Link Speed (mph)        |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                    |                                                                                     |                                                                                     | 30                                                                                  |                                                                                     |                                                                                     |
| Link Distance (ft)      |                                                                                   |                                                                                   | 807                                                                               |                                                                                   |                                                                                   | 830                                                                               |                                                                                    |                                                                                     |                                                                                     | 743                                                                                 |                                                                                     |                                                                                     |
| Travel Time (s)         |                                                                                   |                                                                                   | 18.3                                                                              |                                                                                   |                                                                                   | 18.9                                                                              |                                                                                    |                                                                                     |                                                                                     | 16.9                                                                                |                                                                                     |                                                                                     |
| Peak Hour Factor        | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                               | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                |
| Heavy Vehicles (%)      | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                 | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Shared Lane Traffic (%) |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 10%                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)   | 0                                                                                 | 340                                                                               | 628                                                                               | 25                                                                                | 24                                                                                | 632                                                                               | 0                                                                                  | 18                                                                                  | 0                                                                                   | 14                                                                                  | 0                                                                                   | 12                                                                                  |
| Turn Type               | Prot                                                                              | Prot                                                                              |                                                                                   | Perm                                                                              | Prot                                                                              |                                                                                   |                                                                                    | Perm                                                                                | Perm                                                                                |                                                                                     |                                                                                     | Perm                                                                                |
| Protected Phases        | 7                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 3                                                                                 | 8                                                                                 |                                                                                    |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |                                                                                     |
| Permitted Phases        |                                                                                   |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   |                                                                                    | 8                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |
| Detector Phase          | 7                                                                                 | 7                                                                                 | 4                                                                                 | 4                                                                                 | 3                                                                                 | 8                                                                                 |                                                                                    | 8                                                                                   | 2                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |                                                                                    | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 |                                                                                     | 4.0                                                                                 |
| Minimum Split (s)       | 8.0                                                                               | 8.0                                                                               | 20.0                                                                              | 20.0                                                                              | 8.0                                                                               | 20.0                                                                              |                                                                                    | 20.0                                                                                | 20.0                                                                                | 20.0                                                                                |                                                                                     | 20.0                                                                                |
| Total Split (s)         | 20.0                                                                              | 20.0                                                                              | 31.0                                                                              | 31.0                                                                              | 9.0                                                                               | 20.0                                                                              | 0.0                                                                                | 20.0                                                                                | 20.0                                                                                | 20.0                                                                                | 0.0                                                                                 | 20.0                                                                                |
| Total Split (%)         | 25.0%                                                                             | 25.0%                                                                             | 38.8%                                                                             | 38.8%                                                                             | 11.3%                                                                             | 25.0%                                                                             | 0.0%                                                                               | 25.0%                                                                               | 25.0%                                                                               | 25.0%                                                                               | 0.0%                                                                                | 25.0%                                                                               |
| Maximum Green (s)       | 16.0                                                                              | 16.0                                                                              | 27.0                                                                              | 27.0                                                                              | 5.0                                                                               | 16.0                                                                              |                                                                                    | 16.0                                                                                | 16.0                                                                                | 16.0                                                                                |                                                                                     | 16.0                                                                                |
| Yellow Time (s)         | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               |                                                                                    | 3.5                                                                                 | 3.5                                                                                 | 3.5                                                                                 |                                                                                     | 3.5                                                                                 |
| All-Red Time (s)        | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               |                                                                                    | 0.5                                                                                 | 0.5                                                                                 | 0.5                                                                                 |                                                                                     | 0.5                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               | Lag                                                                               | Lead                                                                              | Lag                                                                               |                                                                                    | Lag                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               |                                                                                    | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                    | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |                                                                                     | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              |                                                                                    | None                                                                                | None                                                                                | None                                                                                |                                                                                     | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               |                                                                                    | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |                                                                                     | 5.0                                                                                 |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 11.0                                                                              | 11.0                                                                              |                                                                                   | 11.0                                                                              |                                                                                    | 11.0                                                                                | 11.0                                                                                | 11.0                                                                                |                                                                                     | 11.0                                                                                |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                    | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |
| Act Effect Green (s)    |                                                                                   | 16.3                                                                              | 33.4                                                                              | 33.4                                                                              | 5.1                                                                               | 16.3                                                                              |                                                                                    | 16.3                                                                                |                                                                                     | 8.1                                                                                 |                                                                                     | 8.1                                                                                 |
| Actuated g/C Ratio      |                                                                                   | 0.24                                                                              | 0.50                                                                              | 0.50                                                                              | 0.08                                                                              | 0.24                                                                              |                                                                                    | 0.24                                                                                |                                                                                     | 0.12                                                                                |                                                                                     | 0.12                                                                                |
| v/c Ratio               |                                                                                   | 0.82                                                                              | 0.37                                                                              | 0.03                                                                              | 0.18                                                                              | 0.81                                                                              |                                                                                    | 0.05                                                                                |                                                                                     | 0.08                                                                                |                                                                                     | 0.06                                                                                |
| Control Delay           |                                                                                   | 45.7                                                                              | 14.3                                                                              | 6.9                                                                               | 36.0                                                                              | 36.3                                                                              |                                                                                    | 11.9                                                                                |                                                                                     | 28.8                                                                                |                                                                                     | 15.9                                                                                |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                    | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |
| Total Delay             |                                                                                   | 45.7                                                                              | 14.3                                                                              | 6.9                                                                               | 36.0                                                                              | 36.3                                                                              |                                                                                    | 11.9                                                                                |                                                                                     | 28.8                                                                                |                                                                                     | 15.9                                                                                |
| LOS                     |                                                                                   | D                                                                                 | B                                                                                 | A                                                                                 | D                                                                                 | D                                                                                 |                                                                                    | B                                                                                   |                                                                                     | C                                                                                   |                                                                                     | B                                                                                   |

Lanes, Volumes, Timings  
3: VALLEY BLVD & FONTANA AVE

PM PEAK HOUR

6/25/2009

|                         |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| Lane Group              | SBL                                                                               | SBT                                                                               | SBR                                                                               | SWL2                                                                              | SWL                                                                               | SWR                                                                               | SWR2                                                                               |
| Lane Configurations     |                                                                                   |  |  |                                                                                   |  |                                                                                   |                                                                                    |
| Volume (vph)            | 48                                                                                | 1                                                                                 | 40                                                                                | 6                                                                                 | 11                                                                                | 163                                                                               | 1                                                                                  |
| Ideal Flow (vphpl)      | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               |
| Storage Length (ft)     | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                    |
| Storage Lanes           | 0                                                                                 |                                                                                   | 1                                                                                 |                                                                                   | 1                                                                                 | 0                                                                                 |                                                                                    |
| Taper Length (ft)       | 25                                                                                |                                                                                   | 25                                                                                |                                                                                   | 25                                                                                | 25                                                                                |                                                                                    |
| Lane Util. Factor       | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               |
| Frt                     |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   | 0.878                                                                             |                                                                                   |                                                                                    |
| Flt Protected           |                                                                                   | 0.953                                                                             |                                                                                   |                                                                                   | 0.995                                                                             |                                                                                   |                                                                                    |
| Satd. Flow (prot)       | 0                                                                                 | 1715                                                                              | 1530                                                                              | 0                                                                                 | 1572                                                                              | 0                                                                                 | 0                                                                                  |
| Flt Permitted           |                                                                                   | 0.720                                                                             |                                                                                   |                                                                                   | 0.995                                                                             |                                                                                   |                                                                                    |
| Satd. Flow (perm)       | 0                                                                                 | 1296                                                                              | 1530                                                                              | 0                                                                                 | 1572                                                                              | 0                                                                                 | 0                                                                                  |
| Right Turn on Red       |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                   | No                                                                                 |
| Satd. Flow (RTOR)       |                                                                                   |                                                                                   | 42                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                    |
| Link Speed (mph)        |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                    |
| Link Distance (ft)      |                                                                                   | 792                                                                               |                                                                                   |                                                                                   | 998                                                                               |                                                                                   |                                                                                    |
| Travel Time (s)         |                                                                                   | 18.0                                                                              |                                                                                   |                                                                                   | 22.7                                                                              |                                                                                   |                                                                                    |
| Peak Hour Factor        | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                               |
| Heavy Vehicles (%)      | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                 |
| Shared Lane Traffic (%) |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |
| Lane Group Flow (vph)   | 0                                                                                 | 52                                                                                | 42                                                                                | 0                                                                                 | 191                                                                               | 0                                                                                 | 0                                                                                  |
| Turn Type               | Perm                                                                              |                                                                                   | Perm                                                                              | Perm                                                                              |                                                                                   |                                                                                   |                                                                                    |
| Protected Phases        |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                    |
| Permitted Phases        | 2                                                                                 |                                                                                   | 2                                                                                 | 6                                                                                 |                                                                                   |                                                                                   |                                                                                    |
| Detector Phase          | 2                                                                                 | 2                                                                                 | 2                                                                                 | 6                                                                                 | 6                                                                                 |                                                                                   |                                                                                    |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |
| Minimum Initial (s)     | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |                                                                                   |                                                                                    |
| Minimum Split (s)       | 20.0                                                                              | 20.0                                                                              | 20.0                                                                              | 20.0                                                                              | 20.0                                                                              |                                                                                   |                                                                                    |
| Total Split (s)         | 20.0                                                                              | 20.0                                                                              | 20.0                                                                              | 20.0                                                                              | 20.0                                                                              | 0.0                                                                               | 0.0                                                                                |
| Total Split (%)         | 25.0%                                                                             | 25.0%                                                                             | 25.0%                                                                             | 25.0%                                                                             | 25.0%                                                                             | 0.0%                                                                              | 0.0%                                                                               |
| Maximum Green (s)       | 16.0                                                                              | 16.0                                                                              | 16.0                                                                              | 16.0                                                                              | 16.0                                                                              |                                                                                   |                                                                                    |
| Yellow Time (s)         | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               |                                                                                   |                                                                                    |
| All-Red Time (s)        | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               |                                                                                   |                                                                                    |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                |
| Total Lost Time (s)     | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   |                                                                                    |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              |                                                                                   |                                                                                    |
| Walk Time (s)           | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                   |                                                                                    |
| Flash Dont Walk (s)     | 11.0                                                                              | 11.0                                                                              | 11.0                                                                              | 11.0                                                                              | 11.0                                                                              |                                                                                   |                                                                                    |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    |
| Act Effect Green (s)    |                                                                                   | 8.1                                                                               | 8.1                                                                               |                                                                                   | 12.7                                                                              |                                                                                   |                                                                                    |
| Actuated g/C Ratio      |                                                                                   | 0.12                                                                              | 0.12                                                                              |                                                                                   | 0.19                                                                              |                                                                                   |                                                                                    |
| v/c Ratio               |                                                                                   | 0.33                                                                              | 0.19                                                                              |                                                                                   | 0.64                                                                              |                                                                                   |                                                                                    |
| Control Delay           |                                                                                   | 34.9                                                                              | 12.1                                                                              |                                                                                   | 37.0                                                                              |                                                                                   |                                                                                    |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    |
| Total Delay             |                                                                                   | 34.9                                                                              | 12.1                                                                              |                                                                                   | 37.0                                                                              |                                                                                   |                                                                                    |
| LOS                     |                                                                                   | C                                                                                 | B                                                                                 |                                                                                   | D                                                                                 |                                                                                   |                                                                                    |

Lanes, Volumes, Timings  
3: VALLEY BLVD & FONTANA AVE

PM PEAK HOUR

6/25/2009

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL2                                                                              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                                | WBR2                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | NBR2                                                                                |
| Approach Delay          |                                                                                   |                                                                                   | 24.9                                                                              |                                                                                   |                                                                                   | 35.7                                                                              |                                                                                    |                                                                                     |                                                                                     | 22.9                                                                                |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                    |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |                                                                                     |
| Queue Length 50th (ft)  |                                                                                   | 140                                                                               | 77                                                                                | 0                                                                                 | 10                                                                                | 142                                                                               |                                                                                    | 0                                                                                   |                                                                                     | 5                                                                                   |                                                                                     | 0                                                                                   |
| Queue Length 95th (ft)  |                                                                                   | #311                                                                              | 167                                                                               | 15                                                                                | 34                                                                                | #264                                                                              |                                                                                    | 17                                                                                  |                                                                                     | 21                                                                                  |                                                                                     | 14                                                                                  |
| Internal Link Dist (ft) |                                                                                   |                                                                                   | 727                                                                               |                                                                                   |                                                                                   | 750                                                                               |                                                                                    |                                                                                     |                                                                                     | 663                                                                                 |                                                                                     |                                                                                     |
| Turn Bay Length (ft)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 100                                                                               |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 415                                                                               | 1700                                                                              | 773                                                                               | 130                                                                               | 782                                                                               |                                                                                    | 351                                                                                 |                                                                                     | 372                                                                                 |                                                                                     | 380                                                                                 |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 0                                                                                   |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.82                                                                              | 0.37                                                                              | 0.03                                                                              | 0.18                                                                              | 0.81                                                                              |                                                                                    | 0.05                                                                                |                                                                                     | 0.04                                                                                |                                                                                     | 0.03                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 80

Actuated Cycle Length: 67.2

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.82

Intersection Signal Delay: 29.7

Intersection LOS: C

Intersection Capacity Utilization 71.4%

ICU Level of Service C

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 3: VALLEY BLVD & FONTANA AVE

|                                                                                                                                                                            |                                                                                        |                                                                                        |                                                                                         |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
|   ø2 |  ø6 |  ø3 |  ø4  |
| 20 s                                                                                                                                                                       | 20 s                                                                                   | 9 s                                                                                    | 31 s                                                                                    |
|                                                                                                                                                                            |                                                                                        |  ø7 |  ø8 |
|                                                                                                                                                                            |                                                                                        | 20 s                                                                                   | 20 s                                                                                    |

Lanes, Volumes, Timings  
3: VALLEY BLVD & FONTANA AVE

PM PEAK HOUR  
6/25/2009

|                         |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| Lane Group              | SBL                                                                               | SBT                                                                               | SBR                                                                               | SWL2                                                                              | SWL                                                                               | SWR                                                                               | SWR2                                                                               |
| Approach Delay          |                                                                                   | 24.7                                                                              |                                                                                   |                                                                                   | 37.0                                                                              |                                                                                   |                                                                                    |
| Approach LOS            |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    |
| Queue Length 50th (ft)  |                                                                                   | 21                                                                                | 0                                                                                 |                                                                                   | 76                                                                                |                                                                                   |                                                                                    |
| Queue Length 95th (ft)  |                                                                                   | 54                                                                                | 26                                                                                |                                                                                   | 145                                                                               |                                                                                   |                                                                                    |
| Internal Link Dist (ft) |                                                                                   | 712                                                                               |                                                                                   |                                                                                   | 918                                                                               |                                                                                   |                                                                                    |
| Turn Bay Length (ft)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |
| Base Capacity (vph)     |                                                                                   | 315                                                                               | 403                                                                               |                                                                                   | 381                                                                               |                                                                                   |                                                                                    |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    |
| Reduced v/c Ratio       |                                                                                   | 0.17                                                                              | 0.10                                                                              |                                                                                   | 0.50                                                                              |                                                                                   |                                                                                    |
| Intersection Summary    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #30 Beech Ave/Valley Blvd

Average Delay (sec/veh): 2.9 Worst Case Level Of Service: D[ 34.9]

Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Stop Sign Stop Sign Uncontrolled Uncontrolled  
Rights: Include Include Include Include  
Lanes: 0 1 0 0 1 0 1 0 0 1 1 0 1 0 2 0 1

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 12   | 9    | 25   | 53   | 5    | 19   | 47   | 748  | 9    | 10   | 504  | 76   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 12   | 9    | 25   | 53   | 5    | 19   | 47   | 748  | 9    | 10   | 504  | 76   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 13   | 9    | 26   | 56   | 5    | 20   | 49   | 787  | 9    | 11   | 531  | 80   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| FinalVolume: | 13   | 9    | 26   | 56   | 5    | 20   | 49   | 787  | 9    | 11   | 531  | 80   |

Critical Gap Module:

|               |     |     |     |     |     |     |     |      |       |     |      |       |
|---------------|-----|-----|-----|-----|-----|-----|-----|------|-------|-----|------|-------|
| Critical Gap: | 7.5 | 6.5 | 6.9 | 7.5 | 6.5 | 6.9 | 4.1 | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim:  | 3.5 | 4.0 | 3.3 | 3.5 | 4.0 | 3.3 | 2.2 | xxxx | xxxxx | 2.2 | xxxx | xxxxx |

Capacity Module:

|              |      |      |      |      |      |      |      |      |       |      |      |       |
|--------------|------|------|------|------|------|------|------|------|-------|------|------|-------|
| Cnflct Vol:  | 1180 | 1523 | 398  | 1049 | 1447 | 265  | 611  | xxxx | xxxxx | 797  | xxxx | xxxxx |
| Potent Cap.: | 148  | 119  | 607  | 184  | 133  | 739  | 978  | xxxx | xxxxx | 834  | xxxx | xxxxx |
| Move Cap.:   | 133  | 112  | 607  | 157  | 124  | 739  | 978  | xxxx | xxxxx | 834  | xxxx | xxxxx |
| Volume/Cap:  | 0.10 | 0.08 | 0.04 | 0.35 | 0.04 | 0.03 | 0.05 | xxxx | xxxxx | 0.01 | xxxx | xxxxx |

Level Of Service Module:

|              |               |               |               |               |               |               |               |               |               |               |               |               |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| 2Way95thQ:   | xxxx          | xxxx          | 0.1           | xxxx          | xxxx          | 0.1           | 0.2           | xxxx          | xxxxx         | 0.0           | xxxx          | xxxxx         |
| Control Del: | xxxxx         | xxxx          | 11.2          | xxxxx         | xxxx          | 10.0          | 8.9           | xxxx          | xxxxx         | 9.4           | xxxx          | xxxxx         |
| LOS by Move: | *             | *             | B             | *             | *             | B             | A             | *             | *             | A             | *             | *             |
| Movement:    | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT |
| Shared Cap.: | 123           | xxxx          | xxxxx         | 154           | xxxx          | xxxxx         | xxxx          | xxxx          | xxxxx         | xxxx          | xxxx          | xxxxx         |
| SharedQueue: | 0.6           | xxxx          | xxxxx         | 1.7           | xxxx          | xxxxx         | xxxxx         | xxxx          | xxxxx         | xxxxx         | xxxx          | xxxxx         |
| Shrd ConDel: | 40.6          | xxxx          | xxxxx         | 43.0          | xxxx          | xxxxx         | xxxxx         | xxxx          | xxxxx         | xxxxx         | xxxx          | xxxxx         |
| Shared LOS:  | E             | *             | *             | E             | *             | *             | *             | *             | *             | *             | *             | *             |
| ApproachDel: | 24.6          |               |               | 34.9          |               |               | xxxxxx        |               |               | xxxxxx        |               |               |
| ApproachLOS: | C             |               |               | D             |               |               | *             |               |               | *             |               |               |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #31 Beech Ave/Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.493

Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): 13.0

Optimal Cycle: 0 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Stop Sign Stop Sign Stop Sign Stop Sign  
Rights: Include Include Include Include  
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  
Lanes: 0 0 1 0 0 0 0 1 0 0 1 0 1 1 0 1

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 84   | 0    | 123  | 48   | 20   | 2    | 8    | 462  | 83   | 104  | 400  | 19   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 84   | 0    | 123  | 48   | 20   | 2    | 8    | 462  | 83   | 104  | 400  | 19   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 88   | 0    | 129  | 51   | 21   | 2    | 8    | 486  | 87   | 109  | 421  | 20   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 88   | 0    | 129  | 51   | 21   | 2    | 8    | 486  | 87   | 109  | 421  | 20   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 88   | 0    | 129  | 51   | 21   | 2    | 8    | 486  | 87   | 109  | 421  | 20   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 0.41 | 0.00 | 0.59 | 0.68 | 0.29 | 0.03 | 1.00 | 1.70 | 0.30 | 1.00 | 1.91 | 0.09 |
| Final Sat.: | 226  | 0    | 331  | 326  | 136  | 14   | 528  | 987  | 181  | 526  | 1092 | 52   |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.39 | xxxx | 0.39 | 0.15 | 0.15 | 0.15 | 0.02 | 0.49 | 0.48 | 0.21 | 0.39 | 0.38 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Delay/Veh:   | 12.7 | 0.0  | 12.7 | 11.0 | 11.0 | 11.0 | 9.5  | 14.3 | 13.8 | 11.1 | 12.5 | 12.4 |
| Delay Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 12.7 | 0.0  | 12.7 | 11.0 | 11.0 | 11.0 | 9.5  | 14.3 | 13.8 | 11.1 | 12.5 | 12.4 |
| LOS by Move: | B    | *    | B    | B    | B    | B    | A    | B    | B    | B    | B    | B    |
| ApproachDel: | 12.7 |      |      | 11.0 |      |      | 14.2 |      |      | 12.2 |      |      |
| Delay Adj:   | 1.00 |      |      | 1.00 |      |      | 1.00 |      |      | 1.00 |      |      |
| ApprAdjDel:  | 12.7 |      |      | 11.0 |      |      | 14.2 |      |      | 12.2 |      |      |
| LOS by Appr: | B    |      |      | B    |      |      | B    |      |      | B    |      |      |
| AllWayAvgQ:  | 0.5  | 0.5  | 0.5  | 0.1  | 0.1  | 0.1  | 0.0  | 0.9  | 0.9  | 0.2  | 0.6  | 0.6  |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
PM PEAK HOUR

## Level Of Service Computation Report

## 2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #32 Beech Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.232  
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 10.0  
Optimal Cycle: 0 Level Of Service: A

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Stop Sign   |   |   | Stop Sign   |   |   | Stop Sign  |   |   | Stop Sign  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 0           | 1 | 0 | 0          | 1 | 0 | 0          | 1 | 0 |

## Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 9    | 79   | 59   | 52   | 115  | 50   | 36   | 195  | 24   | 50   | 99   | 38   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 9    | 79   | 59   | 52   | 115  | 50   | 36   | 195  | 24   | 50   | 99   | 38   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 9    | 83   | 62   | 55   | 121  | 53   | 38   | 205  | 25   | 53   | 104  | 40   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 9    | 83   | 62   | 55   | 121  | 53   | 38   | 205  | 25   | 53   | 104  | 40   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 9    | 83   | 62   | 55   | 121  | 53   | 38   | 205  | 25   | 53   | 104  | 40   |

## Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.28 | 1.53 | 0.19 | 0.53 | 1.06 | 0.41 |
| Final Sat.: | 488  | 526  | 585  | 505  | 545  | 608  | 163  | 904  | 114  | 296  | 617  | 246  |

## Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.02 | 0.16 | 0.11 | 0.11 | 0.22 | 0.09 | 0.23 | 0.23 | 0.22 | 0.18 | 0.17 | 0.16 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Delay/Veh:   | 9.7  | 10.2 | 9.0  | 10.2 | 10.6 | 8.7  | 10.4 | 10.1 | 9.9  | 10.1 | 9.7  | 9.4  |
| Delay Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 9.7  | 10.2 | 9.0  | 10.2 | 10.6 | 8.7  | 10.4 | 10.1 | 9.9  | 10.1 | 9.7  | 9.4  |
| LOS by Move: | A    | B    | A    | B    | B    | A    | B    | B    | A    | B    | A    | A    |
| ApproachDel: | 9.7  |      |      | 10.1 |      |      | 10.2 |      |      | 9.8  |      |      |
| Delay Adj:   | 1.00 |      |      | 1.00 |      |      | 1.00 |      |      | 1.00 |      |      |
| ApprAdjDel:  | 9.7  |      |      | 10.1 |      |      | 10.2 |      |      | 9.8  |      |      |
| LOS by Appr: | A    |      |      | B    |      |      | B    |      |      | A    |      |      |
| AllWayAvgQ:  | 0.0  | 0.2  | 0.1  | 0.1  | 0.2  | 0.1  | 0.3  | 0.3  | 0.3  | 0.2  | 0.2  | 0.2  |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
PM PEAK HOUR

## Level Of Service Computation Report

## 2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #33 Beech Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.941  
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): 35.1  
Optimal Cycle: 0 Level Of Service: E

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Stop Sign   |   |   | Stop Sign   |   |   | Stop Sign  |   |   | Stop Sign  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 0           | 1 | 0 | 0          | 1 | 0 | 0          | 0 | 1 |

## Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 180  | 21   | 11   | 10   | 39   | 125  | 78   | 584  | 266  | 8    | 332  | 7    |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 180  | 21   | 11   | 10   | 39   | 125  | 78   | 584  | 266  | 8    | 332  | 7    |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 189  | 22   | 12   | 11   | 41   | 132  | 82   | 615  | 280  | 8    | 349  | 7    |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 189  | 22   | 12   | 11   | 41   | 132  | 82   | 615  | 280  | 8    | 349  | 7    |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 189  | 22   | 12   | 11   | 41   | 132  | 82   | 615  | 280  | 8    | 349  | 7    |

## Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.17 | 1.26 | 0.57 | 0.02 | 0.96 | 0.02 |
| Final Sat.: | 370  | 389  | 420  | 355  | 373  | 403  | 87   | 669  | 319  | 11   | 465  | 10   |

## Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.51 | 0.06 | 0.03 | 0.03 | 0.11 | 0.33 | 0.94 | 0.92 | 0.88 | 0.75 | 0.75 | 0.75 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Delay/Veh:   | 20.6 | 12.0 | 11.0 | 12.5 | 12.8 | 14.6 | 51.8 | 47.3 | 38.5 | 28.2 | 28.2 | 28.2 |
| Delay Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 20.6 | 12.0 | 11.0 | 12.5 | 12.8 | 14.6 | 51.8 | 47.3 | 38.5 | 28.2 | 28.2 | 28.2 |
| LOS by Move: | C    | B    | B    | B    | B    | B    | F    | E    | E    | D    | D    | D    |
| ApproachDel: | 19.2 |      |      | 14.1 |      |      | 45.2 |      |      | 28.2 |      |      |
| Delay Adj:   | 1.00 |      |      | 1.00 |      |      | 1.00 |      |      | 1.00 |      |      |
| ApprAdjDel:  | 19.2 |      |      | 14.1 |      |      | 45.2 |      |      | 28.2 |      |      |
| LOS by Appr: | C    |      |      | B    |      |      | E    |      |      | D    |      |      |
| AllWayAvgQ:  | 0.9  | 0.1  | 0.0  | 0.0  | 0.1  | 0.4  | 6.1  | 4.5  | 4.5  | 2.4  | 2.4  | 2.4  |

Note: Queue reported is the number of cars per lane.



FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative)

Intersection #34 Citrus Ave/Valley Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.880  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 41.1  
Optimal Cycle: 91 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |   |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |   |
| Lanes:      | 1           | 0 | 1 | 1           | 0 | 1 | 0          | 1 | 1 | 0          | 2 | 0 | 1 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 290  | 836  | 216  | 122  | 763  | 43   | 108  | 578  | 358  | 346  | 452  | 133  |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 290  | 836  | 216  | 122  | 763  | 43   | 108  | 578  | 358  | 346  | 452  | 133  |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 305  | 880  | 227  | 128  | 803  | 45   | 114  | 608  | 377  | 364  | 476  | 140  |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 305  | 880  | 227  | 128  | 803  | 45   | 114  | 608  | 377  | 364  | 476  | 140  |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 305  | 880  | 227  | 128  | 803  | 45   | 114  | 608  | 377  | 364  | 476  | 140  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 0.97 | 0.95 | 0.95 | 0.97 | 0.95 | 0.95 |
| Lanes:      | 1.00 | 1.59 | 0.41 | 1.00 | 1.89 | 0.11 | 2.00 | 1.24 | 0.76 | 2.00 | 1.55 | 0.45 |
| Final Sat.: | 1800 | 2718 | 702  | 1800 | 3238 | 182  | 3492 | 2112 | 1308 | 3492 | 2642 | 778  |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.17 | 0.32 | 0.32 | 0.07 | 0.25 | 0.03 | 0.29 | 0.29 | 0.10 | 0.18 | 0.18 |
| Crit Moves:  | **** |      |      | **** |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.19 | 0.39 | 0.39 | 0.09 | 0.28 | 0.28 | 0.07 | 0.33 | 0.33 | 0.12 | 0.38 |
| Volume/Cap:  | 0.88 | 0.83 | 0.83 | 0.83 | 0.88 | 0.88 | 0.48 | 0.88 | 0.88 | 0.88 | 0.48 |
| Delay/Veh:   | 61.2 | 32.3 | 32.3 | 75.4 | 43.8 | 43.8 | 46.4 | 40.1 | 40.1 | 62.5 | 23.9 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 61.2 | 32.3 | 32.3 | 75.4 | 43.8 | 43.8 | 46.4 | 40.1 | 40.1 | 62.5 | 23.9 |
| LOS by Move: | E    | C    | C    | E    | D    | D    | D    | D    | D    | E    | C    |
| HCM2kAvgQ:   | 12   | 19   | 19   | 6    | 16   | 16   | 2    | 18   | 18   | 9    | 8    |

Note: Queue reported is the number of cars per lane.

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FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative)

Intersection #37 Citrus Ave/Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.639  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 29.8  
Optimal Cycle: 42 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 0 | 1           | 0 | 1 | 1          | 0 | 2 | 0          | 1 | 1 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 25   | 249  | 72   | 155  | 302  | 296  | 302  | 862  | 50   | 75   | 267  | 95   |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 25   | 249  | 72   | 155  | 302  | 296  | 302  | 862  | 50   | 75   | 267  | 95   |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 26   | 262  | 76   | 163  | 318  | 312  | 318  | 907  | 53   | 79   | 281  | 100  |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 26   | 262  | 76   | 163  | 318  | 312  | 318  | 907  | 53   | 79   | 281  | 100  |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 26   | 262  | 76   | 163  | 318  | 312  | 318  | 907  | 53   | 79   | 281  | 100  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 |
| Lanes:      | 1.00 | 0.78 | 0.22 | 1.00 | 1.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 1.48 | 0.52 |
| Final Sat.: | 1800 | 1396 | 404  | 1800 | 1800 | 1800 | 1800 | 3420 | 1800 | 1800 | 2522 | 898  |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.01 | 0.19 | 0.19 | 0.09 | 0.18 | 0.17 | 0.18 | 0.27 | 0.03 | 0.04 | 0.11 | 0.11 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      | **** |      |      |      |
| Green/Cycle: | 0.03 | 0.29 | 0.29 | 0.14 | 0.40 | 0.40 | 0.30 | 0.42 | 0.42 | 0.07 | 0.19 | 0.19 |
| Volume/Cap:  | 0.44 | 0.64 | 0.64 | 0.64 | 0.44 | 0.43 | 0.59 | 0.64 | 0.07 | 0.64 | 0.59 | 0.59 |
| Delay/Veh:   | 52.5 | 33.3 | 33.3 | 45.8 | 22.1 | 22.0 | 31.8 | 24.2 | 17.6 | 56.0 | 38.7 | 38.7 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 52.5 | 33.3 | 33.3 | 45.8 | 22.1 | 22.0 | 31.8 | 24.2 | 17.6 | 56.0 | 38.7 | 38.7 |
| LOS by Move: | D    | C    | C    | D    | C    | C    | C    | C    | B    | E    | D    | D    |
| HCM2kAvgQ:   | 1    | 10   | 10   | 6    | 7    | 7    | 9    | 12   | 1    | 4    | 6    | 6    |

Note: Queue reported is the number of cars per lane.

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FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
PM PEAK HOUR

## Level Of Service Computation Report

## 2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #38 Citrus Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.637  
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): 16.1  
Optimal Cycle: 0 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Stop Sign   |   |   | Stop Sign   |   |   | Stop Sign  |   |   | Stop Sign  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 0           | 0 | 1 | 0           | 0 | 1 | 0          | 0 | 1 | 0          | 1 | 0 |

## Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 4    | 169  | 37   | 41   | 284  | 18   | 64   | 267  | 5    | 50   | 117  | 35   |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 4    | 169  | 37   | 41   | 284  | 18   | 64   | 267  | 5    | 50   | 117  | 35   |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 4    | 178  | 39   | 43   | 299  | 19   | 67   | 281  | 5    | 53   | 123  | 37   |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 4    | 178  | 39   | 43   | 299  | 19   | 67   | 281  | 5    | 53   | 123  | 37   |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 4    | 178  | 39   | 43   | 299  | 19   | 67   | 281  | 5    | 53   | 123  | 37   |

## Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 0.02 | 0.80 | 0.18 | 0.12 | 0.83 | 0.05 | 0.19 | 0.80 | 0.01 | 0.30 | 0.70 | 1.00 |
| Final Sat.: | 10   | 424  | 93   | 68   | 470  | 30   | 106  | 441  | 8    | 142  | 331  | 532  |

## Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.42 | 0.42 | 0.42 | 0.64 | 0.64 | 0.64 | 0.64 | 0.64 | 0.64 | 0.37 | 0.37 | 0.07 |
| Crit Moves:  | ***  |      |      | ***  |      |      | ***  |      |      | ***  |      |      |
| Delay/Veh:   | 13.1 | 13.1 | 13.1 | 17.9 | 17.9 | 17.9 | 18.3 | 18.3 | 18.3 | 13.2 | 13.2 | 9.2  |
| Delay Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 13.1 | 13.1 | 13.1 | 17.9 | 17.9 | 17.9 | 18.3 | 18.3 | 18.3 | 13.2 | 13.2 | 9.2  |
| LOS by Move: | B    | B    | B    | C    | C    | C    | C    | C    | C    | B    | B    | A    |
| ApproachDel: | 13.1 |      |      | 17.9 |      |      | 18.3 |      |      | 12.6 |      |      |
| Delay Adj:   | 1.00 |      |      | 1.00 |      |      | 1.00 |      |      | 1.00 |      |      |
| ApprAdjDel:  | 13.1 |      |      | 17.9 |      |      | 18.3 |      |      | 12.6 |      |      |
| LOS by Appr: | B    |      |      | C    |      |      | C    |      |      | B    |      |      |
| AllWayAvgQ:  | 0.6  | 0.6  | 0.6  | 1.4  | 1.4  | 1.4  | 1.4  | 1.4  | 1.4  | 0.5  | 0.5  | 0.1  |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
PM PEAK HOUR

## Level Of Service Computation Report

## 2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #39 Citrus Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.752  
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): 26.4  
Optimal Cycle: 0 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Stop Sign   |   |   | Stop Sign   |   |   | Stop Sign  |   |   | Stop Sign  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 0           | 0 | 1 | 1          | 0 | 2 | 1          | 0 | 1 |

## Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 37   | 109  | 123  | 90   | 139  | 141  | 91   | 684  | 83   | 140  | 366  | 35   |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 37   | 109  | 123  | 90   | 139  | 141  | 91   | 684  | 83   | 140  | 366  | 35   |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 39   | 115  | 129  | 95   | 146  | 148  | 96   | 720  | 87   | 147  | 385  | 37   |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 39   | 115  | 129  | 95   | 146  | 148  | 96   | 720  | 87   | 147  | 385  | 37   |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 39   | 115  | 129  | 95   | 146  | 148  | 96   | 720  | 87   | 147  | 385  | 37   |

## Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 1.00 | 1.00 | 1.00 | 0.50 | 0.50 | 1.00 | 2.68 | 0.32 | 1.00 | 1.83 | 0.17 |
| Final Sat.: | 293  | 309  | 330  | 351  | 195  | 197  | 352  | 1020 | 126  | 328  | 636  | 61   |

## Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.13 | 0.37 | 0.39 | 0.27 | 0.75 | 0.75 | 0.27 | 0.71 | 0.69 | 0.45 | 0.61 | 0.60 |
| Crit Moves:  | ***  |      |      | ***  |      |      | ***  |      |      | ***  |      |      |
| Delay/Veh:   | 15.8 | 19.5 | 18.9 | 15.9 | 33.0 | 33.0 | 16.0 | 30.6 | 29.2 | 21.1 | 26.1 | 25.7 |
| Delay Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 15.8 | 19.5 | 18.9 | 15.9 | 33.0 | 33.0 | 16.0 | 30.6 | 29.2 | 21.1 | 26.1 | 25.7 |
| LOS by Move: | C    | C    | C    | C    | D    | D    | C    | D    | D    | C    | D    | D    |
| ApproachDel: | 18.7 |      |      | 28.8 |      |      | 28.9 |      |      | 24.8 |      |      |
| Delay Adj:   | 1.00 |      |      | 1.00 |      |      | 1.00 |      |      | 1.00 |      |      |
| ApprAdjDel:  | 18.7 |      |      | 28.8 |      |      | 28.9 |      |      | 24.8 |      |      |
| LOS by Appr: | C    |      |      | D    |      |      | D    |      |      | C    |      |      |
| AllWayAvgQ:  | 0.1  | 0.5  | 0.5  | 0.3  | 2.3  | 2.3  | 0.3  | 2.0  | 1.9  | 0.7  | 1.3  | 1.3  |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
PM PEAK HOUR

## Level Of Service Computation Report

## 2000 HCM Operations Method (Base Volume Alternative)

## Intersection #40 Sierra Ave/Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.647  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 29.5  
Optimal Cycle: 43 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Ovl        |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 3 | 0           | 1 | 2 | 0          | 2 | 0 | 1          | 2 | 0 |

## Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 51   | 945  | 97   | 500  | 770  | 173  | 586  | 471  | 71   | 132  | 213  | 637  |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 51   | 945  | 97   | 500  | 770  | 173  | 586  | 471  | 71   | 132  | 213  | 637  |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 54   | 995  | 102  | 526  | 811  | 182  | 617  | 496  | 75   | 139  | 224  | 671  |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 54   | 995  | 102  | 526  | 811  | 182  | 617  | 496  | 75   | 139  | 224  | 671  |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 54   | 995  | 102  | 526  | 811  | 182  | 617  | 496  | 75   | 139  | 224  | 671  |

## Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.91 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 |
| Lanes:      | 2.00 | 3.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 |
| Final Sat.: | 3492 | 4914 | 1800 | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 | 3492 | 3168 |

## Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.02 | 0.20 | 0.06 | 0.15 | 0.24 | 0.10 | 0.18 | 0.14 | 0.04 | 0.04 | 0.07 | 0.21 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.03 | 0.31 | 0.31 | 0.23 | 0.51 | 0.51 | 0.27 | 0.29 | 0.29 | 0.08 | 0.10 | 0.33 |
| Volume/Cap:  | 0.46 | 0.65 | 0.18 | 0.65 | 0.46 | 0.20 | 0.65 | 0.49 | 0.14 | 0.49 | 0.65 | 0.63 |
| Delay/Veh:   | 50.4 | 30.6 | 25.2 | 36.5 | 15.8 | 13.3 | 33.7 | 29.6 | 26.1 | 45.4 | 47.4 | 29.4 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 50.4 | 30.6 | 25.2 | 36.5 | 15.8 | 13.3 | 33.7 | 29.6 | 26.1 | 45.4 | 47.4 | 29.4 |
| LOS by Move: | D    | C    | C    | D    | B    | B    | C    | C    | C    | D    | D    | C    |
| HCM2kAvgQ:   | 1    | 10   | 2    | 8    | 8    | 3    | 9    | 7    | 2    | 3    | 5    | 11   |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
PM PEAK HOUR

## Level Of Service Computation Report

## 2000 HCM Operations Method (Base Volume Alternative)

## Intersection #41 Sierra Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.558  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 25.7  
Optimal Cycle: 35 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 3 | 0           | 1 | 2 | 0          | 2 | 0 | 1          | 2 | 0 |

## Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 118  | 856  | 20   | 83   | 1010 | 122  | 286  | 148  | 145  | 57   | 92   | 116  |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 118  | 856  | 20   | 83   | 1010 | 122  | 286  | 148  | 145  | 57   | 92   | 116  |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 124  | 901  | 21   | 87   | 1063 | 128  | 301  | 156  | 153  | 60   | 97   | 122  |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 124  | 901  | 21   | 87   | 1063 | 128  | 301  | 156  | 153  | 60   | 97   | 122  |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 124  | 901  | 21   | 87   | 1063 | 128  | 301  | 156  | 153  | 60   | 97   | 122  |

## Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.91 | 1.00 | 0.97 | 0.91 | 0.91 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 |
| Lanes:      | 2.00 | 3.00 | 1.00 | 2.00 | 2.68 | 0.32 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 |
| Final Sat.: | 3492 | 4914 | 1800 | 3492 | 4384 | 530  | 1800 | 3420 | 1800 | 1800 | 3420 |

## Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.04 | 0.18 | 0.01 | 0.03 | 0.24 | 0.24 | 0.17 | 0.05 | 0.08 | 0.03 | 0.03 | 0.07 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.06 | 0.44 | 0.44 | 0.06 | 0.43 | 0.43 | 0.30 | 0.30 | 0.30 | 0.12 | 0.12 | 0.12 |
| Volume/Cap:  | 0.56 | 0.42 | 0.03 | 0.42 | 0.56 | 0.56 | 0.56 | 0.15 | 0.28 | 0.28 | 0.23 | 0.56 |
| Delay/Veh:   | 48.6 | 19.4 | 16.0 | 46.7 | 21.4 | 21.4 | 30.7 | 25.6 | 26.9 | 40.9 | 40.0 | 44.6 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 48.6 | 19.4 | 16.0 | 46.7 | 21.4 | 21.4 | 30.7 | 25.6 | 26.9 | 40.9 | 40.0 | 44.6 |
| LOS by Move: | D    | B    | B    | D    | C    | C    | C    | C    | C    | D    | D    | D    |
| HCM2kAvgQ:   | 3    | 7    | 0    | 2    | 10   | 10   | 8    | 2    | 4    | 2    | 2    | 4    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
PM PEAK HOUR

## Level Of Service Computation Report

## 2000 HCM Operations Method (Base Volume Alternative)

## Intersection #42 Sierra Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.508  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 30.3  
Optimal Cycle: 32 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound  |   |   | West Bound  |   |   |
|-------------|-------------|---|---|-------------|---|---|-------------|---|---|-------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L           | T | R | L           | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Split Phase |   |   | Split Phase |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include     |   |   | Include     |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 1 | 0 | 1           | 1 | 1 | 0           | 1 | 0 |

## Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 99   | 469  | 107  | 109  | 488  | 273  | 424  | 235  | 184  | 83   | 196  | 60   |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 99   | 469  | 107  | 109  | 488  | 273  | 424  | 235  | 184  | 83   | 196  | 60   |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 104  | 494  | 113  | 115  | 514  | 287  | 446  | 247  | 194  | 87   | 206  | 63   |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 104  | 494  | 113  | 115  | 514  | 287  | 446  | 247  | 194  | 87   | 206  | 63   |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 104  | 494  | 113  | 115  | 514  | 287  | 446  | 247  | 194  | 87   | 206  | 63   |

## Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 1.93 | 1.07 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Sat.: | 1800 | 3420 | 1800 | 3492 | 3420 | 1800 | 3301 | 1829 | 1800 | 1800 | 1800 | 1800 |

## Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.06 | 0.14 | 0.06 | 0.03 | 0.15 | 0.16 | 0.14 | 0.14 | 0.11 | 0.05 | 0.11 | 0.04 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.11 | 0.35 | 0.35 | 0.08 | 0.31 | 0.31 | 0.27 | 0.27 | 0.27 | 0.23 | 0.23 | 0.23 |
| Volume/Cap:  | 0.51 | 0.41 | 0.18 | 0.41 | 0.48 | 0.51 | 0.51 | 0.51 | 0.40 | 0.22 | 0.51 | 0.16 |
| Delay/Veh:   | 43.8 | 25.0 | 22.8 | 44.8 | 28.0 | 28.7 | 31.5 | 31.5 | 30.7 | 31.8 | 34.9 | 31.3 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 43.8 | 25.0 | 22.8 | 44.8 | 28.0 | 28.7 | 31.5 | 31.5 | 30.7 | 31.8 | 34.9 | 31.3 |
| LOS by Move: | D    | C    | C    | D    | C    | C    | C    | C    | C    | C    | C    | C    |
| HCM2kAvgQ:   | 4    | 6    | 2    | 2    | 7    | 8    | 7    | 7    | 5    | 2    | 6    | 2    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
PM PEAK HOUR

## Level Of Service Computation Report

## 2000 HCM Operations Method (Base Volume Alternative)

## Intersection #43 Armstrong Rd/Sierra Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.373  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 16.9  
Optimal Cycle: 26 Level Of Service: B

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Ignore     |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 0 | 1           | 0 | 0 | 1          | 0 | 2 | 1          | 0 | 1 |

## Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 665  | 261  | 22   | 18   | 170  | 24   | 32   | 34   | 677  | 15   | 25   | 9    |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 665  | 261  | 22   | 18   | 170  | 24   | 32   | 34   | 677  | 15   | 25   | 9    |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.00 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 700  | 275  | 23   | 19   | 179  | 25   | 34   | 36   | 0    | 16   | 26   | 9    |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 700  | 275  | 23   | 19   | 179  | 25   | 34   | 36   | 0    | 16   | 26   | 9    |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 700  | 275  | 23   | 19   | 179  | 25   | 34   | 36   | 0    | 16   | 26   | 9    |

## Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 |
| Lanes:      | 2.00 | 0.92 | 0.08 | 1.00 | 0.88 | 0.12 | 1.00 | 2.00 | 1.00 | 1.00 | 1.47 | 0.53 |
| Final Sat.: | 3492 | 1660 | 140  | 1800 | 1577 | 223  | 1800 | 3420 | 1800 | 1800 | 2515 | 905  |

## Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.20 | 0.17 | 0.17 | 0.01 | 0.11 | 0.11 | 0.02 | 0.01 | 0.00 | 0.01 | 0.01 | 0.01 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.54 | 0.79 | 0.79 | 0.05 | 0.30 | 0.30 | 0.05 | 0.04 | 0.00 | 0.04 | 0.03 | 0.03 |
| Volume/Cap:  | 0.37 | 0.21 | 0.21 | 0.21 | 0.37 | 0.37 | 0.37 | 0.25 | 0.00 | 0.25 | 0.37 | 0.37 |
| Delay/Veh:   | 13.5 | 2.7  | 2.7  | 46.7 | 27.7 | 27.7 | 48.6 | 47.2 | 0.0  | 48.9 | 50.2 | 50.2 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 13.5 | 2.7  | 2.7  | 46.7 | 27.7 | 27.7 | 48.6 | 47.2 | 0.0  | 48.9 | 50.2 | 50.2 |
| LOS by Move: | B    | A    | A    | D    | C    | C    | D    | D    | A    | D    | D    | D    |
| HCM2kAvgQ:   | 6    | 2    | 2    | 1    | 5    | 5    | 1    | 1    | 0    | 1    | 1    | 1    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Base Volume Alternative)

Intersection #44 Armstrong Rd/SR-60 WB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.677  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 22.6  
Optimal Cycle: 40 Level Of Service: C

| Approach:   | North Bound | South Bound | East Bound  | West Bound  |
|-------------|-------------|-------------|-------------|-------------|
| Movement:   | L - T - R   | L - T - R   | L - T - R   | L - T - R   |
| Control:    | Protected   | Protected   | Split Phase | Split Phase |
| Rights:     | Include     | Include     | Include     | Include     |
| Min. Green: | 0 0 0       | 0 0 0       | 0 0 0       | 0 0 0       |
| Lanes:      | 1 0 2 0 0   | 0 0 1 1 0   | 0 0 0 0 0   | 1 0 0 1 0   |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 203  | 700  | 0    | 0    | 835  | 196  | 0    | 0    | 0    | 290  | 1    | 341  |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 203  | 700  | 0    | 0    | 835  | 196  | 0    | 0    | 0    | 290  | 1    | 341  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 214  | 737  | 0    | 0    | 879  | 206  | 0    | 0    | 0    | 305  | 1    | 359  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 214  | 737  | 0    | 0    | 879  | 206  | 0    | 0    | 0    | 305  | 1    | 359  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 214  | 737  | 0    | 0    | 879  | 206  | 0    | 0    | 0    | 305  | 1    | 359  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 0.00 | 0.00 | 1.62 | 0.38 | 0.00 | 0.00 | 0.00 | 1.00 | 0.01 | 0.99 |
| Final Sat.: | 1800 | 3420 | 0    | 0    | 2770 | 650  | 0    | 0    | 0    | 1800 | 5    | 1795 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.12 | 0.22 | 0.00 | 0.00 | 0.32 | 0.32 | 0.00 | 0.00 | 0.00 | 0.17 | 0.20 | 0.20 |
| Crit Moves:  | **** |      |      |      | **** |      |      |      |      | **** |      |      |
| Green/Cycle: | 0.18 | 0.64 | 0.00 | 0.00 | 0.47 | 0.47 | 0.00 | 0.00 | 0.00 | 0.30 | 0.30 | 0.30 |
| Volume/Cap:  | 0.68 | 0.33 | 0.00 | 0.00 | 0.68 | 0.68 | 0.00 | 0.00 | 0.00 | 0.57 | 0.68 | 0.68 |
| Delay/Veh:   | 44.3 | 8.1  | 0.0  | 0.0  | 21.8 | 21.8 | 0.0  | 0.0  | 0.0  | 31.4 | 34.5 | 34.5 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 44.3 | 8.1  | 0.0  | 0.0  | 21.8 | 21.8 | 0.0  | 0.0  | 0.0  | 31.4 | 34.5 | 34.5 |
| LOS by Move: | D    | A    | A    | A    | C    | C    | A    | A    | A    | C    | C    | C    |
| HCM2kAvgQ:   | 7    | 5    | 0    | 0    | 14   | 14   | 0    | 0    | 0    | 8    | 11   | 11   |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
EXISTING CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #45 Armstrong Rd/SR-60 EB Ramps

Average Delay (sec/veh): 175.6 Worst Case Level Of Service: F[1102.1]

| Approach: | North Bound  | South Bound  | East Bound | West Bound |
|-----------|--------------|--------------|------------|------------|
| Movement: | L - T - R    | L - T - R    | L - T - R  | L - T - R  |
| Control:  | Uncontrolled | Uncontrolled | Stop Sign  | Stop Sign  |
| Rights:   | Include      | Include      | Include    | Include    |
| Lanes:    | 0 0 1 1 0    | 1 0 2 0 0    | 0 1 0 1 0  | 0 0 0 0 0  |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 0    | 696  | 153  | 296  | 804  | 0    | 212  | 1    | 152  | 0    | 0    | 0    |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0    | 696  | 153  | 296  | 804  | 0    | 212  | 1    | 152  | 0    | 0    | 0    |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 0    | 733  | 161  | 312  | 846  | 0    | 223  | 1    | 160  | 0    | 0    | 0    |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| FinalVolume: | 0    | 733  | 161  | 312  | 846  | 0    | 223  | 1    | 160  | 0    | 0    | 0    |

Critical Gap Module:

|                    |      |       |       |     |      |       |     |     |     |       |      |       |
|--------------------|------|-------|-------|-----|------|-------|-----|-----|-----|-------|------|-------|
| Critical Gap:xxxxx | xxxx | xxxx  | xxxxx | 4.1 | xxxx | xxxxx | 6.8 | 6.5 | 6.9 | xxxxx | xxxx | xxxxx |
| FollowUpTim:xxxxx  | xxxx | xxxxx | xxxxx | 2.2 | xxxx | xxxxx | 3.5 | 4.0 | 3.3 | xxxxx | xxxx | xxxxx |

Capacity Module:

|              |      |      |       |      |      |       |      |      |      |      |      |       |
|--------------|------|------|-------|------|------|-------|------|------|------|------|------|-------|
| Cnflct Vol:  | xxxx | xxxx | xxxxx | 894  | xxxx | xxxxx | 1836 | 2363 | 423  | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | xxxxx | 767  | xxxx | xxxxx | 69   | 36   | 585  | xxxx | xxxx | xxxxx |
| Move Cap.:   | xxxx | xxxx | xxxxx | 767  | xxxx | xxxxx | 47   | 21   | 585  | xxxx | xxxx | xxxxx |
| Volume/Cap:  | xxxx | xxxx | xxxx  | 0.41 | xxxx | xxxx  | 4.75 | 0.05 | 0.27 | xxxx | xxxx | xxxx  |

Level Of Service Module:

|                   |               |               |               |               |               |               |               |               |               |               |               |               |
|-------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| 2Way95thQ:        | xxxx          | xxxx          | xxxxx         | 2.0           | xxxx          | xxxxx         | xxxx          | xxxx          | xxxxx         | xxxx          | xxxx          | xxxxx         |
| Control Del:xxxxx | xxxx          | xxxxx         | xxxxx         | 12.9          | xxxx          | xxxxx         | xxxxx         | xxxx          | xxxxx         | xxxxx         | xxxx          | xxxxx         |
| LOS by Move:      | *             | *             | *             | B             | *             | *             | *             | *             | *             | *             | *             | *             |
| Movement:         | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT |
| Shared Cap.:      | xxxx          | xxxx          | xxxxx         | xxxx          | xxxx          | xxxxx         | 47            | xxxx          | 498           | xxxx          | xxxx          | xxxxx         |
| SharedQueue:xxxxx | xxxx          | xxxxx         | xxxxx         | xxxxx         | xxxx          | xxxxx         | 25.5          | xxxx          | 1.4           | xxxxx         | xxxx          | xxxxx         |
| Shrd ConDel:xxxxx | xxxx          | xxxxx         | xxxxx         | xxxxx         | xxxx          | xxxxx         | 1883          | xxxx          | 15.6          | xxxxx         | xxxx          | xxxxx         |
| Shared LOS:       | *             | *             | *             | *             | *             | *             | F             | *             | C             | *             | *             | *             |
| ApproachDel:      | xxxxxx        | xxxxxx        | xxxxxx        | 1102.1        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        |
| ApproachLOS:      | *             | *             | *             | F             | *             | *             | F             | *             | F             | *             | *             | *             |

Note: Queue reported is the number of cars per lane.

## **Forecast Existing With Project Conditions**

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FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 I-15 SB Ramps/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 1.010  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 37.3  
Optimal Cycle: 180 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |   |
| Control:    | Split Phase |   |   | Split Phase |   |   | Protected  |   |   | Protected  |   |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |   |
| Lanes:      | 0           | 0 | 0 | 1           | 0 | 1 | 0          | 0 | 3 | 0          | 1 | 2 | 0 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 0    | 0    | 0    | 790  | 1    | 647  | 0    | 302  | 139  | 244  | 639  | 0    |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 0    | 0    | 0    | 790  | 1    | 647  | 0    | 302  | 139  | 244  | 639  | 0    |
| Added Vol:    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1823 | 0    | 0    | 259  | 0    |
| PasserByVol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:  | 0    | 0    | 0    | 790  | 1    | 647  | 0    | 2125 | 139  | 244  | 898  | 0    |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 0    | 0    | 0    | 832  | 1    | 681  | 0    | 2237 | 146  | 257  | 945  | 0    |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 0    | 0    | 0    | 832  | 1    | 681  | 0    | 2237 | 146  | 257  | 945  | 0    |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 0    | 0    | 0    | 832  | 1    | 681  | 0    | 2237 | 146  | 257  | 945  | 0    |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 1.00 | 0.97 | 0.91 | 1.00 |
| Lanes:      | 0.00 | 0.00 | 0.00 | 1.54 | 0.01 | 1.45 | 0.00 | 3.00 | 1.00 | 2.00 | 3.00 | 0.00 |
| Final Sat.: | 0    | 0    | 0    | 2788 | 3    | 2609 | 0    | 4914 | 1800 | 3492 | 4914 | 0    |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |       |      |      |
|--------------|------|------|------|------|------|------|------|------|------|-------|------|------|
| Vol/Sat:     | 0.00 | 0.00 | 0.00 | 0.30 | 0.42 | 0.26 | 0.00 | 0.46 | 0.08 | 0.07  | 0.19 | 0.00 |
| Crit Moves:  |      |      |      | **** |      |      | **** |      |      | ****  |      |      |
| Green/Cycle: | 0.00 | 0.00 | 0.00 | 0.42 | 0.42 | 0.42 | 0.00 | 0.45 | 0.45 | 0.07  | 0.52 | 0.00 |
| Volume/Cap:  | 0.00 | 0.00 | 0.00 | 0.72 | 1.01 | 0.63 | 0.00 | 1.01 | 0.18 | 1.01  | 0.37 | 0.00 |
| Delay/Veh:   | 0.0  | 0.0  | 0.0  | 25.5 | 54.9 | 23.6 | 0.0  | 49.1 | 16.5 | 105.4 | 14.1 | 0.0  |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 |
| AdjDel/Veh:  | 0.0  | 0.0  | 0.0  | 25.5 | 54.9 | 23.6 | 0.0  | 49.1 | 16.5 | 105.4 | 14.1 | 0.0  |
| LOS by Move: | A    | A    | A    | C    | D    | C    | A    | D    | B    | F     | B    | A    |
| HCM2kAvgQ:   | 0    | 0    | 0    | 15   | 31   | 12   | 0    | 33   | 3    | 8     | 6    | 0    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 I-15 NB Ramps/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.893  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 20.2  
Optimal Cycle: 90 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Split Phase |   |   | Split Phase |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 0           | 1 | 0 | 2          | 0 | 3 | 0          | 0 | 1 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 340  | 1    | 536  | 0    | 0    | 0    | 175  | 899  | 0    | 0    | 530  | 446  |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 340  | 1    | 536  | 0    | 0    | 0    | 175  | 899  | 0    | 0    | 530  | 446  |
| Added Vol:    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1823 | 0    | 0    | 259  | 0    |
| PasserByVol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:  | 340  | 1    | 536  | 0    | 0    | 0    | 175  | 2722 | 0    | 0    | 789  | 446  |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 358  | 1    | 564  | 0    | 0    | 0    | 184  | 2865 | 0    | 0    | 831  | 469  |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 358  | 1    | 564  | 0    | 0    | 0    | 184  | 2865 | 0    | 0    | 831  | 469  |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 358  | 1    | 564  | 0    | 0    | 0    | 184  | 2865 | 0    | 0    | 831  | 469  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.97 | 0.91 | 1.00 | 1.00 | 0.91 | 1.00 |
| Lanes:      | 1.38 | 0.01 | 1.61 | 0.00 | 0.00 | 0.00 | 2.00 | 3.00 | 0.00 | 0.00 | 3.00 | 1.00 |
| Final Sat.: | 2497 | 4    | 2899 | 0    | 0    | 0    | 3492 | 4914 | 0    | 0    | 4914 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.14 | 0.26 | 0.19 | 0.00 | 0.00 | 0.00 | 0.05 | 0.58 | 0.00 | 0.00 | 0.17 | 0.26 |
| Crit Moves:  |      |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.29 | 0.29 | 0.29 | 0.00 | 0.00 | 0.00 | 0.11 | 0.65 | 0.00 | 0.00 | 0.54 | 0.54 |
| Volume/Cap:  | 0.50 | 0.89 | 0.68 | 0.00 | 0.00 | 0.00 | 0.48 | 0.89 | 0.00 | 0.00 | 0.31 | 0.48 |
| Delay/Veh:   | 29.9 | 44.2 | 32.9 | 0.0  | 0.0  | 0.0  | 42.8 | 18.1 | 0.0  | 0.0  | 12.6 | 14.5 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 29.9 | 44.2 | 32.9 | 0.0  | 0.0  | 0.0  | 42.8 | 18.1 | 0.0  | 0.0  | 12.6 | 14.5 |
| LOS by Move: | C    | D    | C    | A    | A    | A    | D    | B    | A    | A    | B    | B    |
| HCM2kAvgQ:   | 7    | 17   | 11   | 0    | 0    | 0    | 3    | 30   | 0    | 0    | 5    | 9    |

Note: Queue reported is the number of cars per lane.



FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Etiwanda Ave/San Bernardino Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.526  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 22.5  
Optimal Cycle: 33 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 2 | 0           | 1 | 1 | 0          | 2 | 0 | 1          | 2 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 270  | 466  | 81   | 27   | 536  | 102  | 88   | 189  | 118  | 67   | 188  | 27   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 270  | 466  | 81   | 27   | 536  | 102  | 88   | 189  | 118  | 67   | 188  | 27   |
| Added Vol:   | 0    | 72   | 0    | 0    | 362  | 0    | 0    | 52   | 0    | 0    | 8    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 270  | 538  | 81   | 27   | 898  | 102  | 88   | 241  | 118  | 67   | 196  | 27   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 284  | 566  | 85   | 28   | 945  | 107  | 93   | 254  | 124  | 71   | 206  | 28   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 284  | 566  | 85   | 28   | 945  | 107  | 93   | 254  | 124  | 71   | 206  | 28   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 284  | 566  | 85   | 28   | 945  | 107  | 93   | 254  | 124  | 71   | 206  | 28   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 0.95 | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 0.95 |
| Lanes:      | 2.00 | 2.00 | 1.00 | 2.00 | 1.80 | 0.20 | 2.00 | 2.00 | 1.00 | 2.00 | 1.76 | 0.24 |
| Final Sat.: | 3492 | 3420 | 1800 | 3492 | 3071 | 349  | 3492 | 3420 | 1800 | 3492 | 3006 | 414  |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.08 | 0.17 | 0.05 | 0.01 | 0.31 | 0.31 | 0.03 | 0.07 | 0.07 | 0.02 | 0.07 | 0.07 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.15 | 0.70 | 0.70 | 0.03 | 0.58 | 0.58 | 0.05 | 0.14 | 0.14 | 0.04 | 0.13 | 0.13 |
| Volume/Cap:  | 0.53 | 0.24 | 0.07 | 0.24 | 0.53 | 0.53 | 0.53 | 0.52 | 0.49 | 0.52 | 0.53 | 0.53 |
| Delay/Veh:   | 39.9 | 5.3  | 4.6  | 48.0 | 12.7 | 12.7 | 49.3 | 40.8 | 41.0 | 50.8 | 41.8 | 41.8 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 39.9 | 5.3  | 4.6  | 48.0 | 12.7 | 12.7 | 49.3 | 40.8 | 41.0 | 50.8 | 41.8 | 41.8 |
| LOS by Move: | D    | A    | A    | D    | B    | B    | D    | D    | D    | D    | D    | D    |
| HCM2kAvgQ:   | 5    | 3    | 1    | 1    | 10   | 10   | 2    | 4    | 4    | 2    | 4    | 4    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Etiwanda Ave/I-10 WB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.468  
Loss Time (sec): 4 (Y+R=4.0 sec) Average Delay (sec/veh): 17.7  
Optimal Cycle: 21 Level Of Service: B

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound  |   |   | West Bound  |   |   |
|-------------|-------------|---|---|-------------|---|---|-------------|---|---|-------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L           | T | R | L           | T | R |
| Control:    | Permitted   |   |   | Permitted   |   |   | Split Phase |   |   | Split Phase |   |   |
| Rights:     | Ignore      |   |   | Ignore      |   |   | Include     |   |   | Include     |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 |
| Lanes:      | 0           | 0 | 2 | 0           | 0 | 3 | 0           | 0 | 0 | 0           | 0 | 2 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 0    | 493  | 466  | 0    | 684  | 246  | 0    | 0    | 0    | 403  | 0    | 214  |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0    | 493  | 466  | 0    | 684  | 246  | 0    | 0    | 0    | 403  | 0    | 214  |
| Added Vol:   | 0    | 64   | 42   | 0    | 314  | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 0    | 557  | 508  | 0    | 998  | 246  | 0    | 0    | 0    | 403  | 0    | 214  |
| User Adj:    | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.00 | 0.95 | 0.95 | 0.00 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 0    | 586  | 0    | 0    | 1051 | 0    | 0    | 0    | 0    | 424  | 0    | 225  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 0    | 586  | 0    | 0    | 1051 | 0    | 0    | 0    | 0    | 424  | 0    | 225  |
| PCE Adj:     | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 0    | 586  | 0    | 0    | 1051 | 0    | 0    | 0    | 0    | 424  | 0    | 225  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.88 |
| Lanes:      | 0.00 | 2.00 | 1.00 | 0.00 | 3.00 | 1.00 | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 2.00 |
| Final Sat.: | 0    | 3420 | 1800 | 0    | 4914 | 1800 | 0    | 0    | 0    | 1800 | 0    | 3168 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.00 | 0.17 | 0.00 | 0.00 | 0.21 | 0.00 | 0.00 | 0.00 | 0.00 | 0.24 | 0.00 | 0.07 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.00 | 0.46 | 0.00 | 0.00 | 0.46 | 0.00 | 0.00 | 0.00 | 0.00 | 0.50 | 0.00 | 0.50 |
| Volume/Cap:  | 0.00 | 0.38 | 0.00 | 0.00 | 0.47 | 0.00 | 0.00 | 0.00 | 0.00 | 0.47 | 0.00 | 0.14 |
| Delay/Veh:   | 0.0  | 18.0 | 0.0  | 0.0  | 18.9 | 0.0  | 0.0  | 0.0  | 0.0  | 16.5 | 0.0  | 13.3 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 0.0  | 18.0 | 0.0  | 0.0  | 18.9 | 0.0  | 0.0  | 0.0  | 0.0  | 16.5 | 0.0  | 13.3 |
| LOS by Move: | A    | B    | A    | A    | B    | A    | A    | A    | A    | B    | A    | B    |
| HCM2kAvgQ:   | 0    | 6    | 0    | 0    | 8    | 0    | 0    | 0    | 0    | 9    | 0    | 2    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 Etiwanda Ave/I-10 EB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.844  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 24.9  
Optimal Cycle: 70 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound  |   |   | West Bound  |   |   |
|-------------|-------------|---|---|-------------|---|---|-------------|---|---|-------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L           | T | R | L           | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Split Phase |   |   | Split Phase |   |   |
| Rights:     | Ignore      |   |   | Ignore      |   |   | Include     |   |   | Include     |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 |
| Lanes:      | 0           | 0 | 3 | 0           | 0 | 2 | 0           | 0 | 0 | 0           | 0 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 0    | 720  | 323  | 0    | 968  | 164  | 144  | 0    | 583  | 0    | 0    | 0    |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0    | 720  | 323  | 0    | 968  | 164  | 144  | 0    | 583  | 0    | 0    | 0    |
| Added Vol:   | 0    | 106  | 0    | 0    | 314  | 0    | 0    | 0    | 99   | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 0    | 826  | 323  | 0    | 1282 | 164  | 144  | 0    | 682  | 0    | 0    | 0    |
| User Adj:    | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.00 | 0.95 | 0.95 | 0.00 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 0    | 869  | 0    | 0    | 1349 | 0    | 152  | 0    | 718  | 0    | 0    | 0    |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 0    | 869  | 0    | 0    | 1349 | 0    | 152  | 0    | 718  | 0    | 0    | 0    |
| PCE Adj:     | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 0    | 869  | 0    | 0    | 1349 | 0    | 152  | 0    | 718  | 0    | 0    | 0    |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.91 | 1.00 | 1.00 | 0.95 | 1.00 | 0.97 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 0.00 | 3.00 | 1.00 | 0.00 | 2.00 | 1.00 | 2.00 | 0.00 | 1.00 | 0.00 | 0.00 | 0.00 |
| Final Sat.: | 0    | 4914 | 1800 | 0    | 3420 | 1800 | 3492 | 0    | 1800 | 0    | 0    | 0    |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.00 | 0.18 | 0.00 | 0.00 | 0.39 | 0.00 | 0.04 | 0.00 | 0.40 | 0.00 | 0.00 | 0.00 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      |      |      |      |
| Green/Cycle: | 0.00 | 0.47 | 0.00 | 0.00 | 0.47 | 0.00 | 0.47 | 0.00 | 0.47 | 0.00 | 0.00 | 0.00 |
| Volume/Cap:  | 0.00 | 0.38 | 0.00 | 0.00 | 0.84 | 0.00 | 0.09 | 0.00 | 0.84 | 0.00 | 0.00 | 0.00 |
| Delay/Veh:   | 0.0  | 17.3 | 0.0  | 0.0  | 27.7 | 0.0  | 14.6 | 0.0  | 30.9 | 0.0  | 0.0  | 0.0  |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 0.0  | 17.3 | 0.0  | 0.0  | 27.7 | 0.0  | 14.6 | 0.0  | 30.9 | 0.0  | 0.0  | 0.0  |
| LOS by Move: | A    | B    | A    | A    | C    | A    | B    | A    | C    | A    | A    | A    |
| HCM2kAvgQ:   | 0    | 6    | 0    | 0    | 22   | 0    | 1    | 0    | 22   | 0    | 0    | 0    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #6 Etiwanda Ave/ East Airport Dr-Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 1.191  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 93.1  
Optimal Cycle: 180 Level Of Service: F

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound  |   |   | West Bound  |   |   |
|-------------|-------------|---|---|-------------|---|---|-------------|---|---|-------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L           | T | R | L           | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Prot+Permit |   |   | Prot+Permit |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include     |   |   | Include     |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 1           | 0 | 1 | 1           | 0 | 1 | 1           | 0 | 1 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 44   | 599  | 183  | 338  | 846  | 256  | 91   | 63   | 36   | 46   | 91   | 345  |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 44   | 599  | 183  | 338  | 846  | 256  | 91   | 63   | 36   | 46   | 91   | 345  |
| Added Vol:   | 66   | 20   | 0    | 328  | 85   | 0    | 0    | 1095 | 227  | 0    | 217  | 86   |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 110  | 619  | 183  | 666  | 931  | 256  | 91   | 1158 | 263  | 46   | 308  | 431  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 116  | 652  | 193  | 701  | 980  | 269  | 96   | 1219 | 277  | 48   | 324  | 454  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 116  | 652  | 193  | 701  | 980  | 269  | 96   | 1219 | 277  | 48   | 324  | 454  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 116  | 652  | 193  | 701  | 980  | 269  | 96   | 1219 | 277  | 48   | 324  | 454  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Lanes:      | 1.00 | 1.54 | 0.46 | 1.00 | 1.57 | 0.43 | 1.00 | 1.63 | 0.37 | 1.00 | 1.00 | 1.00 |
| Final Sat.: | 1800 | 2640 | 780  | 1800 | 2682 | 738  | 1800 | 2787 | 633  | 1800 | 1710 | 1710 |

Capacity Analysis Module:

|              |      |      |       |       |      |      |      |      |       |       |      |      |
|--------------|------|------|-------|-------|------|------|------|------|-------|-------|------|------|
| Vol/Sat:     | 0.06 | 0.25 | 0.25  | 0.39  | 0.37 | 0.37 | 0.00 | 0.44 | 0.44  | 0.00  | 0.19 | 0.27 |
| Crit Moves:  | **** |      |       | ****  |      |      | **** |      |       | ****  |      |      |
| Green/Cycle: | 0.08 | 0.21 | 0.21  | 0.33  | 0.45 | 0.45 | 0.06 | 0.37 | 0.37  | 0.02  | 0.32 | 0.32 |
| Volume/Cap:  | 0.81 | 1.20 | 1.20  | 1.20  | 0.81 | 0.81 | 0.82 | 1.20 | 1.20  | 1.20  | 0.59 | 0.82 |
| Delay/Veh:   | 72.9 | 141  | 141.5 | 137.9 | 26.9 | 26.9 | 81.3 | 128  | 128.1 | 253.9 | 28.9 | 37.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00  | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00  | 1.00 | 1.00 |
| AdjDel/Veh:  | 72.9 | 141  | 141.5 | 137.9 | 26.9 | 26.9 | 81.3 | 128  | 128.1 | 253.9 | 28.9 | 37.0 |
| LOS by Move: | E    | F    | F     | F     | C    | C    | F    | F    | F     | F     | C    | D    |
| HCM2kAvgQ:   | 6    | 26   | 26    | 38    | 19   | 19   | 5    | 43   | 43    | 4     | 9    | 16   |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 Etiwanda Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 1.074  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 61.1  
Optimal Cycle: 180 Level Of Service: E

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 2 | 0           | 2 | 0 | 1          | 2 | 0 | 2          | 0 | 2 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 208  | 559  | 52   | 115  | 640  | 159  | 145  | 358  | 218  | 75   | 677  | 126  |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 208  | 559  | 52   | 115  | 640  | 159  | 145  | 358  | 218  | 75   | 677  | 126  |
| Added Vol:   | 6    | 10   | 50   | 269  | 42   | 0    | 0    | 1799 | 24   | 35   | 253  | 76   |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 214  | 569  | 102  | 384  | 682  | 159  | 145  | 2157 | 242  | 110  | 930  | 202  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 225  | 599  | 107  | 404  | 718  | 167  | 153  | 2271 | 255  | 116  | 979  | 213  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 225  | 599  | 107  | 404  | 718  | 167  | 153  | 2271 | 255  | 116  | 979  | 213  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 225  | 599  | 107  | 404  | 718  | 167  | 153  | 2271 | 255  | 116  | 979  | 213  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 |
| Lanes:      | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 |
| Final Sat.: | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 | 3492 | 3420 |

Capacity Analysis Module:

|              |       |      |      |       |      |      |      |      |      |       |      |      |
|--------------|-------|------|------|-------|------|------|------|------|------|-------|------|------|
| Vol/Sat:     | 0.06  | 0.18 | 0.06 | 0.12  | 0.21 | 0.09 | 0.04 | 0.66 | 0.14 | 0.03  | 0.29 | 0.12 |
| Crit Moves:  | ****  | **** | **** | ****  | **** | **** | **** | **** | **** | ****  | **** |      |
| Green/Cycle: | 0.06  | 0.16 | 0.16 | 0.11  | 0.21 | 0.21 | 0.09 | 0.62 | 0.62 | 0.03  | 0.56 | 0.56 |
| Volume/Cap:  | 1.01  | 1.07 | 0.37 | 1.07  | 1.01 | 0.45 | 0.51 | 1.07 | 0.23 | 1.07  | 0.51 | 0.21 |
| Delay/Veh:   | 110.6 | 101  | 38.0 | 112.1 | 76.7 | 35.5 | 45.1 | 61.9 | 8.6  | 156.4 | 13.6 | 10.9 |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 |
| AdjDel/Veh:  | 110.6 | 101  | 38.0 | 112.1 | 76.7 | 35.5 | 45.1 | 61.9 | 8.6  | 156.4 | 13.6 | 10.9 |
| LOS by Move: | F     | F    | D    | F     | E    | D    | D    | E    | A    | F     | B    | B    |
| HCM2kAvgQ:   | 7     | 17   | 3    | 12    | 18   | 5    | 3    | 52   | 3    | 5     | 10   | 3    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Etiwanda Ave/Marlay Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.382  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 16.1  
Optimal Cycle: 22 Level Of Service: B

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Permitted  |   |   | Permitted  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 1           | 0 | 2 | 1          | 0 | 1 | 1          | 0 | 1 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 40   | 562  | 117  | 79   | 508  | 41   | 11   | 31   | 32   | 81   | 64   | 96   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 40   | 562  | 117  | 79   | 508  | 41   | 11   | 31   | 32   | 81   | 64   | 96   |
| Added Vol:   | 0    | 60   | 27   | 24   | 77   | 0    | 0    | 24   | 0    | 6    | 6    | 6    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 40   | 622  | 144  | 103  | 585  | 41   | 11   | 55   | 32   | 87   | 70   | 102  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 42   | 655  | 152  | 108  | 616  | 43   | 12   | 58   | 34   | 92   | 74   | 107  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 42   | 655  | 152  | 108  | 616  | 43   | 12   | 58   | 34   | 92   | 74   | 107  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 42   | 655  | 152  | 108  | 616  | 43   | 12   | 58   | 34   | 92   | 74   | 107  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 0.95 | 1.00 | 0.91 | 0.91 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 |
| Lanes:      | 1.00 | 1.62 | 0.38 | 1.00 | 2.80 | 0.20 | 1.00 | 1.26 | 0.74 | 1.00 | 1.00 |
| Final Sat.: | 1800 | 2777 | 643  | 1800 | 4592 | 322  | 1800 | 2162 | 1258 | 1800 | 1710 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.02 | 0.24 | 0.24 | 0.06 | 0.13 | 0.13 | 0.01 | 0.03 | 0.03 | 0.05 | 0.04 | 0.06 |
| Crit Moves:  | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |      |
| Green/Cycle: | 0.12 | 0.62 | 0.62 | 0.16 | 0.66 | 0.66 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 |
| Volume/Cap:  | 0.20 | 0.38 | 0.38 | 0.38 | 0.20 | 0.20 | 0.04 | 0.16 | 0.16 | 0.31 | 0.26 | 0.38 |
| Delay/Veh:   | 40.6 | 9.7  | 9.7  | 38.6 | 6.7  | 6.7  | 35.2 | 36.0 | 36.0 | 37.4 | 36.7 | 37.8 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 40.6 | 9.7  | 9.7  | 38.6 | 6.7  | 6.7  | 35.2 | 36.0 | 36.0 | 37.4 | 36.7 | 37.8 |
| LOS by Move: | D    | A    | A    | D    | A    | A    | D    | D    | D    | D    | D    | D    |
| HCM2kAvgQ:   | 1    | 7    | 7    | 3    | 3    | 3    | 0    | 1    | 1    | 3    | 2    | 3    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #9 Etiwanda Ave/Philadelphia Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.357  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 15.4  
Optimal Cycle: 22 Level Of Service: B

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Permitted  |   |   | Permitted  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 1 | 0 | 1          | 0 | 1 | 0          | 1 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 81   | 702  | 18   | 46   | 472  | 78   | 53   | 13   | 42   | 11   | 7    | 16   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 81   | 702  | 18   | 46   | 472  | 78   | 53   | 13   | 42   | 11   | 7    | 16   |
| Added Vol:   | 0    | 43   | 14   | 70   | 10   | 3    | 12   | 12   | 0    | 3    | 3    | 31   |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 81   | 745  | 32   | 116  | 482  | 81   | 65   | 25   | 42   | 14   | 10   | 47   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 85   | 784  | 34   | 122  | 507  | 85   | 68   | 26   | 44   | 15   | 11   | 49   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 85   | 784  | 34   | 122  | 507  | 85   | 68   | 26   | 44   | 15   | 11   | 49   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 85   | 784  | 34   | 122  | 507  | 85   | 68   | 26   | 44   | 15   | 11   | 49   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.91 | 0.91 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 2.57 | 0.43 | 1.00 | 1.00 | 1.00 | 1.00 | 0.18 | 0.82 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 4207 | 707  | 1800 | 1800 | 1800 | 1800 | 316  | 1484 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.05 | 0.23 | 0.02 | 0.07 | 0.12 | 0.12 | 0.04 | 0.01 | 0.02 | 0.01 | 0.03 | 0.03 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.24 | 0.64 | 0.64 | 0.19 | 0.60 | 0.60 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 |
| Volume/Cap:  | 0.20 | 0.36 | 0.03 | 0.36 | 0.20 | 0.20 | 0.36 | 0.14 | 0.23 | 0.08 | 0.31 | 0.31 |
| Delay/Veh:   | 31.0 | 8.4  | 6.5  | 35.8 | 9.2  | 9.2  | 42.6 | 40.8 | 41.5 | 40.4 | 42.2 | 42.2 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 31.0 | 8.4  | 6.5  | 35.8 | 9.2  | 9.2  | 42.6 | 40.8 | 41.5 | 40.4 | 42.2 | 42.2 |
| LOS by Move: | C    | A    | A    | D    | A    | A    | D    | D    | D    | D    | D    | D    |
| HCM2kAvgQ:   | 2    | 6    | 0    | 3    | 3    | 3    | 2    | 1    | 1    | 0    | 2    | 2    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #10 Etiwanda Ave/SR-60 WB Ramp

Cycle (sec): 100 Critical Vol./Cap.(X): 0.482  
Loss Time (sec): 4 (Y+R=4.0 sec) Average Delay (sec/veh): 14.7  
Optimal Cycle: 22 Level Of Service: B

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound  |   |   | West Bound  |   |   |
|-------------|-------------|---|---|-------------|---|---|-------------|---|---|-------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L           | T | R | L           | T | R |
| Control:    | Permitted   |   |   | Permitted   |   |   | Split Phase |   |   | Split Phase |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include     |   |   | Include     |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 |
| Lanes:      | 0           | 0 | 2 | 0           | 0 | 2 | 0           | 0 | 0 | 1           | 0 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 0    | 873  | 0    | 0    | 500  | 0    | 0    | 0    | 0    | 245  | 0    | 302  |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0    | 873  | 0    | 0    | 500  | 0    | 0    | 0    | 0    | 245  | 0    | 302  |
| Added Vol:   | 0    | 58   | 0    | 0    | 14   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 0    | 931  | 0    | 0    | 514  | 0    | 0    | 0    | 0    | 245  | 0    | 302  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 0    | 980  | 0    | 0    | 541  | 0    | 0    | 0    | 0    | 258  | 0    | 318  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 0    | 980  | 0    | 0    | 541  | 0    | 0    | 0    | 0    | 258  | 0    | 318  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 0    | 980  | 0    | 0    | 541  | 0    | 0    | 0    | 0    | 258  | 0    | 318  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 0.00 | 2.00 | 0.00 | 0.00 | 2.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 |
| Final Sat.: | 0    | 3420 | 0    | 0    | 3420 | 0    | 0    | 0    | 0    | 1800 | 0    | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.00 | 0.29 | 0.00 | 0.00 | 0.16 | 0.00 | 0.00 | 0.00 | 0.00 | 0.14 | 0.00 | 0.18 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.00 | 0.59 | 0.00 | 0.00 | 0.59 | 0.00 | 0.00 | 0.00 | 0.00 | 0.37 | 0.00 | 0.37 |
| Volume/Cap:  | 0.00 | 0.48 | 0.00 | 0.00 | 0.27 | 0.00 | 0.00 | 0.00 | 0.00 | 0.39 | 0.00 | 0.48 |
| Delay/Veh:   | 0.0  | 11.7 | 0.0  | 0.0  | 9.9  | 0.0  | 0.0  | 0.0  | 0.0  | 23.8 | 0.0  | 25.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 0.0  | 11.7 | 0.0  | 0.0  | 9.9  | 0.0  | 0.0  | 0.0  | 0.0  | 23.8 | 0.0  | 25.0 |
| LOS by Move: | A    | B    | A    | A    | A    | A    | A    | A    | A    | C    | A    | C    |
| HCM2kAvgQ:   | 0    | 9    | 0    | 0    | 4    | 0    | 0    | 0    | 0    | 6    | 0    | 8    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

## Level Of Service Computation Report

## 2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #11 Etiwanda Ave/SR-60 EB Ramp

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: B[ 12.7]

| Approach: | North Bound  |   |   |   | South Bound  |   |   |   | East Bound |   |   |   | West Bound |   |   |   |
|-----------|--------------|---|---|---|--------------|---|---|---|------------|---|---|---|------------|---|---|---|
| Movement: | L            | T | R |   | L            | T | R |   | L          | T | R |   | L          | T | R |   |
| Control:  | Uncontrolled |   |   |   | Uncontrolled |   |   |   | Stop Sign  |   |   |   | Stop Sign  |   |   |   |
| Rights:   | Include      |   |   |   | Include      |   |   |   | Include    |   |   |   | Include    |   |   |   |
| Lanes:    | 0            | 0 | 1 | 1 | 0            | 1 | 0 | 2 | 0          | 0 | 0 | 0 | 0          | 0 | 0 | 0 |

## Volume Module:

|              |      |      |      |  |      |      |      |  |      |      |      |  |      |      |      |  |
|--------------|------|------|------|--|------|------|------|--|------|------|------|--|------|------|------|--|
| Base Vol:    | 0    | 896  | 225  |  | 97   | 620  | 0    |  | 0    | 0    | 0    |  | 0    | 0    | 0    |  |
| Growth Adj:  | 1.00 | 1.00 | 1.00 |  | 1.00 | 1.00 | 1.00 |  | 1.00 | 1.00 | 1.00 |  | 1.00 | 1.00 | 1.00 |  |
| Initial Bse: | 0    | 896  | 225  |  | 97   | 620  | 0    |  | 0    | 0    | 0    |  | 0    | 0    | 0    |  |
| Added Vol:   | 0    | 58   | 0    |  | 0    | 14   | 0    |  | 0    | 0    | 0    |  | 0    | 0    | 0    |  |
| PasserByVol: | 0    | 0    | 0    |  | 0    | 0    | 0    |  | 0    | 0    | 0    |  | 0    | 0    | 0    |  |
| Initial Fut: | 0    | 954  | 225  |  | 97   | 634  | 0    |  | 0    | 0    | 0    |  | 0    | 0    | 0    |  |
| User Adj:    | 1.00 | 1.00 | 1.00 |  | 1.00 | 1.00 | 1.00 |  | 1.00 | 1.00 | 1.00 |  | 1.00 | 1.00 | 1.00 |  |
| PHF Adj:     | 0.95 | 0.95 | 0.95 |  | 0.95 | 0.95 | 0.95 |  | 0.95 | 0.95 | 0.95 |  | 0.95 | 0.95 | 0.95 |  |
| PHF Volume:  | 0    | 1004 | 237  |  | 102  | 667  | 0    |  | 0    | 0    | 0    |  | 0    | 0    | 0    |  |
| Reduct Vol:  | 0    | 0    | 0    |  | 0    | 0    | 0    |  | 0    | 0    | 0    |  | 0    | 0    | 0    |  |
| FinalVolume: | 0    | 1004 | 237  |  | 102  | 667  | 0    |  | 0    | 0    | 0    |  | 0    | 0    | 0    |  |

## Critical Gap Module:

|                   |      |      |      |  |     |      |       |       |      |       |       |      |       |      |       |  |
|-------------------|------|------|------|--|-----|------|-------|-------|------|-------|-------|------|-------|------|-------|--|
| Critical Gp:xxxxx | xxxx | xxxx | xxxx |  | 4.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxx | xxxxx |  |
| FollowUpTim:xxxxx | xxxx | xxxx | xxxx |  | 2.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxx | xxxxx |  |

## Capacity Module:

|              |      |      |       |  |      |      |       |      |      |       |      |      |       |      |      |       |
|--------------|------|------|-------|--|------|------|-------|------|------|-------|------|------|-------|------|------|-------|
| Cnflct Vol:  | xxxx | xxxx | xxxxx |  | 1241 | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | xxxxx |  | 568  | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.:   | xxxx | xxxx | xxxxx |  | 568  | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Volume/Cap:  | xxxx | xxxx | xxxx  |  | 0.18 | xxxx | xxxx  | xxxx | xxxx | xxxx  | xxxx | xxxx | xxxx  | xxxx | xxxx | xxxx  |

## Level Of Service Module:

|                   |        |       |       |   |        |      |       |       |        |       |       |      |        |      |       |       |
|-------------------|--------|-------|-------|---|--------|------|-------|-------|--------|-------|-------|------|--------|------|-------|-------|
| 2Way95thQ:        | xxxx   | xxxx  | xxxxx |   | 0.7    | xxxx | xxxxx | xxxx  | xxxx   | xxxxx | xxxx  | xxxx | xxxxx  | xxxx | xxxx  | xxxxx |
| Control Del:xxxxx | xxxx   | xxxxx | xxxxx |   | 12.7   | xxxx | xxxxx | xxxxx | xxxx   | xxxxx | xxxxx | xxxx | xxxxx  | xxxx | xxxxx | xxxxx |
| LOS by Move:      | *      | *     | *     |   | B      | *    | *     | *     | *      | *     | *     | *    | *      | *    | *     | *     |
| Movement:         | LT     | -     | LTR   | - | RT     | LT   | -     | LTR   | -      | RT    | LT    | -    | LTR    | -    | RT    |       |
| Shared Cap.:      | xxxx   | xxxx  | xxxxx |   | xxxx   | xxxx | xxxxx | xxxx  | xxxx   | xxxxx | xxxx  | xxxx | xxxxx  | xxxx | xxxx  | xxxxx |
| SharedQueue:xxxxx | xxxx   | xxxxx | xxxxx |   | xxxxx  | xxxx | xxxxx | xxxx  | xxxxx  | xxxx  | xxxxx | xxxx | xxxxx  | xxxx | xxxxx | xxxxx |
| Shrd ConDel:xxxxx | xxxx   | xxxxx | xxxxx |   | xxxxx  | xxxx | xxxxx | xxxx  | xxxxx  | xxxx  | xxxxx | xxxx | xxxxx  | xxxx | xxxxx | xxxxx |
| Shared LOS:       | *      | *     | *     |   | *      | *    | *     | *     | *      | *     | *     | *    | *      | *    | *     | *     |
| ApproachDel:      | xxxxxx |       |       |   | xxxxxx |      |       |       | xxxxxx |       |       |      | xxxxxx |      |       |       |
| ApproachLOS:      | *      |       |       |   | *      |      |       |       | *      |       |       |      | *      |      |       |       |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

## Level Of Service Computation Report

## 2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 Commerce Way/Ontario Mills Pkwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.516

Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 25.9

Optimal Cycle: 33 Level Of Service: C

| Approach:                     | North Bound |   |   |   | South Bound |   |   |   | East Bound |   |   |   | West Bound |   |   |   |
|-------------------------------|-------------|---|---|---|-------------|---|---|---|------------|---|---|---|------------|---|---|---|
| Movement:                     | L           | T | R |   | L           | T | R |   | L          | T | R |   | L          | T | R |   |
| ----- ----- ----- ----- ----- |             |   |   |   |             |   |   |   |            |   |   |   |            |   |   |   |
| Control:                      | Protected   |   |   |   | Protected   |   |   |   | Protected  |   |   |   | Protected  |   |   |   |
| Rights:                       | Include     |   |   |   | Include     |   |   |   | Include    |   |   |   | Include    |   |   |   |
| Min. Green:                   | 0           | 0 | 0 |   | 0           | 0 | 0 |   | 0          | 0 | 0 |   | 0          | 0 | 0 |   |
| Lanes:                        | 2           | 0 | 1 | 0 | 1           | 0 | 1 | 0 | 1          | 0 | 2 | 0 | 1          | 2 | 0 | 1 |

## Volume Module:

|              |      |      |      |  |      |      |      |  |      |      |      |  |      |      |      |  |
|--------------|------|------|------|--|------|------|------|--|------|------|------|--|------|------|------|--|
| Base Vol:    | 32   | 102  | 490  |  | 15   | 65   | 10   |  | 5    | 114  | 5    |  | 329  | 251  | 10   |  |
| Growth Adj:  | 1.00 | 1.00 | 1.00 |  | 1.00 | 1.00 | 1.00 |  | 1.00 | 1.00 | 1.00 |  | 1.00 | 1.00 | 1.00 |  |
| Initial Bse: | 32   | 102  | 490  |  | 15   | 65   | 10   |  | 5    | 114  | 5    |  | 329  | 251  | 10   |  |
| Added Vol:   | 0    | 0    | 0    |  | 0    | 0    | 0    |  | 0    | 148  | 0    |  | 0    | 30   | 0    |  |
| PasserByVol: | 0    | 0    | 0    |  | 0    | 0    | 0    |  | 0    | 0    | 0    |  | 0    | 0    | 0    |  |
| Initial Fut: | 32   | 102  | 490  |  | 15   | 65   | 10   |  | 5    | 262  | 5    |  | 329  | 281  | 10   |  |
| User Adj:    | 1.00 | 1.00 | 1.00 |  | 1.00 | 1.00 | 1.00 |  | 1.00 | 1.00 | 1.00 |  | 1.00 | 1.00 | 1.00 |  |
| PHF Adj:     | 0.95 | 0.95 | 0.95 |  | 0.95 | 0.95 | 0.95 |  | 0.95 | 0.95 | 0.95 |  | 0.95 | 0.95 | 0.95 |  |
| PHF Volume:  | 34   | 107  | 516  |  | 16   | 68   | 11   |  | 5    | 276  | 5    |  | 346  | 296  | 11   |  |
| Reduct Vol:  | 0    | 0    | 0    |  | 0    | 0    | 0    |  | 0    | 0    | 0    |  | 0    | 0    | 0    |  |
| Reduced Vol: | 34   | 107  | 516  |  | 16   | 68   | 11   |  | 5    | 276  | 5    |  | 346  | 296  | 11   |  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 |  | 1.00 | 1.00 | 1.00 |  | 1.00 | 1.00 | 1.00 |  | 1.00 | 1.00 | 1.00 |  |
| MLF Adj:     | 1.00 | 1.00 | 1.00 |  | 1.00 | 1.00 | 1.00 |  | 1.00 | 1.00 | 1.00 |  | 1.00 | 1.00 | 1.00 |  |
| FinalVolume: | 34   | 107  | 516  |  | 16   | 68   | 11   |  | 5    | 276  | 5    |  | 346  | 296  | 11   |  |

## Saturation Flow Module:

|             |      |      |      |  |      |      |      |  |      |      |      |  |      |      |      |  |
|-------------|------|------|------|--|------|------|------|--|------|------|------|--|------|------|------|--|
| Sat/Lane:   | 1800 | 1800 | 1800 |  | 1800 | 1800 | 1800 |  | 1800 | 1800 | 1800 |  | 1800 | 1800 | 1800 |  |
| Adjustment: | 0.97 | 1.00 | 1.00 |  | 1.00 | 0.95 | 0.95 |  | 1.00 | 0.95 | 1.00 |  | 0.97 | 0.95 | 1.00 |  |
| Lanes:      | 2.00 | 1.00 | 1.00 |  | 1.00 | 1.73 | 0.27 |  | 1.00 | 2.00 | 1.00 |  | 2.00 | 2.00 | 1.00 |  |
| Final Sat.: | 3492 | 1800 | 1800 |  | 1800 | 2964 | 456  |  | 1800 | 3420 | 1800 |  | 3492 | 3420 | 1800 |  |

## Capacity Analysis Module:

|              |      |      |      |  |      |      |      |  |      |      |      |  |      |      |      |  |
|--------------|------|------|------|--|------|------|------|--|------|------|------|--|------|------|------|--|
| Vol/Sat:     | 0.01 | 0.06 | 0.29 |  | 0.01 | 0.02 | 0.02 |  | 0.00 | 0.08 | 0.00 |  | 0.10 | 0.09 | 0.01 |  |
| Crit Moves:  |      |      | **** |  | **** |      |      |  |      | **** |      |  | **** |      |      |  |
| Green/Cycle: | 0.17 | 0.55 | 0.55 |  | 0.02 | 0.40 | 0.40 |  | 0.01 | 0.16 | 0.16 |  | 0.19 | 0.34 | 0.34 |  |
| Volume/Cap:  | 0.06 | 0.11 | 0.52 |  | 0.52 | 0.06 | 0.06 |  | 0.26 | 0.52 | 0.02 |  | 0.52 | 0.26 | 0.02 |  |
| Delay/Veh:   | 34.9 | 10.6 | 14.4 |  | 63.3 | 18.2 | 18.2 |  | 55.6 | 39.6 | 35.7 |  | 36.9 | 24.2 | 22.1 |  |
| User DelAdj: | 1.00 | 1.00 | 1.00 |  | 1.00 | 1.00 | 1.00 |  | 1.00 | 1.00 | 1.00 |  | 1.00 | 1.00 | 1.00 |  |
| AdjDel/Veh:  | 34.9 | 10.6 | 14.4 |  | 63.3 | 18.2 | 18.2 |  | 55.6 | 39.6 | 35.7 |  | 36.9 | 24.2 | 22.1 |  |
| LOS by Move: | C    | B    | B    |  | E    | B    | B    |  | E    | D    | D    |  | D    | C    | C    |  |
| HCM2kAvgQ:   | 0    | 2    | 10   |  | 1    | 1    | 1    |  | 0    | 5    | 0    |  | 5    | 3    | 0    |  |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #13 Mulberry Ave/Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.681  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 19.9  
Optimal Cycle: 40 Level Of Service: B

| Approach:   | North Bound | South Bound | East Bound | West Bound |
|-------------|-------------|-------------|------------|------------|
| Movement:   | L - T - R   | L - T - R   | L - T - R  | L - T - R  |
| Control:    | Split Phase | Split Phase | Protected  | Protected  |
| Rights:     | Include     | Include     | Include    | Include    |
| Min. Green: | 0 0 0       | 0 0 0       | 0 0 0      | 0 0 0      |
| Lanes:      | 1 0 0 0 1   | 0 0 0 0 0   | 0 0 2 1 0  | 1 0 2 0 0  |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 158  | 0    | 131  | 0    | 0    | 0    | 0    | 203  | 81   | 161  | 367  | 0    |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 158  | 0    | 131  | 0    | 0    | 0    | 0    | 203  | 81   | 161  | 367  | 0    |
| Added Vol:   | 38   | 0    | 145  | 0    | 0    | 0    | 0    | 1289 | 134  | 33   | 264  | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 196  | 0    | 276  | 0    | 0    | 0    | 0    | 1492 | 215  | 194  | 631  | 0    |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 206  | 0    | 291  | 0    | 0    | 0    | 0    | 1571 | 226  | 204  | 664  | 0    |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 206  | 0    | 291  | 0    | 0    | 0    | 0    | 1571 | 226  | 204  | 664  | 0    |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 206  | 0    | 291  | 0    | 0    | 0    | 0    | 1571 | 226  | 204  | 664  | 0    |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 0.91 | 1.00 | 0.95 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 0.00 | 1.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.62 | 0.38 | 1.00 | 2.00 | 0.00 |
| Final Sat.: | 1800 | 0    | 1800 | 0    | 0    | 0    | 0    | 4295 | 619  | 1800 | 3420 | 0    |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.11 | 0.00 | 0.16 | 0.00 | 0.00 | 0.00 | 0.37 | 0.37 | 0.11 | 0.19 | 0.00 | 0.00 |
| Crit Moves:  | **** |      | **** |      |      |      | **** |      | **** |      |      |      |
| Green/Cycle: | 0.24 | 0.00 | 0.24 | 0.00 | 0.00 | 0.00 | 0.54 | 0.54 | 0.17 | 0.70 | 0.00 | 0.00 |
| Volume/Cap:  | 0.48 | 0.00 | 0.68 | 0.00 | 0.00 | 0.00 | 0.68 | 0.68 | 0.68 | 0.28 | 0.00 | 0.00 |
| Delay/Veh:   | 33.8 | 0.0  | 39.2 | 0.0  | 0.0  | 0.0  | 17.7 | 17.7 | 45.5 | 5.5  | 0.0  | 0.0  |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 33.8 | 0.0  | 39.2 | 0.0  | 0.0  | 0.0  | 17.7 | 17.7 | 45.5 | 5.5  | 0.0  | 0.0  |
| LOS by Move: | C    | A    | D    | A    | A    | A    | B    | B    | D    | A    | A    | A    |
| HCM2kAvgQ:   | 6    | 0    | 9    | 0    | 0    | 0    | 15   | 15   | 7    | 4    | 0    | 0    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #14 Mulberry Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.419  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 18.4  
Optimal Cycle: 24 Level Of Service: B

| Approach:   | North Bound | South Bound | East Bound | West Bound |
|-------------|-------------|-------------|------------|------------|
| Movement:   | L - T - R   | L - T - R   | L - T - R  | L - T - R  |
| Control:    | Protected   | Protected   | Permitted  | Permitted  |
| Rights:     | Include     | Include     | Include    | Include    |
| Min. Green: | 0 0 0       | 0 0 0       | 0 0 0      | 0 0 0      |
| Lanes:      | 1 0 1 0 1   | 1 0 0 1 0   | 0 1 0 0 1  | 0 0 1! 0 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 80   | 240  | 51   | 25   | 171  | 17   | 2    | 10   | 24   | 52   | 14   | 43   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 80   | 240  | 51   | 25   | 171  | 17   | 2    | 10   | 24   | 52   | 14   | 43   |
| Added Vol:   | 0    | 173  | 227  | 49   | 118  | 0    | 0    | 0    | 0    | 67   | 0    | 10   |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 80   | 413  | 278  | 74   | 289  | 17   | 2    | 10   | 24   | 119  | 14   | 53   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 84   | 435  | 293  | 78   | 304  | 18   | 2    | 11   | 25   | 125  | 15   | 56   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 84   | 435  | 293  | 78   | 304  | 18   | 2    | 11   | 25   | 125  | 15   | 56   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 84   | 435  | 293  | 78   | 304  | 18   | 2    | 11   | 25   | 125  | 15   | 56   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 1.00 | 1.00 | 1.00 | 0.94 | 0.06 | 0.17 | 0.83 | 1.00 | 0.64 | 0.08 | 0.28 |
| Final Sat.: | 1800 | 1800 | 1800 | 1800 | 1700 | 100  | 300  | 1500 | 1800 | 1152 | 135  | 513  |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.05 | 0.24 | 0.16 | 0.04 | 0.18 | 0.18 | 0.01 | 0.01 | 0.01 | 0.11 | 0.11 | 0.11 |
| Crit Moves:  | **** |      | **** |      |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.14 | 0.58 | 0.58 | 0.10 | 0.54 | 0.54 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 |
| Volume/Cap:  | 0.33 | 0.42 | 0.28 | 0.42 | 0.33 | 0.33 | 0.03 | 0.03 | 0.05 | 0.42 | 0.42 | 0.42 |
| Delay/Veh:   | 39.5 | 12.1 | 10.8 | 43.5 | 13.1 | 13.1 | 27.6 | 27.6 | 27.8 | 31.3 | 31.3 | 31.3 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 39.5 | 12.1 | 10.8 | 43.5 | 13.1 | 13.1 | 27.6 | 27.6 | 27.8 | 31.3 | 31.3 | 31.3 |
| LOS by Move: | D    | B    | B    | D    | B    | B    | C    | C    | C    | C    | C    | C    |
| HCM2kAvgQ:   | 3    | 7    | 4    | 3    | 6    | 6    | 0    | 0    | 1    | 5    | 5    | 5    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #15 Mulberry Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 1.179  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 81.6  
Optimal Cycle: 180 Level Of Service: F

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 2 | 0           | 2 | 0 | 1          | 0 | 2 | 0          | 2 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 417  | 378  | 222  | 8    | 217  | 61   | 84   | 227  | 72   | 205  | 723  | 35   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 417  | 378  | 222  | 8    | 217  | 61   | 84   | 227  | 72   | 205  | 723  | 35   |
| Added Vol:   | 33   | 154  | 274  | 0    | 78   | 108  | 237  | 1786 | 19   | 87   | 296  | 6    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 450  | 532  | 496  | 8    | 295  | 169  | 321  | 2013 | 91   | 292  | 1019 | 41   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 474  | 560  | 522  | 8    | 311  | 178  | 338  | 2119 | 96   | 307  | 1073 | 43   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 474  | 560  | 522  | 8    | 311  | 178  | 338  | 2119 | 96   | 307  | 1073 | 43   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 474  | 560  | 522  | 8    | 311  | 178  | 338  | 2119 | 96   | 307  | 1073 | 43   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 |
| Lanes:      | 2.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 3492 | 3420 | 1800 | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 |

Capacity Analysis Module:

|              |      |      |       |       |      |      |      |      |      |       |      |      |
|--------------|------|------|-------|-------|------|------|------|------|------|-------|------|------|
| Vol/Sat:     | 0.14 | 0.16 | 0.29  | 0.00  | 0.09 | 0.10 | 0.19 | 0.62 | 0.05 | 0.17  | 0.31 | 0.02 |
| Crit Moves:  | **** |      |       | ****  |      |      | **** |      |      | ****  |      |      |
| Green/Cycle: | 0.14 | 0.25 | 0.25  | 0.00  | 0.11 | 0.11 | 0.25 | 0.53 | 0.53 | 0.14  | 0.42 | 0.42 |
| Volume/Cap:  | 0.94 | 0.67 | 1.18  | 1.18  | 0.86 | 0.94 | 0.75 | 1.18 | 0.10 | 1.18  | 0.75 | 0.06 |
| Delay/Veh:   | 67.8 | 36.0 | 139.6 | 458.2 | 62.7 | 92.2 | 41.3 | 111  | 11.9 | 155.9 | 26.8 | 17.3 |
| User DelAdj: | 1.00 | 1.00 | 1.00  | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 |
| AdjDel/Veh:  | 67.8 | 36.0 | 139.6 | 458.2 | 62.7 | 92.2 | 41.3 | 111  | 11.9 | 155.9 | 26.8 | 17.3 |
| LOS by Move: | E    | D    | F     | F     | E    | F    | D    | F    | B    | F     | C    | B    |
| HCM2kAvgQ:   | 11   | 9    | 29    | 1     | 8    | 9    | 11   | 57   | 1    | 18    | 16   | 1    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #16 Mulberry Ave/Marlay Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.377  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 13.4  
Optimal Cycle: 26 Level Of Service: B

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 2 | 0 | 1          | 0 | 1 | 0          | 1 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 62   | 468  | 34   | 7    | 277  | 53   | 41   | 14   | 42   | 41   | 52   | 52   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 62   | 468  | 34   | 7    | 277  | 53   | 41   | 14   | 42   | 41   | 52   | 52   |
| Added Vol:   | 16   | 452  | 0    | 0    | 148  | 36   | 9    | 0    | 4    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 78   | 920  | 34   | 7    | 425  | 89   | 50   | 14   | 46   | 41   | 52   | 52   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 82   | 968  | 36   | 7    | 447  | 94   | 53   | 15   | 48   | 43   | 55   | 55   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 82   | 968  | 36   | 7    | 447  | 94   | 53   | 15   | 48   | 43   | 55   | 55   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 82   | 968  | 36   | 7    | 447  | 94   | 53   | 15   | 48   | 43   | 55   | 55   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.05 | 0.28 | 0.02 | 0.00 | 0.13 | 0.05 | 0.03 | 0.01 | 0.03 | 0.02 | 0.03 | 0.03 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.20 | 0.75 | 0.75 | 0.01 | 0.56 | 0.56 | 0.08 | 0.08 | 0.08 | 0.07 | 0.08 | 0.08 |
| Volume/Cap:  | 0.23 | 0.38 | 0.03 | 0.38 | 0.23 | 0.09 | 0.38 | 0.10 | 0.32 | 0.32 | 0.38 | 0.38 |
| Delay/Veh:   | 34.1 | 4.4  | 3.2  | 60.9 | 11.0 | 10.0 | 45.5 | 42.6 | 44.4 | 45.3 | 45.2 | 45.2 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 34.1 | 4.4  | 3.2  | 60.9 | 11.0 | 10.0 | 45.5 | 42.6 | 44.4 | 45.3 | 45.2 | 45.2 |
| LOS by Move: | C    | A    | A    | E    | B    | B    | D    | D    | D    | D    | D    | D    |
| HCM2kAvgQ:   | 2    | 6    | 0    | 1    | 4    | 1    | 2    | 0    | 2    | 2    | 2    | 2    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #17 Mulberry Ave/Philadelphia Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.471  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 9.1  
Optimal Cycle: 26 Level Of Service: A

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Permitted  |   |   | Permitted  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 1 | 0 | 1          | 0 | 1 | 0          | 1 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 96   | 857  | 19   | 10   | 977  | 33   | 28   | 1    | 52   | 66   | 5    | 19   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 96   | 857  | 19   | 10   | 977  | 33   | 28   | 1    | 52   | 66   | 5    | 19   |
| Added Vol:   | 31   | 438  | 0    | 0    | 82   | 70   | 30   | 0    | 7    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 127  | 1295 | 19   | 10   | 1059 | 103  | 58   | 1    | 59   | 66   | 5    | 19   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 134  | 1363 | 20   | 11   | 1115 | 108  | 61   | 1    | 62   | 69   | 5    | 20   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 134  | 1363 | 20   | 11   | 1115 | 108  | 61   | 1    | 62   | 69   | 5    | 20   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 134  | 1363 | 20   | 11   | 1115 | 108  | 61   | 1    | 62   | 69   | 5    | 20   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.21 | 0.79 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 | 1800 | 1800 | 1800 | 1800 | 375  | 1425 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.07 | 0.40 | 0.01 | 0.01 | 0.33 | 0.06 | 0.03 | 0.00 | 0.03 | 0.04 | 0.01 | 0.01 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.16 | 0.85 | 0.85 | 0.01 | 0.70 | 0.70 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 |
| Volume/Cap:  | 0.47 | 0.47 | 0.01 | 0.47 | 0.47 | 0.09 | 0.41 | 0.01 | 0.42 | 0.47 | 0.17 | 0.17 |
| Delay/Veh:   | 39.4 | 2.1  | 1.2  | 63.9 | 6.9  | 4.9  | 45.5 | 42.2 | 45.6 | 46.2 | 43.3 | 43.3 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 39.4 | 2.1  | 1.2  | 63.9 | 6.9  | 4.9  | 45.5 | 42.2 | 45.6 | 46.2 | 43.3 | 43.3 |
| LOS by Move: | D    | A    | A    | E    | A    | A    | D    | D    | D    | D    | D    | D    |
| HCM2kAvgQ:   | 4    | 6    | 0    | 1    | 8    | 1    | 2    | 0    | 2    | 3    | 1    | 1    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #18 Mulberry Ave/SR-60 WB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.802  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 18.4  
Optimal Cycle: 59 Level Of Service: B

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound  |   |   | West Bound  |   |   |
|-------------|-------------|---|---|-------------|---|---|-------------|---|---|-------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L           | T | R | L           | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Split Phase |   |   | Split Phase |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include     |   |   | Include     |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 0 | 1 | 0           | 0 | 0 | 0           | 1 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 235  | 708  | 0    | 0    | 491  | 770  | 0    | 0    | 0    | 123  | 1    | 244  |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 235  | 708  | 0    | 0    | 491  | 770  | 0    | 0    | 0    | 123  | 1    | 244  |
| Added Vol:   | 0    | 469  | 0    | 0    | 89   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 235  | 1177 | 0    | 0    | 580  | 770  | 0    | 0    | 0    | 123  | 1    | 244  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 247  | 1239 | 0    | 0    | 611  | 811  | 0    | 0    | 0    | 129  | 1    | 257  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 247  | 1239 | 0    | 0    | 611  | 811  | 0    | 0    | 0    | 129  | 1    | 257  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 247  | 1239 | 0    | 0    | 611  | 811  | 0    | 0    | 0    | 129  | 1    | 257  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 0.00 | 0.00 | 1.00 | 1.00 | 0.00 | 0.00 | 0.00 | 0.99 | 0.01 | 1.00 |
| Final Sat.: | 1800 | 3420 | 0    | 0    | 1710 | 1710 | 0    | 0    | 0    | 1785 | 15   | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.14 | 0.36 | 0.00 | 0.00 | 0.36 | 0.47 | 0.00 | 0.00 | 0.00 | 0.07 | 0.07 | 0.14 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.17 | 0.76 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.00 | 0.00 | 0.18 | 0.18 | 0.18 |
| Volume/Cap:  | 0.80 | 0.48 | 0.00 | 0.00 | 0.60 | 0.80 | 0.00 | 0.00 | 0.00 | 0.41 | 0.41 | 0.80 |
| Delay/Veh:   | 53.8 | 4.6  | 0.0  | 0.0  | 13.5 | 18.6 | 0.0  | 0.0  | 0.0  | 37.3 | 37.3 | 53.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 53.8 | 4.6  | 0.0  | 0.0  | 13.5 | 18.6 | 0.0  | 0.0  | 0.0  | 37.3 | 37.3 | 53.0 |
| LOS by Move: | D    | A    | A    | A    | B    | B    | A    | A    | A    | D    | D    | D    |
| HCM2kAvgQ:   | 10   | 8    | 0    | 0    | 13   | 22   | 0    | 0    | 0    | 4    | 4    | 10   |

Note: Queue reported is the number of cars per lane.



FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #19 Mulberry Ave/SR-60 EB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.765  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 25.1  
Optimal Cycle: 51 Level Of Service: C

| Approach:   | North Bound | South Bound | East Bound  | West Bound  |
|-------------|-------------|-------------|-------------|-------------|
| Movement:   | L - T - R   | L - T - R   | L - T - R   | L - T - R   |
| Control:    | Protected   | Protected   | Split Phase | Split Phase |
| Rights:     | Include     | Include     | Include     | Include     |
| Min. Green: | 0 0 0       | 0 0 0       | 0 0 0       | 0 0 0       |
| Lanes:      | 0 0 1 1 0   | 1 0 2 0 0   | 1 0 1 0 0   | 0 0 0 0 0   |

| Volume Module: | Base Vol: | Growth Adj: | Initial Bse: | Added Vol: | PasserByVol: | Initial Fut: | User Adj: | PHF Adj:  | PHF Volume: | Reduct Vol: | Reduced Vol: | PCE Adj:  | MLF Adj:  | FinalVolume: |
|----------------|-----------|-------------|--------------|------------|--------------|--------------|-----------|-----------|-------------|-------------|--------------|-----------|-----------|--------------|
|                | 0 548     | 1.00 1.00   | 0 548        | 0 469      | 0 0          | 0 1017       | 1.00 1.00 | 0.95 0.95 | 0 1071      | 0 0         | 0 1071       | 1.00 1.00 | 1.00 1.00 | 0 1071       |
|                | 93        | 1.00 1.00   | 93           | 0 89       | 0 0          | 93           | 1.00 1.00 | 0.95 0.95 | 98          | 0 0         | 98           | 1.00 1.00 | 1.00 1.00 | 98           |
|                | 164 425   | 1.00 1.00   | 164 425      | 0 89       | 0 0          | 164 514      | 1.00 1.00 | 0.95 0.95 | 173 541     | 0 0         | 173 541      | 1.00 1.00 | 1.00 1.00 | 173 541      |
|                | 0 378     | 1.00 1.00   | 0 378        | 0 0        | 0 0          | 0 378        | 1.00 1.00 | 0.95 0.95 | 398 3       | 0 0         | 398 3        | 1.00 1.00 | 1.00 1.00 | 398 3        |
|                | 290       | 1.00 1.00   | 290          | 0 0        | 0 0          | 290          | 1.00 1.00 | 0.95 0.95 | 305         | 0 0         | 305          | 1.00 1.00 | 1.00 1.00 | 305          |
|                | 0 0 0     | 1.00 1.00   | 0 0 0        | 0 0 0      | 0 0 0        | 0 0 0        | 1.00 1.00 | 0.95 0.95 | 0 0 0       | 0 0 0       | 0 0 0        | 1.00 1.00 | 1.00 1.00 | 0 0 0        |

| Saturation Flow Module: | Sat/Lane: | Adjustment: | Lanes:    | Final Sat.: |
|-------------------------|-----------|-------------|-----------|-------------|
|                         | 1800 1800 | 1.00 0.95   | 0.00 1.83 | 0 3133      |
|                         | 1800 1800 | 1.00 0.95   | 0.17 2.00 | 287         |
|                         | 1800 1800 | 1.00 0.95   | 0.00 2.00 | 1800 3420   |
|                         | 1800 1800 | 1.00 0.95   | 0.00 2.00 | 0 2506      |
|                         | 1800 1800 | 1.00 0.95   | 0.00 2.00 | 11 1083     |
|                         | 1800 1800 | 1.00 0.95   | 0.00 2.00 | 0 0 0       |

| Capacity Analysis Module: | Vol/Sat:  | Crit Moves: | Green/Cycle: | Volume/Cap: | Delay/Veh: | User DelAdj: | AdjDel/Veh: | LOS by Move: | HCM2kAvgQ: |
|---------------------------|-----------|-------------|--------------|-------------|------------|--------------|-------------|--------------|------------|
|                           | 0.00 0.34 | ****        | 0.00 0.45    | 0.00 0.77   | 0.0 25.7   | 1.00 1.00    | 0.0 25.7    | A C          | 0 17       |
|                           | 0.34      | ****        | 0.45         | 0.77        | 25.7       | 1.00 1.00    | 25.7        | C            | 17         |
|                           | 0.10 0.16 | ****        | 0.13 0.57    | 0.77 0.28   | 56.8 11.0  | 1.00 1.00    | 56.8 11.0   | E B          | 7 4        |
|                           | 0.16 0.28 | ****        | 0.37 0.37    | 0.43 0.77   | 23.9 31.7  | 1.00 1.00    | 23.9 31.7   | A C          | 7 15       |
|                           | 0.28      | ****        | 0.37         | 0.77        | 31.7       | 1.00 1.00    | 31.7        | C            | 15         |
|                           | 0.00 0.00 | ****        | 0.00 0.00    | 0.00 0.00   | 0.0 0.0    | 1.00 1.00    | 0.0 0.0     | A A          | 0 0        |
|                           | 0.00      | ****        | 0.00         | 0.00        | 0.0        | 1.00 1.00    | 0.0         | A            | 0          |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #20 Banana Ave/San Bernardino Ave

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: B[ 10.0]

| Approach: | North Bound | South Bound | East Bound   | West Bound   |
|-----------|-------------|-------------|--------------|--------------|
| Movement: | L - T - R   | L - T - R   | L - T - R    | L - T - R    |
| Control:  | Stop Sign   | Stop Sign   | Uncontrolled | Uncontrolled |
| Rights:   | Include     | Include     | Include      | Include      |
| Lanes:    | 0 0 1 0 0   | 0 0 0 0 0   | 0 0 2 0 1    | 1 0 2 0 0    |

| Volume Module: | Base Vol: | Growth Adj: | Initial Bse: | Added Vol: | PasserByVol: | Initial Fut: | User Adj: | PHF Adj:  | PHF Volume: | Reduct Vol: | FinalVolume: |
|----------------|-----------|-------------|--------------|------------|--------------|--------------|-----------|-----------|-------------|-------------|--------------|
|                | 7 0       | 1.00 1.00   | 7 0          | 0 0        | 0 0          | 7 0          | 1.00 1.00 | 0.95 0.95 | 7 0         | 0 0         | 7 0          |
|                | 36        | 1.00 1.00   | 36           | 0 0        | 0 0          | 36           | 1.00 1.00 | 0.95 0.95 | 38          | 0 0         | 38           |
|                | 0 0       | 1.00 1.00   | 0 0          | 0 0        | 0 0          | 0 0          | 1.00 1.00 | 0.95 0.95 | 0 0         | 0 0         | 0 0          |
|                | 0 244     | 1.00 1.00   | 0 244        | 0 52       | 0 0          | 0 244        | 1.00 1.00 | 0.95 0.95 | 312         | 0 0         | 312          |
|                | 5         | 1.00 1.00   | 5            | 0 8        | 0 0          | 5            | 1.00 1.00 | 0.95 0.95 | 26          | 0 0         | 26           |
|                | 25 315    | 1.00 1.00   | 25 315       | 0 8        | 0 0          | 25 315       | 1.00 1.00 | 0.95 0.95 | 340         | 0 0         | 340          |
|                | 0 0       | 1.00 1.00   | 0 0          | 0 0        | 0 0          | 0 0          | 1.00 1.00 | 0.95 0.95 | 0 0         | 0 0         | 0 0          |

| Critical Gap Module: | Critical Gap: | FollowUpTim: |
|----------------------|---------------|--------------|
|                      | 6.8 6.5       | 3.5 4.0      |
|                      | 6.9           | 3.3          |

| Capacity Module: | Cnflct Vol: | Potent Cap.: | Move Cap.: | Volume/Cap: |
|------------------|-------------|--------------|------------|-------------|
|                  | 534 704     | 481 364      | 473 356    | 0.02 0.00   |
|                  | 156         | 868          | 868        | 0.04        |
|                  | xxxx xxxx   | xxxx xxxx    | xxxx xxxx  | xxxx xxxx   |
|                  | 317         | 1255         | 1255       | 0.02        |
|                  | xxxx xxxx   | xxxx xxxx    | xxxx xxxx  | xxxx xxxx   |

| Level Of Service Module: | 2Way95thQ: | Control Del: | LOS by Move: | Movement:     | Shared Cap.: | SharedQueue: | Shrd ConDel: | Shared LOS: | ApproachDel: | ApproachLOS: |
|--------------------------|------------|--------------|--------------|---------------|--------------|--------------|--------------|-------------|--------------|--------------|
|                          | xxxx xxxx  | xxxxxx       | *            | LT - LTR - RT | 764          | 0.2          | 10.0         | B           | 10.0         | B            |
|                          | xxxx xxxx  | xxxxxx       | *            | LT - LTR - RT | xxxx         | xxxx         | xxxx         | *           | xxxxxx       | *            |
|                          | xxxx xxxx  | xxxxxx       | *            | LT - LTR - RT | xxxx         | xxxx         | xxxx         | *           | xxxxxx       | *            |
|                          | 0.1        | 7.9          | A            | LT - LTR - RT | xxxx         | xxxx         | xxxx         | *           | xxxxxx       | *            |
|                          | xxxx xxxx  | xxxxxx       | *            | LT - LTR - RT | xxxx         | xxxx         | xxxx         | *           | xxxxxx       | *            |
|                          | xxxx xxxx  | xxxxxx       | *            | LT - LTR - RT | xxxx         | xxxx         | xxxx         | *           | xxxxxx       | *            |
|                          | xxxx xxxx  | xxxxxx       | *            | LT - LTR - RT | xxxx         | xxxx         | xxxx         | *           | xxxxxx       | *            |
|                          | xxxx xxxx  | xxxxxx       | *            | LT - LTR - RT | xxxx         | xxxx         | xxxx         | *           | xxxxxx       | *            |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #21 Banana Ave/Valley Blvd

Average Delay (sec/veh): 1.0 Worst Case Level Of Service: C[ 24.3]

Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Stop Sign Stop Sign Uncontrolled Uncontrolled  
Rights: Include Include Include Include  
Lanes: 0 0 1! 0 0 0 0 1! 0 0 1 0 2 0 1 1 0 1 1 0

Volume Module:

Base Vol: 4 0 1 14 0 22 50 424 18 12 609 40  
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
Initial Bse: 4 0 1 14 0 22 50 424 18 12 609 40  
Added Vol: 0 0 0 0 0 0 0 148 0 0 30 0  
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0  
Initial Fut: 4 0 1 14 0 22 50 572 18 12 639 40  
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95  
PHF Volume: 4 0 1 15 0 23 53 602 19 13 673 42  
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
FinalVolume: 4 0 1 15 0 23 53 602 19 13 673 42

Critical Gap Module:

Critical Gp: 7.5 6.5 6.9 7.5 6.5 6.9 4.1 xxxx xxxxx 4.1 xxxx xxxxx  
FollowUpTim: 3.5 4.0 3.3 3.5 4.0 3.3 2.2 xxxx xxxxx 2.2 xxxx xxxxx

Capacity Module:

Cnflct Vol: 1069 1447 301 1125 1445 357 715 xxxx xxxxx 621 xxxx xxxxx  
Potent Cap.: 178 133 701 162 133 645 895 xxxx xxxxx 969 xxxx xxxxx  
Move Cap.: 163 123 701 153 124 645 895 xxxx xxxxx 969 xxxx xxxxx  
Volume/Cap: 0.03 0.00 0.00 0.10 0.00 0.04 0.06 xxxx xxxxx 0.01 xxxx xxxxx

Level Of Service Module:

2Way95thQ: xxxx xxxx xxxxx xxxx xxxx xxxxx 0.2 xxxx xxxxx 0.0 xxxx xxxxx  
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx 9.3 xxxx xxxxx 8.8 xxxx xxxxx  
LOS by Move: \* \* \* \* \* A \* \* \* A \* \* \*  
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT  
Shared Cap.: xxxx 192 xxxxx xxxx 287 xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx  
SharedQueue:xxxxx 0.1 xxxxx xxxxx 0.5 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx  
Shrd ConDel:xxxxx 24.3 xxxxx xxxxx 19.4 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx  
Shared LOS: \* C \* \* C \* \* \* \*  
ApproachDel: 24.3 19.4 xxxxxx xxxxxx  
ApproachLOS: C C \* \*

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #22 Cherry Ave/San Bernardino Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 1.200

Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 90.0

Optimal Cycle: 180 Level Of Service: F

Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected  
Rights: Include Ignore Ignore Include  
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0

Lanes: 1 0 2 1 0 1 0 3 0 1 1 0 2 0 1 1 0 1 1 0

Volume Module:

Base Vol: 45 595 68 63 753 142 137 60 60 173 129 65  
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
Initial Bse: 45 595 68 63 753 142 137 60 60 173 129 65  
Added Vol: 0 630 2 0 3519 108 16 7 0 15 45 0  
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0  
Initial Fut: 45 1225 70 63 4272 250 153 67 60 188 174 65  
User Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 0.00 1.00 1.00 1.00  
PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.00 0.95 0.95 0.00 0.95 0.95 0.95  
PHF Volume: 47 1289 74 66 4497 0 161 71 0 198 183 68  
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
Reduced Vol: 47 1289 74 66 4497 0 161 71 0 198 183 68  
PCE Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 0.00 1.00 1.00 1.00  
MLF Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 0.00 1.00 1.00 1.00  
FinalVolume: 47 1289 74 66 4497 0 161 71 0 198 183 68

Saturation Flow Module:

Sat/Lane: 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800  
Adjustment: 1.00 0.91 0.91 1.00 0.91 1.00 1.00 0.95 1.00 1.00 0.95 0.95  
Lanes: 1.00 2.84 0.16 1.00 3.00 1.00 1.00 2.00 1.00 1.00 1.46 0.54  
Final Sat.: 1800 4648 266 1800 4914 1800 1800 3420 1800 1800 2490 930

Capacity Analysis Module:

Vol/Sat: 0.03 0.28 0.28 0.04 0.92 0.00 0.09 0.02 0.00 0.11 0.07 0.07  
Crit Moves: \*\*\*\* \*\*\*\* \*\*\*\*  
Green/Cycle: 0.02 0.69 0.69 0.09 0.76 0.00 0.07 0.02 0.00 0.11 0.06 0.06  
Volume/Cap: 1.20 0.40 0.40 0.40 1.20 0.00 1.20 0.96 0.00 0.96 1.20 1.20  
Delay/Veh: 257.4 6.6 6.6 44.4 105 0.0 187.7 140 0.0 95.6 174 173.8  
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
AdjDel/Veh: 257.4 6.6 6.6 44.4 105 0.0 187.7 140 0.0 95.6 174 173.8  
LOS by Move: F A A D F A F F A F F F  
HCM2kAvgQ: 4 7 7 2 85 0 11 3 0 10 9 9

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #23 Cherry Ave/Valley Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 1.910  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 303.6  
Optimal Cycle: 180 Level Of Service: F

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |   |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |   |
| Lanes:      | 1           | 0 | 2 | 0           | 1 | 1 | 0          | 2 | 0 | 1          | 1 | 0 | 2 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 152  | 614  | 232  | 93   | 702  | 127  | 86   | 195  | 151  | 368  | 715  | 107  |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 152  | 614  | 232  | 93   | 702  | 127  | 86   | 195  | 151  | 368  | 715  | 107  |
| Added Vol:   | 64   | 972  | 70   | 3    | 3464 | 0    | 0    | 56   | 57   | 20   | 66   | 17   |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 216  | 1586 | 302  | 96   | 4166 | 127  | 86   | 251  | 208  | 388  | 781  | 124  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 227  | 1669 | 318  | 101  | 4385 | 134  | 91   | 264  | 219  | 408  | 822  | 131  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 227  | 1669 | 318  | 101  | 4385 | 134  | 91   | 264  | 219  | 408  | 822  | 131  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 227  | 1669 | 318  | 101  | 4385 | 134  | 91   | 264  | 219  | 408  | 822  | 131  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 |

Capacity Analysis Module:

|              |       |      |      |      |      |      |       |      |       |       |      |      |
|--------------|-------|------|------|------|------|------|-------|------|-------|-------|------|------|
| Vol/Sat:     | 0.13  | 0.49 | 0.18 | 0.06 | 1.28 | 0.07 | 0.05  | 0.08 | 0.12  | 0.23  | 0.24 | 0.07 |
| Crit Moves:  | ***   |      |      | ***  |      |      |       |      | ***   |       |      | ***  |
| Green/Cycle: | 0.07  | 0.66 | 0.66 | 0.08 | 0.67 | 0.67 | 0.03  | 0.06 | 0.06  | 0.12  | 0.15 | 0.15 |
| Volume/Cap:  | 1.91  | 0.74 | 0.27 | 0.74 | 1.91 | 0.11 | 1.59  | 1.21 | 1.91  | 1.91  | 1.59 | 0.48 |
| Delay/Veh:   | 485.7 | 12.5 | 7.1  | 64.1 | 428  | 5.9  | 383.0 | 177  | 486.9 | 470.5 | 318  | 40.2 |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00  | 1.00  | 1.00 | 1.00 |
| AdjDel/Veh:  | 485.7 | 12.5 | 7.1  | 64.1 | 428  | 5.9  | 383.0 | 177  | 486.9 | 470.5 | 318  | 40.2 |
| LOS by Move: | F     | B    | A    | E    | F    | A    | F     | F    | F     | F     | F    | D    |
| HCM2kAvgQ:   | 22    | 19   | 4    | 5    | 204  | 1    | 9     | 10   | 21    | 38    | 35   | 4    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #26 Cherry Ave/Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 2.355  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 529.7  
Optimal Cycle: 180 Level Of Service: F

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 1 | 1 | 0          | 1 | 1 | 0          | 1 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 28   | 474  | 16   | 420  | 347  | 557  | 211  | 148  | 13   | 33   | 321  | 232  |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 28   | 474  | 16   | 420  | 347  | 557  | 211  | 148  | 13   | 33   | 321  | 232  |
| Added Vol:   | 211  | 731  | 130  | 789  | 3785 | 468  | 149  | 652  | 376  | 335  | 455  | 241  |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 239  | 1205 | 146  | 1209 | 4132 | 1025 | 360  | 800  | 389  | 368  | 776  | 473  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 252  | 1268 | 154  | 1273 | 4349 | 1079 | 379  | 842  | 409  | 387  | 817  | 498  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 252  | 1268 | 154  | 1273 | 4349 | 1079 | 379  | 842  | 409  | 387  | 817  | 498  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 252  | 1268 | 154  | 1273 | 4349 | 1079 | 379  | 842  | 409  | 387  | 817  | 498  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 1.60 | 0.40 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 2740 | 680  | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 |

Capacity Analysis Module:

|              |       |      |      |       |      |       |       |      |       |       |      |
|--------------|-------|------|------|-------|------|-------|-------|------|-------|-------|------|
| Vol/Sat:     | 0.14  | 0.37 | 0.09 | 0.71  | 1.59 | 0.21  | 0.25  | 0.23 | 0.22  | 0.24  | 0.28 |
| Crit Moves:  | ***   |      |      | ***   |      | ***   |       |      | ***   |       | ***  |
| Green/Cycle: | 0.06  | 0.25 | 0.25 | 0.48  | 0.67 | 0.09  | 0.11  | 0.11 | 0.10  | 0.12  | 0.12 |
| Volume/Cap:  | 2.36  | 1.47 | 0.34 | 1.47  | 2.36 | 2.36  | 2.23  | 2.06 | 2.23  | 2.03  | 2.36 |
| Delay/Veh:   | 685.0 | 255  | 31.0 | 243.8 | 628  | 627.6 | 674.4 | 607  | 539.1 | 617.4 | 518  |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00  | 1.00 | 1.00  | 1.00  | 1.00 | 1.00  | 1.00  | 1.00 |
| AdjDel/Veh:  | 685.0 | 255  | 31.0 | 243.8 | 628  | 627.6 | 674.4 | 607  | 539.1 | 617.4 | 518  |
| LOS by Move: | F     | F    | C    | F     | F    | F     | F     | F    | F     | F     | F    |
| HCM2kAvgQ:   | 27    | 48   | 4    | 89    | 287  | 287   | 39    | 45   | 40    | 39    | 41   |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #27 Cherry Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 1.417  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 162.0  
Optimal Cycle: 180 Level Of Service: F

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Permitted  |   |   | Permitted  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 1           | 0 | 2 | 0          | 1 | 0 | 0          | 1 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 17   | 454  | 10   | 41   | 358  | 162  | 222  | 43   | 67   | 8    | 91   | 19   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 17   | 454  | 10   | 41   | 358  | 162  | 222  | 43   | 67   | 8    | 91   | 19   |
| Added Vol:   | 496  | 756  | 28   | 241  | 2333 | 932  | 138  | 0    | 70   | 7    | 0    | 35   |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 513  | 1210 | 38   | 282  | 2691 | 1094 | 360  | 43   | 137  | 15   | 91   | 54   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 540  | 1274 | 40   | 297  | 2833 | 1152 | 379  | 45   | 144  | 16   | 96   | 57   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 540  | 1274 | 40   | 297  | 2833 | 1152 | 379  | 45   | 144  | 16   | 96   | 57   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 540  | 1274 | 40   | 297  | 2833 | 1152 | 379  | 45   | 144  | 16   | 96   | 57   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 2.91 | 0.09 | 1.00 | 2.13 | 0.87 | 1.00 | 0.24 | 0.76 | 0.14 | 0.86 | 1.00 |
| Final Sat.: | 1800 | 4764 | 150  | 1800 | 3494 | 1420 | 1710 | 409  | 1301 | 255  | 1545 | 1800 |

Capacity Analysis Module:

|              |       |      |      |      |      |       |       |      |      |      |      |      |
|--------------|-------|------|------|------|------|-------|-------|------|------|------|------|------|
| Vol/Sat:     | 0.30  | 0.27 | 0.27 | 0.16 | 0.81 | 0.81  | 0.22  | 0.11 | 0.11 | 0.06 | 0.06 | 0.03 |
| Crit Moves:  | ****  |      |      | **** |      |       | ****  |      |      |      |      |      |
| Green/Cycle: | 0.21  | 0.48 | 0.48 | 0.30 | 0.57 | 0.57  | 0.16  | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 |
| Volume/Cap:  | 1.42  | 0.55 | 0.55 | 0.55 | 1.42 | 1.42  | 1.42  | 0.71 | 0.71 | 0.40 | 0.40 | 0.20 |
| Delay/Veh:   | 242.1 | 18.4 | 18.4 | 30.7 | 211  | 211.4 | 244.2 | 43.0 | 43.0 | 38.9 | 38.9 | 37.1 |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 242.1 | 18.4 | 18.4 | 30.7 | 211  | 211.4 | 244.2 | 43.0 | 43.0 | 38.9 | 38.9 | 37.1 |
| LOS by Move: | F     | B    | B    | C    | F    | F     | F     | D    | D    | D    | D    | D    |
| HCM2kAvgQ:   | 38    | 11   | 11   | 8    | 97   | 97    | 29    | 7    | 7    | 3    | 3    | 2    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #28 Cherry Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 1.370  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 128.0  
Optimal Cycle: 180 Level Of Service: F

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 2 | 0           | 2 | 0 | 2          | 0 | 2 | 1          | 0 | 2 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 387  | 402  | 69   | 151  | 402  | 174  | 161  | 496  | 224  | 85   | 920  | 121  |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 387  | 402  | 69   | 151  | 402  | 174  | 161  | 496  | 224  | 85   | 920  | 121  |
| Added Vol:   | 80   | 605  | 147  | 547  | 116  | 652  | 575  | 1084 | 12   | 22   | 426  | 434  |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 467  | 1007 | 216  | 698  | 518  | 826  | 736  | 1580 | 236  | 107  | 1346 | 555  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 492  | 1060 | 227  | 735  | 545  | 869  | 775  | 1663 | 248  | 113  | 1417 | 584  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 492  | 1060 | 227  | 735  | 545  | 869  | 775  | 1663 | 248  | 113  | 1417 | 584  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 492  | 1060 | 227  | 735  | 545  | 869  | 775  | 1663 | 248  | 113  | 1417 | 584  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.91 | 0.91 | 0.97 | 0.95 | 1.00 |
| Lanes:      | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 2.61 | 0.39 | 2.00 | 2.00 | 1.00 |
| Final Sat.: | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 | 3492 | 4275 | 639  | 3492 | 3420 | 1800 |

Capacity Analysis Module:

|              |       |      |      |       |      |       |       |      |      |       |      |      |
|--------------|-------|------|------|-------|------|-------|-------|------|------|-------|------|------|
| Vol/Sat:     | 0.14  | 0.31 | 0.13 | 0.21  | 0.16 | 0.48  | 0.22  | 0.39 | 0.39 | 0.03  | 0.41 | 0.32 |
| Crit Moves:  | ****  |      |      | ****  |      |       | ****  |      |      | ****  |      |      |
| Green/Cycle: | 0.10  | 0.27 | 0.27 | 0.18  | 0.35 | 0.35  | 0.16  | 0.43 | 0.43 | 0.04  | 0.30 | 0.30 |
| Volume/Cap:  | 1.37  | 1.14 | 0.47 | 1.14  | 0.45 | 1.37  | 1.37  | 0.91 | 0.91 | 0.91  | 1.37 | 1.07 |
| Delay/Veh:   | 228.0 | 113  | 31.1 | 122.5 | 25.2 | 208.6 | 219.2 | 32.9 | 32.9 | 101.1 | 207  | 94.5 |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00  | 1.00 | 1.00  | 1.00  | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 |
| AdjDel/Veh:  | 228.0 | 113  | 31.1 | 122.5 | 25.2 | 208.6 | 219.2 | 32.9 | 32.9 | 101.1 | 207  | 94.5 |
| LOS by Move: | F     | F    | C    | F     | C    | F     | F     | C    | C    | F     | F    | F    |
| HCM2kAvgQ:   | 18    | 29   | 6    | 21    | 7    | 57    | 28    | 24   | 24   | 4     | 49   | 28   |

Note: Queue reported is the number of cars per lane.

Lanes, Volumes, Timings  
3: VALLEY BLVD & FONTANA

EXISTING WITH PROJECT - AM PEAK HOUR

6/25/2009

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL2                                                                              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                                | WBR2                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | NBR2                                                                                |
| Lane Configurations     |                                                                                   |  |  |  |  |  |                                                                                    |  |                                                                                     |  |                                                                                     |  |
| Volume (vph)            | 72                                                                                | 82                                                                                | 459                                                                               | 8                                                                                 | 4                                                                                 | 495                                                                               | 62                                                                                 | 16                                                                                  | 25                                                                                  | 13                                                                                  | 5                                                                                   | 10                                                                                  |
| Ideal Flow (vphpl)      | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Lane Util. Factor       | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 0.91                                                                              | 0.91                                                                               | 0.91                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Frt                     |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   | 0.983                                                                             |                                                                                    | 0.850                                                                               |                                                                                     | 0.983                                                                               |                                                                                     | 0.850                                                                               |
| Flt Protected           |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                    |                                                                                     |                                                                                     | 0.972                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)       | 0                                                                                 | 1710                                                                              | 3420                                                                              | 1530                                                                              | 1710                                                                              | 3220                                                                              | 0                                                                                  | 1392                                                                                | 0                                                                                   | 1720                                                                                | 0                                                                                   | 1530                                                                                |
| Flt Permitted           |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                    |                                                                                     |                                                                                     | 0.792                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)       | 0                                                                                 | 1710                                                                              | 3420                                                                              | 1530                                                                              | 1710                                                                              | 3220                                                                              | 0                                                                                  | 1392                                                                                | 0                                                                                   | 1401                                                                                | 0                                                                                   | 1530                                                                                |
| Right Turn on Red       |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                    | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)       |                                                                                   |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   |                                                                                    | 15                                                                                  |                                                                                     |                                                                                     |                                                                                     | 11                                                                                  |
| Link Speed (mph)        |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                    |                                                                                     |                                                                                     | 30                                                                                  |                                                                                     |                                                                                     |
| Link Distance (ft)      |                                                                                   |                                                                                   | 807                                                                               |                                                                                   |                                                                                   | 830                                                                               |                                                                                    |                                                                                     |                                                                                     | 743                                                                                 |                                                                                     |                                                                                     |
| Travel Time (s)         |                                                                                   |                                                                                   | 18.3                                                                              |                                                                                   |                                                                                   | 18.9                                                                              |                                                                                    |                                                                                     |                                                                                     | 16.9                                                                                |                                                                                     |                                                                                     |
| Peak Hour Factor        | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                               | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                |
| Heavy Vehicles (%)      | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                 | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Shared Lane Traffic (%) |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 10%                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)   | 0                                                                                 | 162                                                                               | 483                                                                               | 8                                                                                 | 4                                                                                 | 588                                                                               | 0                                                                                  | 15                                                                                  | 0                                                                                   | 45                                                                                  | 0                                                                                   | 11                                                                                  |
| Turn Type               | Prot                                                                              | Prot                                                                              |                                                                                   | Perm                                                                              | Prot                                                                              |                                                                                   |                                                                                    | Perm                                                                                | Perm                                                                                |                                                                                     |                                                                                     | Perm                                                                                |
| Protected Phases        | 7                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 3                                                                                 | 8                                                                                 |                                                                                    |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |                                                                                     |
| Permitted Phases        |                                                                                   |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   |                                                                                    | 8                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |
| Detector Phase          | 7                                                                                 | 7                                                                                 | 4                                                                                 | 4                                                                                 | 3                                                                                 | 8                                                                                 |                                                                                    | 8                                                                                   | 2                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |                                                                                    | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 |                                                                                     | 4.0                                                                                 |
| Minimum Split (s)       | 8.0                                                                               | 8.0                                                                               | 20.0                                                                              | 20.0                                                                              | 8.0                                                                               | 20.0                                                                              |                                                                                    | 20.0                                                                                | 20.0                                                                                | 20.0                                                                                |                                                                                     | 20.0                                                                                |
| Total Split (s)         | 13.0                                                                              | 13.0                                                                              | 25.0                                                                              | 25.0                                                                              | 8.0                                                                               | 20.0                                                                              | 0.0                                                                                | 20.0                                                                                | 22.0                                                                                | 22.0                                                                                | 0.0                                                                                 | 22.0                                                                                |
| Total Split (%)         | 16.3%                                                                             | 16.3%                                                                             | 31.3%                                                                             | 31.3%                                                                             | 10.0%                                                                             | 25.0%                                                                             | 0.0%                                                                               | 25.0%                                                                               | 27.5%                                                                               | 27.5%                                                                               | 0.0%                                                                                | 27.5%                                                                               |
| Maximum Green (s)       | 9.0                                                                               | 9.0                                                                               | 21.0                                                                              | 21.0                                                                              | 4.0                                                                               | 16.0                                                                              |                                                                                    | 16.0                                                                                | 18.0                                                                                | 18.0                                                                                |                                                                                     | 18.0                                                                                |
| Yellow Time (s)         | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               |                                                                                    | 3.5                                                                                 | 3.5                                                                                 | 3.5                                                                                 |                                                                                     | 3.5                                                                                 |
| All-Red Time (s)        | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               |                                                                                    | 0.5                                                                                 | 0.5                                                                                 | 0.5                                                                                 |                                                                                     | 0.5                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               | Lag                                                                               | Lead                                                                              | Lag                                                                               |                                                                                    | Lag                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               |                                                                                    | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                    | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |                                                                                     | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              |                                                                                    | None                                                                                | None                                                                                | None                                                                                |                                                                                     | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               |                                                                                    | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |                                                                                     | 5.0                                                                                 |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 11.0                                                                              | 11.0                                                                              |                                                                                   | 11.0                                                                              |                                                                                    | 11.0                                                                                | 11.0                                                                                | 11.0                                                                                |                                                                                     | 11.0                                                                                |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                    | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |
| Act Effect Green (s)    |                                                                                   | 9.1                                                                               | 27.4                                                                              | 27.4                                                                              | 4.1                                                                               | 15.5                                                                              |                                                                                    | 15.5                                                                                |                                                                                     | 9.8                                                                                 |                                                                                     | 9.8                                                                                 |
| Actuated g/C Ratio      |                                                                                   | 0.13                                                                              | 0.40                                                                              | 0.40                                                                              | 0.06                                                                              | 0.23                                                                              |                                                                                    | 0.23                                                                                |                                                                                     | 0.14                                                                                |                                                                                     | 0.14                                                                                |
| v/c Ratio               |                                                                                   | 0.70                                                                              | 0.35                                                                              | 0.01                                                                              | 0.04                                                                              | 0.80                                                                              |                                                                                    | 0.05                                                                                |                                                                                     | 0.22                                                                                |                                                                                     | 0.05                                                                                |
| Control Delay           |                                                                                   | 50.6                                                                              | 17.7                                                                              | 11.1                                                                              | 34.8                                                                              | 36.6                                                                              |                                                                                    | 12.7                                                                                |                                                                                     | 29.8                                                                                |                                                                                     | 14.7                                                                                |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                    | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |
| Total Delay             |                                                                                   | 50.6                                                                              | 17.7                                                                              | 11.1                                                                              | 34.8                                                                              | 36.6                                                                              |                                                                                    | 12.7                                                                                |                                                                                     | 29.8                                                                                |                                                                                     | 14.7                                                                                |
| LOS                     |                                                                                   | D                                                                                 | B                                                                                 | B                                                                                 | C                                                                                 | D                                                                                 |                                                                                    | B                                                                                   |                                                                                     | C                                                                                   |                                                                                     | B                                                                                   |
| Approach Delay          |                                                                                   |                                                                                   | 25.8                                                                              |                                                                                   |                                                                                   | 36.0                                                                              |                                                                                    |                                                                                     |                                                                                     | 26.9                                                                                |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                    |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |                                                                                     |
| Queue Length 50th (ft)  |                                                                                   | 71                                                                                | 75                                                                                | 0                                                                                 | 2                                                                                 | 136                                                                               |                                                                                    | 0                                                                                   |                                                                                     | 18                                                                                  |                                                                                     | 0                                                                                   |

Lanes, Volumes, Timings  
3: VALLEY BLVD & FONTANA

EXISTING WITH PROJECT - AM PEAK HOUR

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| Lane Group              | SBL2                                                                              | SBL                                                                               | SBT                                                                               | SBR                                                                               | SWL2                                                                              | SWL                                                                               | SWR                                                                                | SWR2                                                                                |
| Lane Configurations     |                                                                                   |                                                                                   |  |  |                                                                                   |  |                                                                                    |                                                                                     |
| Volume (vph)            | 1                                                                                 | 75                                                                                | 4                                                                                 | 78                                                                                | 9                                                                                 | 22                                                                                | 317                                                                                | 5                                                                                   |
| Ideal Flow (vphpl)      | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                |
| Lane Util. Factor       | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                |
| Frt                     |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   | 0.877                                                                             |                                                                                    |                                                                                     |
| Flt Protected           |                                                                                   |                                                                                   | 0.955                                                                             |                                                                                   |                                                                                   | 0.996                                                                             |                                                                                    |                                                                                     |
| Satd. Flow (prot)       | 0                                                                                 | 0                                                                                 | 1719                                                                              | 1530                                                                              | 0                                                                                 | 1572                                                                              | 0                                                                                  | 0                                                                                   |
| Flt Permitted           |                                                                                   |                                                                                   | 0.703                                                                             |                                                                                   |                                                                                   | 0.996                                                                             |                                                                                    |                                                                                     |
| Satd. Flow (perm)       | 0                                                                                 | 0                                                                                 | 1265                                                                              | 1530                                                                              | 0                                                                                 | 1572                                                                              | 0                                                                                  | 0                                                                                   |
| Right Turn on Red       |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                    | No                                                                                  |
| Satd. Flow (RTOR)       |                                                                                   |                                                                                   |                                                                                   | 82                                                                                |                                                                                   |                                                                                   |                                                                                    |                                                                                     |
| Link Speed (mph)        |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                    |                                                                                     |
| Link Distance (ft)      |                                                                                   |                                                                                   | 792                                                                               |                                                                                   |                                                                                   | 998                                                                               |                                                                                    |                                                                                     |
| Travel Time (s)         |                                                                                   |                                                                                   | 18.0                                                                              |                                                                                   |                                                                                   | 22.7                                                                              |                                                                                    |                                                                                     |
| Peak Hour Factor        | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                               | 0.95                                                                                |
| Heavy Vehicles (%)      | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                 | 0%                                                                                  |
| Shared Lane Traffic (%) |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |
| Lane Group Flow (vph)   | 0                                                                                 | 0                                                                                 | 84                                                                                | 82                                                                                | 0                                                                                 | 371                                                                               | 0                                                                                  | 0                                                                                   |
| Turn Type               | Perm                                                                              | Perm                                                                              |                                                                                   | Perm                                                                              | Perm                                                                              |                                                                                   |                                                                                    |                                                                                     |
| Protected Phases        |                                                                                   |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                    |                                                                                     |
| Permitted Phases        | 2                                                                                 | 2                                                                                 |                                                                                   | 2                                                                                 | 6                                                                                 |                                                                                   |                                                                                    |                                                                                     |
| Detector Phase          | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 | 6                                                                                 | 6                                                                                 |                                                                                    |                                                                                     |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |
| Minimum Initial (s)     | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |                                                                                    |                                                                                     |
| Minimum Split (s)       | 20.0                                                                              | 20.0                                                                              | 20.0                                                                              | 20.0                                                                              | 20.0                                                                              | 20.0                                                                              |                                                                                    |                                                                                     |
| Total Split (s)         | 22.0                                                                              | 22.0                                                                              | 22.0                                                                              | 22.0                                                                              | 25.0                                                                              | 25.0                                                                              | 0.0                                                                                | 0.0                                                                                 |
| Total Split (%)         | 27.5%                                                                             | 27.5%                                                                             | 27.5%                                                                             | 27.5%                                                                             | 31.3%                                                                             | 31.3%                                                                             | 0.0%                                                                               | 0.0%                                                                                |
| Maximum Green (s)       | 18.0                                                                              | 18.0                                                                              | 18.0                                                                              | 18.0                                                                              | 21.0                                                                              | 21.0                                                                              |                                                                                    |                                                                                     |
| Yellow Time (s)         | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               |                                                                                    |                                                                                     |
| All-Red Time (s)        | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               |                                                                                    |                                                                                     |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |
| Total Lost Time (s)     | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                | 4.0                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                    |                                                                                     |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              |                                                                                    |                                                                                     |
| Walk Time (s)           | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                    |                                                                                     |
| Flash Dont Walk (s)     | 11.0                                                                              | 11.0                                                                              | 11.0                                                                              | 11.0                                                                              | 11.0                                                                              | 11.0                                                                              |                                                                                    |                                                                                     |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                    |                                                                                     |
| Act Effect Green (s)    |                                                                                   |                                                                                   | 9.8                                                                               | 9.8                                                                               |                                                                                   | 19.8                                                                              |                                                                                    |                                                                                     |
| Actuated g/C Ratio      |                                                                                   |                                                                                   | 0.14                                                                              | 0.14                                                                              |                                                                                   | 0.29                                                                              |                                                                                    |                                                                                     |
| v/c Ratio               |                                                                                   |                                                                                   | 0.46                                                                              | 0.28                                                                              |                                                                                   | 0.81                                                                              |                                                                                    |                                                                                     |
| Control Delay           |                                                                                   |                                                                                   | 36.8                                                                              | 9.8                                                                               |                                                                                   | 40.6                                                                              |                                                                                    |                                                                                     |
| Queue Delay             |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               |                                                                                    |                                                                                     |
| Total Delay             |                                                                                   |                                                                                   | 36.8                                                                              | 9.8                                                                               |                                                                                   | 40.6                                                                              |                                                                                    |                                                                                     |
| LOS                     |                                                                                   |                                                                                   | D                                                                                 | A                                                                                 |                                                                                   | D                                                                                 |                                                                                    |                                                                                     |
| Approach Delay          |                                                                                   |                                                                                   | 23.5                                                                              |                                                                                   |                                                                                   | 40.6                                                                              |                                                                                    |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                    |                                                                                     |
| Queue Length 50th (ft)  |                                                                                   |                                                                                   | 35                                                                                | 0                                                                                 |                                                                                   | 152                                                                               |                                                                                    |                                                                                     |

Lanes, Volumes, Timings  
3: VALLEY BLVD & FONTANA

EXISTING WITH PROJECT - AM PEAK HOUR

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| Lane Group              | EBL2                                                                              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                                | WBR2                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | NBR2                                                                                |
| Queue Length 95th (ft)  |                                                                                   | #177                                                                              | 147                                                                               | 10                                                                                | 11                                                                                | #243                                                                              |                                                                                    | 16                                                                                  |                                                                                     | 46                                                                                  |                                                                                     | 13                                                                                  |
| Internal Link Dist (ft) |                                                                                   |                                                                                   | 727                                                                               |                                                                                   |                                                                                   | 750                                                                               |                                                                                    |                                                                                     |                                                                                     | 663                                                                                 |                                                                                     |                                                                                     |
| Turn Bay Length (ft)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 233                                                                               | 1376                                                                              | 621                                                                               | 104                                                                               | 780                                                                               |                                                                                    | 349                                                                                 |                                                                                     | 382                                                                                 |                                                                                     | 425                                                                                 |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 0                                                                                   |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.70                                                                              | 0.35                                                                              | 0.01                                                                              | 0.04                                                                              | 0.75                                                                              |                                                                                    | 0.04                                                                                |                                                                                     | 0.12                                                                                |                                                                                     | 0.03                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 80

Actuated Cycle Length: 68

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.81

Intersection Signal Delay: 31.9

Intersection LOS: C

Intersection Capacity Utilization 73.2%

ICU Level of Service D

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 3: VALLEY BLVD & FONTANA

|                                                                                                                                                                            |                                                                                        |                                                                                        |                                                                                         |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
|   ø2 |  ø6 |  ø3 |  ø4  |
| 22 s                                                                                                                                                                       | 25 s                                                                                   | 8 s                                                                                    | 25 s                                                                                    |
|                                                                                                                                                                            |                                                                                        |  ø7 |  ø8 |
|                                                                                                                                                                            |                                                                                        | 13 s                                                                                   | 20 s                                                                                    |

Lanes, Volumes, Timings  
3: VALLEY BLVD & FONTANA

EXISTING WITH PROJECT - AM PEAK HOUR

6/25/2009

|                         |  |     |      |      |      |      |     |      |
|-------------------------|------------------------------------------------------------------------------------|-----|------|------|------|------|-----|------|
| Lane Group              | SBL2                                                                               | SBL | SBT  | SBR  | SWL2 | SWL  | SWR | SWR2 |
| Queue Length 95th (ft)  |                                                                                    |     | 75   | 35   |      | #317 |     |      |
| Internal Link Dist (ft) |                                                                                    |     | 712  |      |      | 918  |     |      |
| Turn Bay Length (ft)    |                                                                                    |     |      |      |      |      |     |      |
| Base Capacity (vph)     |                                                                                    |     | 345  | 477  |      | 500  |     |      |
| Starvation Cap Reductn  |                                                                                    |     | 0    | 0    |      | 0    |     |      |
| Spillback Cap Reductn   |                                                                                    |     | 0    | 0    |      | 0    |     |      |
| Storage Cap Reductn     |                                                                                    |     | 0    | 0    |      | 0    |     |      |
| Reduced v/c Ratio       |                                                                                    |     | 0.24 | 0.17 |      | 0.74 |     |      |
| Intersection Summary    |                                                                                    |     |      |      |      |      |     |      |



FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

## Level Of Service Computation Report

## 2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #30 Beech Ave/Valley Blvd

Average Delay (sec/veh): 8.8 Worst Case Level Of Service: E[ 49.5]

Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Stop Sign Stop Sign Uncontrolled Uncontrolled  
Rights: Include Include Include Include  
Lanes: 0 1 0 0 1 0 1 0 0 1 1 0 1 1 0 1 0 2 0 1

## Volume Module:

Base Vol: 4 2 12 68 3 20 8 376 9 20 348 50  
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
Initial Bse: 4 2 12 68 3 20 8 376 9 20 348 50  
Added Vol: 0 16 8 0 55 55 16 43 0 55 154 0  
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0  
Initial Fut: 4 18 20 68 58 75 24 419 9 75 502 50  
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95  
PHF Volume: 4 19 21 72 61 79 25 441 9 79 528 53  
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
FinalVolume: 4 19 21 72 61 79 25 441 9 79 528 53

## Critical Gap Module:

Critical Gp: 7.5 6.5 6.9 7.5 6.5 6.9 4.1 xxxx xxxxx 4.1 xxxx xxxxx  
FollowUpTim: 3.5 4.0 3.3 3.5 4.0 3.3 2.2 xxxx xxxxx 2.2 xxxx xxxxx

## Capacity Module:

Cnflct Vol: 949 1235 225 967 1187 264 581 xxxx xxxxx 451 xxxx xxxxx  
Potent Cap.: 218 178 784 212 190 740 1003 xxxx xxxxx 1121 xxxx xxxxx  
Move Cap.: 132 161 784 174 172 740 1003 xxxx xxxxx 1121 xxxx xxxxx  
Volume/Cap: 0.03 0.12 0.03 0.41 0.35 0.11 0.03 xxxx xxxxx 0.07 xxxx xxxxx

## Level Of Service Module:

2Way95thQ: xxxx xxxx 0.1 xxxx xxxx 0.4 0.1 xxxx xxxxx 0.2 xxxx xxxxx  
Control Del:xxxxx xxxx 9.7 xxxxx xxxx 10.4 8.7 xxxx xxxxx 8.5 xxxx xxxxx  
LOS by Move: \* \* A \* \* B A \* \* A \* \*  
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT  
Shared Cap.: 155 xxxx xxxxx 173 xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx  
SharedQueue: 0.5 xxxx xxxxx 5.0 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx  
Shrd ConDel: 32.3 xxxx xxxxx 72.7 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx  
Shared LOS: D \* F \* \* \* \* \*  
ApproachDel: 21.5 49.5 xxxxxx xxxxxx  
ApproachLOS: C E \* \*

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

## Level Of Service Computation Report

## 2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #31 Beech Ave/Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 1.577

Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): 228.3

Optimal Cycle: 0 Level Of Service: F

Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Stop Sign Stop Sign Stop Sign Stop Sign  
Rights: Include Include Include Include  
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0  
Lanes: 0 0 1 0 0 0 0 1 0 0 1 0 1 0 1 1 0

## Volume Module:

Base Vol: 72 8 73 8 0 5 427 111 121 381 16  
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
Initial Bse: 72 8 73 8 0 5 427 111 121 381 16  
Added Vol: 63 0 114 0 0 0 796 17 245 1105 0  
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0  
Initial Fut: 135 8 187 8 0 5 5 1223 128 366 1486 16  
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95  
PHF Volume: 142 8 197 8 0 5 5 1287 135 385 1564 17  
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0  
Reduced Vol: 142 8 197 8 0 5 5 1287 135 385 1564 17  
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
FinalVolume: 142 8 197 8 0 5 5 1287 135 385 1564 17

## Saturation Flow Module:

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
Lanes: 0.41 0.02 0.57 0.62 0.00 0.38 1.00 1.81 0.19 1.00 1.98 0.02  
Final Sat.: 221 13 306 255 0 160 430 841 89 469 992 11

## Capacity Analysis Module:

Vol/Sat: 0.64 0.64 0.64 0.03 xxxx 0.03 0.01 1.53 1.52 0.82 1.58 1.57  
Crit Moves: \*\*\*\*  
Delay/Veh: 20.9 20.9 20.9 11.5 0.0 11.5 11.1 269 262.6 37.0 287 286.3  
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
AdjDel/Veh: 20.9 20.9 20.9 11.5 0.0 11.5 11.1 269 262.6 37.0 287 286.3  
LOS by Move: C C C B \* B B F F E F F  
ApproachDel: 20.9 11.5 267.5 238.0  
Delay Adj: 1.00 1.00 1.00 1.00  
ApprAdjDel: 20.9 11.5 267.5 238.0  
LOS by Appr: C B F F  
AllWayAvgQ: 1.7 1.7 1.7 0.0 0.0 0.0 0.0 33.8 32.9 3.5 38.7 38.5

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #32 Beech Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.557  
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 13.3  
Optimal Cycle: 0 Level Of Service: B

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Stop Sign   |   |   | Stop Sign   |   |   | Stop Sign  |   |   | Stop Sign  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 0           | 1 | 0 | 0          | 1 | 0 | 0          | 1 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 8    | 122  | 72   | 22   | 55   | 19   | 50   | 126  | 7    | 38   | 97   | 36   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 8    | 122  | 72   | 22   | 55   | 19   | 50   | 126  | 7    | 38   | 97   | 36   |
| Added Vol:   | 62   | 145  | 0    | 0    | 136  | 125  | 33   | 0    | 12   | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 70   | 267  | 72   | 22   | 191  | 144  | 83   | 126  | 19   | 38   | 97   | 36   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 74   | 281  | 76   | 23   | 201  | 152  | 87   | 133  | 20   | 40   | 102  | 38   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 74   | 281  | 76   | 23   | 201  | 152  | 87   | 133  | 20   | 40   | 102  | 38   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 74   | 281  | 76   | 23   | 201  | 152  | 87   | 133  | 20   | 40   | 102  | 38   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.73 | 1.10 | 0.17 | 0.44 | 1.14 | 0.42 |
| Final Sat.: | 466  | 504  | 551  | 454  | 490  | 539  | 336  | 535  | 82   | 204  | 538  | 206  |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.16 | 0.56 | 0.14 | 0.05 | 0.41 | 0.28 | 0.26 | 0.25 | 0.24 | 0.20 | 0.19 | 0.18 |
| Crit Moves:  | ***  |      |      | ***  |      |      | ***  |      |      | ***  |      |      |
| Delay/Veh:   | 11.4 | 17.5 | 9.9  | 10.6 | 14.3 | 11.4 | 12.5 | 11.9 | 11.7 | 11.7 | 11.3 | 11.0 |
| Delay Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 11.4 | 17.5 | 9.9  | 10.6 | 14.3 | 11.4 | 12.5 | 11.9 | 11.7 | 11.7 | 11.3 | 11.0 |
| LOS by Move: | B    | C    | A    | B    | B    | B    | B    | B    | B    | B    | B    | B    |
| ApproachDel: | 15.1 |      |      | 12.9 |      |      | 12.1 |      |      | 11.3 |      |      |
| Delay Adj:   | 1.00 |      |      | 1.00 |      |      | 1.00 |      |      | 1.00 |      |      |
| ApprAdjDel:  | 15.1 |      |      | 12.9 |      |      | 12.1 |      |      | 11.3 |      |      |
| LOS by Appr: | C    |      |      | B    |      |      | B    |      |      | B    |      |      |
| AllWayAvgQ:  | 0.2  | 1.1  | 0.1  | 0.0  | 0.6  | 0.3  | 0.3  | 0.3  | 0.3  | 0.2  | 0.2  | 0.2  |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #33 Beech Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 4.097  
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): 733.3  
Optimal Cycle: 0 Level Of Service: F

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Stop Sign   |   |   | Stop Sign   |   |   | Stop Sign  |   |   | Stop Sign  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 0           | 1 | 0 | 0          | 1 | 0 | 0          | 0 | 1 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 316  | 38   | 13   | 2    | 5    | 73   | 117  | 412  | 137  | 1    | 303  | 11   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 316  | 38   | 13   | 2    | 5    | 73   | 117  | 412  | 137  | 1    | 303  | 11   |
| Added Vol:   | 95   | 221  | 126  | 0    | 54   | 0    | 0    | 724  | 17   | 18   | 1352 | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 411  | 259  | 139  | 2    | 59   | 73   | 117  | 1136 | 154  | 19   | 1655 | 11   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 433  | 273  | 146  | 2    | 62   | 77   | 123  | 1196 | 162  | 20   | 1742 | 12   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 433  | 273  | 146  | 2    | 62   | 77   | 123  | 1196 | 162  | 20   | 1742 | 12   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 433  | 273  | 146  | 2    | 62   | 77   | 123  | 1196 | 162  | 20   | 1742 | 12   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.17 | 1.61 | 0.22 | 0.01 | 0.98 | 0.01 |
| Final Sat.: | 367  | 385  | 414  | 300  | 313  | 333  | 70   | 691  | 95   | 5    | 425  | 3    |

Capacity Analysis Module:

|              |       |      |      |      |      |      |       |      |       |        |      |       |
|--------------|-------|------|------|------|------|------|-------|------|-------|--------|------|-------|
| Vol/Sat:     | 1.18  | 0.71 | 0.35 | 0.01 | 0.20 | 0.23 | 1.75  | 1.73 | 1.71  | 4.10   | 4.10 | 4.10  |
| Crit Moves:  | ***   |      |      | ***  |      |      | ***   |      |       | ***    |      |       |
| Delay/Veh:   | 136.0 | 31.5 | 15.9 | 14.6 | 16.7 | 16.4 | 369.7 | 359  | 347.7 | 1416   | 1416 | 1416  |
| Delay Adj:   | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00  | 1.00   | 1.00 | 1.00  |
| AdjDel/Veh:  | 136.0 | 31.5 | 15.9 | 14.6 | 16.7 | 16.4 | 369.7 | 359  | 347.7 | 1416   | 1416 | 1416  |
| LOS by Move: | F     | D    | C    | B    | C    | C    | F     | F    | F     | F      | F    | F     |
| ApproachDel: | 81.9  |      |      | 16.5 |      |      | 358.7 |      |       | 1415.9 |      |       |
| Delay Adj:   | 1.00  |      |      | 1.00 |      |      | 1.00  |      |       | 1.00   |      |       |
| ApprAdjDel:  | 81.9  |      |      | 16.5 |      |      | 358.7 |      |       | 1415.9 |      |       |
| LOS by Appr: | F     |      |      | C    |      |      | F     |      |       | F      |      |       |
| AllWayAvgQ:  | 12.6  | 2.1  | 0.5  | 0.0  | 0.2  | 0.3  | 42.0  | 40.6 | 40.6  | 169    | 169  | 168.9 |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #34 Citrus Ave/Valley Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 1.709  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 244.7  
Optimal Cycle: 180 Level Of Service: F

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |   |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |   |
| Lanes:      | 1           | 0 | 1 | 1           | 0 | 1 | 0          | 1 | 1 | 0          | 2 | 0 | 1 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 352  | 695  | 122  | 104  | 727  | 35   | 28   | 206  | 491  | 397  | 425  | 83   |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 352  | 695  | 122  | 104  | 727  | 35   | 28   | 206  | 491  | 397  | 425  | 83   |
| Added Vol:    | 85   | 339  | 0    | 0    | 2095 | 0    | 0    | 26   | 25   | 0    | 124  | 0    |
| PasserByVol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:  | 437  | 1034 | 122  | 104  | 2822 | 35   | 28   | 232  | 516  | 397  | 549  | 83   |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 460  | 1088 | 128  | 109  | 2971 | 37   | 29   | 244  | 543  | 418  | 578  | 87   |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 460  | 1088 | 128  | 109  | 2971 | 37   | 29   | 244  | 543  | 418  | 578  | 87   |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 460  | 1088 | 128  | 109  | 2971 | 37   | 29   | 244  | 543  | 418  | 578  | 87   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 0.97 | 0.95 | 0.95 | 0.97 | 0.95 | 0.95 |
| Lanes:      | 1.00 | 1.79 | 0.21 | 1.00 | 1.98 | 0.02 | 2.00 | 1.00 | 1.00 | 2.00 | 1.74 | 0.26 |
| Final Sat.: | 1800 | 3059 | 361  | 1800 | 3378 | 42   | 3492 | 1710 | 1710 | 3492 | 2971 | 449  |

Capacity Analysis Module:

|              |       |      |      |      |      |       |       |      |       |       |      |      |
|--------------|-------|------|------|------|------|-------|-------|------|-------|-------|------|------|
| Vol/Sat:     | 0.26  | 0.36 | 0.36 | 0.06 | 0.88 | 0.88  | 0.01  | 0.14 | 0.32  | 0.12  | 0.19 | 0.19 |
| Crit Moves:  | ***   |      |      | ***  |      |       | ***   |      | ***   |       |      |      |
| Green/Cycle: | 0.15  | 0.57 | 0.57 | 0.10 | 0.51 | 0.51  | 0.01  | 0.19 | 0.19  | 0.07  | 0.25 | 0.25 |
| Volume/Cap:  | 1.71  | 0.63 | 0.63 | 0.63 | 1.71 | 1.71  | 0.79  | 0.77 | 1.71  | 1.71  | 0.79 | 0.79 |
| Delay/Veh:   | 376.9 | 15.2 | 15.2 | 50.5 | 346  | 345.7 | 120.1 | 42.2 | 368.9 | 382.4 | 40.6 | 40.6 |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00  | 1.00 | 1.00  | 1.00  | 1.00 | 1.00 |
| AdjDel/Veh:  | 376.9 | 15.2 | 15.2 | 50.5 | 346  | 345.7 | 120.1 | 42.2 | 368.9 | 382.4 | 40.6 | 40.6 |
| LOS by Move: | F     | B    | B    | D    | F    | F     | F     | D    | F     | F     | D    | D    |
| HCM2kAvgQ:   | 39    | 14   | 14   | 4    | 128  | 128   | 2     | 9    | 48    | 19    | 12   | 12   |

Note: Queue reported is the number of cars per lane.

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FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #37 Citrus Ave/Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 2.066  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 411.1  
Optimal Cycle: 180 Level Of Service: F

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 0 | 1           | 0 | 1 | 1          | 0 | 2 | 0          | 1 | 1 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 17   | 376  | 62   | 245  | 179  | 505  | 237  | 235  | 7    | 48   | 422  | 224  |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 17   | 376  | 62   | 245  | 179  | 505  | 237  | 235  | 7    | 48   | 422  | 224  |
| Added Vol:    | 86   | 227  | 25   | 0    | 1541 | 1181 | 204  | 273  | 25   | 174  | 1228 | 0    |
| PasserByVol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:  | 103  | 603  | 87   | 245  | 1720 | 1686 | 441  | 508  | 32   | 222  | 1650 | 224  |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 108  | 635  | 92   | 258  | 1811 | 1775 | 464  | 535  | 34   | 234  | 1737 | 236  |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 108  | 635  | 92   | 258  | 1811 | 1775 | 464  | 535  | 34   | 234  | 1737 | 236  |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 108  | 635  | 92   | 258  | 1811 | 1775 | 464  | 535  | 34   | 234  | 1737 | 236  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 |
| Lanes:      | 1.00 | 0.87 | 0.13 | 1.00 | 1.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 1.76 | 0.24 |
| Final Sat.: | 1800 | 1573 | 227  | 1800 | 1800 | 1800 | 1800 | 3420 | 1800 | 1800 | 3011 | 409  |

Capacity Analysis Module:

|              |       |      |      |       |      |       |       |      |      |      |      |       |
|--------------|-------|------|------|-------|------|-------|-------|------|------|------|------|-------|
| Vol/Sat:     | 0.06  | 0.40 | 0.40 | 0.14  | 1.01 | 0.99  | 0.26  | 0.16 | 0.02 | 0.13 | 0.58 | 0.58  |
| Crit Moves:  | ***   |      |      | ***   |      |       | ***   |      | ***  |      |      |       |
| Green/Cycle: | 0.03  | 0.38 | 0.38 | 0.14  | 0.49 | 0.49  | 0.12  | 0.22 | 0.22 | 0.18 | 0.28 | 0.28  |
| Volume/Cap:  | 2.07  | 1.06 | 1.06 | 1.06  | 2.07 | 2.03  | 2.07  | 0.71 | 0.08 | 0.71 | 2.07 | 2.07  |
| Delay/Veh:   | 587.4 | 82.2 | 82.2 | 117.5 | 509  | 491.0 | 538.5 | 39.1 | 31.0 | 45.3 | 519  | 519.4 |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00  | 1.00 | 1.00  | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  |
| AdjDel/Veh:  | 587.4 | 82.2 | 82.2 | 117.5 | 509  | 491.0 | 538.5 | 39.1 | 31.0 | 45.3 | 519  | 519.4 |
| LOS by Move: | F     | F    | F    | F     | F    | F     | F     | D    | C    | D    | F    | F     |
| HCM2kAvgQ:   | 12    | 33   | 33   | 14    | 169  | 164   | 45    | 9    | 1    | 8    | 98   | 98    |

Note: Queue reported is the number of cars per lane.

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FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #38 Citrus Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 3.959  
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): 854.7  
Optimal Cycle: 0 Level Of Service: F

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Stop Sign   |   |   | Stop Sign   |   |   | Stop Sign  |   |   | Stop Sign  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 0           | 0 | 1 | 0           | 0 | 1 | 0          | 0 | 1 | 0          | 1 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 11   | 280  | 37   | 18   | 155  | 33   | 49   | 103  | 0    | 20   | 178  | 21   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 11   | 280  | 37   | 18   | 155  | 33   | 49   | 103  | 0    | 20   | 178  | 21   |
| Added Vol:   | 87   | 290  | 0    | 0    | 1005 | 532  | 71   | 18   | 11   | 0    | 126  | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 98   | 570  | 37   | 18   | 1160 | 565  | 120  | 121  | 11   | 20   | 304  | 21   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 103  | 600  | 39   | 19   | 1221 | 595  | 126  | 127  | 12   | 21   | 320  | 22   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 103  | 600  | 39   | 19   | 1221 | 595  | 126  | 127  | 12   | 21   | 320  | 22   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 103  | 600  | 39   | 19   | 1221 | 595  | 126  | 127  | 12   | 21   | 320  | 22   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 0.14 | 0.81 | 0.05 | 0.01 | 0.67 | 0.32 | 0.48 | 0.48 | 0.04 | 0.06 | 0.94 | 1.00 |
| Final Sat.: | 63   | 366  | 24   | 5    | 308  | 150  | 190  | 192  | 17   | 25   | 387  | 450  |

Capacity Analysis Module:

|              |       |      |        |      |      |       |      |      |      |      |      |      |
|--------------|-------|------|--------|------|------|-------|------|------|------|------|------|------|
| Vol/Sat:     | 1.64  | 1.64 | 1.64   | 3.96 | 3.96 | 3.96  | 0.67 | 0.67 | 0.67 | 0.83 | 0.83 | 0.05 |
| Crit Moves:  | ****  |      |        | **** |      |       | **** |      |      | **** |      |      |
| Delay/Veh:   | 318.2 | 318  | 318.2  | 1353 | 1353 | 1353  | 27.4 | 27.4 | 27.4 | 40.6 | 40.6 | 11.0 |
| Delay Adj:   | 1.00  | 1.00 | 1.00   | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 318.2 | 318  | 318.2  | 1353 | 1353 | 1353  | 27.4 | 27.4 | 27.4 | 40.6 | 40.6 | 11.0 |
| LOS by Move: | F     | F    | F      | F    | F    | F     | D    | D    | D    | E    | E    | B    |
| ApproachDel: | 318.2 |      | 1352.7 |      |      | 27.4  |      |      | 38.8 |      |      |      |
| Delay Adj:   | 1.00  |      | 1.00   |      |      | 1.00  |      |      | 1.00 |      |      |      |
| ApprAdjDel:  | 318.2 |      | 1352.7 |      |      | 27.4  |      |      | 38.8 |      |      |      |
| LOS by Appr: | F     |      | F      |      |      | D     |      |      | E    |      |      |      |
| AllWayAvgQ:  | 38.6  | 38.6 | 38.6   | 173  | 173  | 172.7 | 1.7  | 1.7  | 1.7  | 3.4  | 3.4  | 0.1  |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #39 Citrus Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 4.110  
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): 766.0  
Optimal Cycle: 0 Level Of Service: F

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Stop Sign   |   |   | Stop Sign   |   |   | Stop Sign  |   |   | Stop Sign  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 0           | 0 | 1 | 1          | 0 | 2 | 1          | 0 | 1 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 71   | 174  | 240  | 40   | 63   | 51   | 119  | 422  | 23   | 99   | 347  | 35   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 71   | 174  | 240  | 40   | 63   | 51   | 119  | 422  | 23   | 99   | 347  | 35   |
| Added Vol:   | 95   | 265  | 0    | 32   | 52   | 455  | 112  | 242  | 13   | 0    | 1674 | 184  |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 166  | 439  | 240  | 72   | 115  | 506  | 231  | 664  | 36   | 99   | 2021 | 219  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 175  | 462  | 253  | 76   | 121  | 533  | 243  | 699  | 38   | 104  | 2127 | 231  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 175  | 462  | 253  | 76   | 121  | 533  | 243  | 699  | 38   | 104  | 2127 | 231  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 175  | 462  | 253  | 76   | 121  | 533  | 243  | 699  | 38   | 104  | 2127 | 231  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 1.00 | 1.00 | 1.00 | 0.19 | 0.81 | 1.00 | 2.85 | 0.15 | 1.00 | 1.80 | 0.20 |
| Final Sat.: | 274  | 285  | 302  | 313  | 64   | 281  | 282  | 837  | 46   | 274  | 518  | 56   |

Capacity Analysis Module:

|              |       |      |       |      |      |       |      |      |        |      |      |       |
|--------------|-------|------|-------|------|------|-------|------|------|--------|------|------|-------|
| Vol/Sat:     | 0.64  | 1.62 | 0.84  | 0.24 | 1.90 | 1.90  | 0.86 | 0.83 | 0.83   | 0.38 | 4.11 | 4.09  |
| Crit Moves:  | ****  |      |       | **** |      |       | **** |      |        | **** |      |       |
| Delay/Veh:   | 36.1  | 322  | 53.8  | 17.8 | 436  | 435.6 | 61.4 | 55.1 | 54.0   | 23.6 | 1428 | 1416  |
| Delay Adj:   | 1.00  | 1.00 | 1.00  | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00   | 1.00 | 1.00 | 1.00  |
| AdjDel/Veh:  | 36.1  | 322  | 53.8  | 17.8 | 436  | 435.6 | 61.4 | 55.1 | 54.0   | 23.6 | 1428 | 1416  |
| LOS by Move: | E     | F    | F     | C    | F    | F     | F    | F    | F      | C    | F    | F     |
| ApproachDel: | 189.9 |      | 392.2 |      |      | 56.6  |      |      | 1367.2 |      |      |       |
| Delay Adj:   | 1.00  |      | 1.00  |      |      | 1.00  |      |      | 1.00   |      |      |       |
| ApprAdjDel:  | 189.9 |      | 392.2 |      |      | 56.6  |      |      | 1367.2 |      |      |       |
| LOS by Appr: | F     |      | F     |      |      | F     |      |      | F      |      |      |       |
| AllWayAvgQ:  | 1.5   | 24.3 | 3.3   | 0.3  | 40.5 | 40.5  | 3.6  | 3.3  | 3.2    | 0.6  | 113  | 112.3 |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #40 Sierra Ave/Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.964  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 41.9  
Optimal Cycle: 152 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Ovl        |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 3 | 0           | 2 | 1 | 2          | 0 | 2 | 0          | 2 | 2 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 102  | 1006 | 50   | 409  | 555  | 277  | 200  | 103  | 45   | 25   | 182  | 366  |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 102  | 1006 | 50   | 409  | 555  | 277  | 200  | 103  | 45   | 25   | 182  | 366  |
| Added Vol:    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 298  | 0    | 0    | 1403 | 0    |
| PasserByVol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:  | 102  | 1006 | 50   | 409  | 555  | 277  | 200  | 401  | 45   | 25   | 1585 | 366  |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 107  | 1059 | 53   | 431  | 584  | 292  | 211  | 422  | 47   | 26   | 1668 | 385  |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 107  | 1059 | 53   | 431  | 584  | 292  | 211  | 422  | 47   | 26   | 1668 | 385  |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 107  | 1059 | 53   | 431  | 584  | 292  | 211  | 422  | 47   | 26   | 1668 | 385  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.91 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 0.88 |
| Lanes:      | 2.00 | 3.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 2.00 |
| Final Sat.: | 3492 | 4914 | 1800 | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 | 3492 | 3420 | 3168 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.03 | 0.22 | 0.03 | 0.12 | 0.17 | 0.16 | 0.06 | 0.12 | 0.03 | 0.01 | 0.49 | 0.12 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.05 | 0.22 | 0.22 | 0.13 | 0.30 | 0.30 | 0.06 | 0.54 | 0.54 | 0.03 | 0.51 | 0.63 |
| Volume/Cap:  | 0.57 | 0.96 | 0.13 | 0.96 | 0.57 | 0.54 | 0.96 | 0.23 | 0.05 | 0.23 | 0.96 | 0.19 |
| Delay/Veh:   | 50.5 | 57.5 | 31.2 | 76.7 | 30.5 | 30.6 | 97.3 | 12.4 | 11.1 | 48.2 | 37.9 | 7.7  |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 50.5 | 57.5 | 31.2 | 76.7 | 30.5 | 30.6 | 97.3 | 12.4 | 11.1 | 48.2 | 37.9 | 7.7  |
| LOS by Move: | D    | E    | C    | E    | C    | C    | F    | B    | B    | D    | D    | A    |
| HCM2kAvgQ:   | 3    | 17   | 1    | 11   | 9    | 8    | 6    | 4    | 1    | 1    | 32   | 3    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #41 Sierra Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.338  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 20.8  
Optimal Cycle: 25 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 3 | 0           | 2 | 1 | 1          | 0 | 2 | 0          | 2 | 1 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 80   | 868  | 31   | 59   | 451  | 75   | 131  | 64   | 51   | 50   | 100  | 54   |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 80   | 868  | 31   | 59   | 451  | 75   | 131  | 64   | 51   | 50   | 100  | 54   |
| Added Vol:    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:  | 80   | 868  | 31   | 59   | 451  | 75   | 131  | 64   | 51   | 50   | 100  | 54   |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 84   | 914  | 33   | 62   | 475  | 79   | 138  | 67   | 54   | 53   | 105  | 57   |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 84   | 914  | 33   | 62   | 475  | 79   | 138  | 67   | 54   | 53   | 105  | 57   |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 84   | 914  | 33   | 62   | 475  | 79   | 138  | 67   | 54   | 53   | 105  | 57   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.91 | 1.00 | 0.97 | 0.91 | 0.91 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 |
| Lanes:      | 2.00 | 3.00 | 1.00 | 2.00 | 2.57 | 0.43 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 3492 | 4914 | 1800 | 3492 | 4213 | 701  | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.02 | 0.19 | 0.02 | 0.02 | 0.11 | 0.11 | 0.08 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.11 | 0.55 | 0.55 | 0.05 | 0.50 | 0.50 | 0.23 | 0.16 | 0.16 | 0.16 | 0.09 | 0.09 |
| Volume/Cap:  | 0.23 | 0.34 | 0.03 | 0.34 | 0.23 | 0.23 | 0.34 | 0.12 | 0.19 | 0.19 | 0.34 | 0.35 |
| Delay/Veh:   | 41.2 | 12.5 | 10.3 | 46.8 | 14.3 | 14.3 | 32.9 | 36.1 | 36.6 | 36.9 | 43.3 | 43.9 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 41.2 | 12.5 | 10.3 | 46.8 | 14.3 | 14.3 | 32.9 | 36.1 | 36.6 | 36.9 | 43.3 | 43.9 |
| LOS by Move: | D    | B    | B    | D    | B    | B    | C    | D    | D    | D    | D    | D    |
| HCM2kAvgQ:   | 1    | 6    | 0    | 1    | 3    | 3    | 4    | 1    | 2    | 1    | 2    | 2    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #42 Sierra Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 1.829  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 347.4  
Optimal Cycle: 180 Level Of Service: F

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound  |   |   | West Bound  |   |   |
|-------------|-------------|---|---|-------------|---|---|-------------|---|---|-------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L           | T | R | L           | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Split Phase |   |   | Split Phase |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include     |   |   | Include     |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 2 | 0 | 1           | 1 | 0 | 1           | 0 | 1 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 138  | 554  | 79   | 38   | 352  | 158  | 338  | 297  | 106  | 115  | 252  | 111  |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 138  | 554  | 79   | 38   | 352  | 158  | 338  | 297  | 106  | 115  | 252  | 111  |
| Added Vol:    | 112  | 0    | 0    | 0    | 0    | 0    | 0    | 273  | 18   | 0    | 1872 | 0    |
| PasserByVol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:  | 250  | 554  | 79   | 38   | 352  | 158  | 338  | 570  | 124  | 115  | 2124 | 111  |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 263  | 583  | 83   | 40   | 371  | 166  | 356  | 600  | 131  | 121  | 2236 | 117  |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 263  | 583  | 83   | 40   | 371  | 166  | 356  | 600  | 131  | 121  | 2236 | 117  |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 263  | 583  | 83   | 40   | 371  | 166  | 356  | 600  | 131  | 121  | 2236 | 117  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 1.12 | 1.88 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Sat.: | 1800 | 3420 | 1800 | 3492 | 3420 | 1800 | 1910 | 3220 | 1800 | 1800 | 1800 | 1800 |

Capacity Analysis Module:

|              |       |      |      |       |      |       |       |      |      |      |      |      |
|--------------|-------|------|------|-------|------|-------|-------|------|------|------|------|------|
| Vol/Sat:     | 0.15  | 0.17 | 0.05 | 0.01  | 0.11 | 0.09  | 0.19  | 0.19 | 0.07 | 0.07 | 1.24 | 0.06 |
| Crit Moves:  | ****  |      |      | ****  |      |       | ****  |      |      | **** |      |      |
| Green/Cycle: | 0.08  | 0.13 | 0.13 | 0.01  | 0.06 | 0.06  | 0.10  | 0.10 | 0.10 | 0.68 | 0.68 | 0.68 |
| Volume/Cap:  | 1.83  | 1.31 | 0.35 | 1.31  | 1.83 | 1.56  | 1.83  | 1.83 | 0.71 | 0.10 | 1.83 | 0.10 |
| Delay/Veh:   | 445.0 | 197  | 40.6 | 317.4 | 439  | 339.6 | 425.5 | 426  | 55.8 | 5.6  | 392  | 5.5  |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00  | 1.00 | 1.00  | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 445.0 | 197  | 40.6 | 317.4 | 439  | 339.6 | 425.5 | 426  | 55.8 | 5.6  | 392  | 5.5  |
| LOS by Move: | F     | F    | D    | F     | F    | F     | F     | F    | E    | A    | F    | A    |
| HCM2kAvgQ:   | 24    | 21   | 3    | 3     | 18   | 14    | 30    | 30   | 5    | 1    | 191  | 1    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #43 Armstrong Rd/Sierra Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.367  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 16.5  
Optimal Cycle: 26 Level Of Service: B

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Ignore     |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 0 | 1           | 0 | 0 | 1          | 0 | 2 | 1          | 0 | 1 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 572  | 136  | 18   | 11   | 171  | 21   | 9    | 6    | 459  | 29   | 23   | 13   |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 572  | 136  | 18   | 11   | 171  | 21   | 9    | 6    | 459  | 29   | 23   | 13   |
| Added Vol:    | 112  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 18   | 0    | 0    | 0    |
| PasserByVol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:  | 684  | 136  | 18   | 11   | 171  | 21   | 9    | 6    | 477  | 29   | 23   | 13   |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.00 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 720  | 143  | 19   | 12   | 180  | 22   | 9    | 6    | 0    | 31   | 24   | 14   |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 720  | 143  | 19   | 12   | 180  | 22   | 9    | 6    | 0    | 31   | 24   | 14   |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 720  | 143  | 19   | 12   | 180  | 22   | 9    | 6    | 0    | 31   | 24   | 14   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 |
| Lanes:      | 2.00 | 0.88 | 0.12 | 1.00 | 0.89 | 0.11 | 1.00 | 2.00 | 1.00 | 1.00 | 1.28 | 0.72 |
| Final Sat.: | 3492 | 1590 | 210  | 1800 | 1603 | 197  | 1800 | 3420 | 1800 | 1800 | 2185 | 1235 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.21 | 0.09 | 0.09 | 0.01 | 0.11 | 0.11 | 0.01 | 0.00 | 0.00 | 0.02 | 0.01 | 0.01 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.56 | 0.81 | 0.81 | 0.06 | 0.31 | 0.31 | 0.02 | 0.01 | 0.00 | 0.05 | 0.03 | 0.03 |
| Volume/Cap:  | 0.37 | 0.11 | 0.11 | 0.11 | 0.37 | 0.37 | 0.32 | 0.37 | 0.00 | 0.37 | 0.32 | 0.32 |
| Delay/Veh:   | 12.2 | 2.0  | 2.0  | 45.1 | 27.5 | 27.5 | 54.7 | 62.3 | 0.0  | 49.0 | 48.7 | 48.7 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 12.2 | 2.0  | 2.0  | 45.1 | 27.5 | 27.5 | 54.7 | 62.3 | 0.0  | 49.0 | 48.7 | 48.7 |
| LOS by Move: | B    | A    | A    | D    | C    | C    | D    | E    | A    | D    | D    | D    |
| HCM2kAvgQ:   | 6    | 1    | 1    | 0    | 5    | 5    | 1    | 0    | 0    | 1    | 1    | 1    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #44 Armstrong Rd/SR-60 WB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.651  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 23.3  
Optimal Cycle: 37 Level Of Service: C

| Approach:   | North Bound | South Bound | East Bound  | West Bound  |
|-------------|-------------|-------------|-------------|-------------|
| Movement:   | L - T - R   | L - T - R   | L - T - R   | L - T - R   |
| Control:    | Protected   | Protected   | Split Phase | Split Phase |
| Rights:     | Include     | Include     | Include     | Include     |
| Min. Green: | 0 0 0       | 0 0 0       | 0 0 0       | 0 0 0       |
| Lanes:      | 1 0 2 0 0   | 0 0 1 1 0   | 0 0 0 0 0   | 1 0 0 1 0   |

| Volume Module: | Base Vol: | 202  | 512  | 0    | 0    | 611  | 240  | 0    | 0    | 199  | 9    | 378  |
|----------------|-----------|------|------|------|------|------|------|------|------|------|------|------|
| Growth Adj:    | 1.00      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:   | 202       | 512  | 0    | 0    | 611  | 240  | 0    | 0    | 199  | 9    | 378  |      |
| Added Vol:     | 0         | 112  | 0    | 0    | 18   | 0    | 0    | 0    | 0    | 0    | 0    |      |
| PasserByVol:   | 0         | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |      |
| Initial Fut:   | 202       | 624  | 0    | 0    | 629  | 240  | 0    | 0    | 199  | 9    | 378  |      |
| User Adj:      | 1.00      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |      |
| PHF Adj:       | 0.95      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |      |
| PHF Volume:    | 213       | 657  | 0    | 0    | 662  | 253  | 0    | 0    | 209  | 9    | 398  |      |
| Reduct Vol:    | 0         | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |      |
| Reduced Vol:   | 213       | 657  | 0    | 0    | 662  | 253  | 0    | 0    | 209  | 9    | 398  |      |
| PCE Adj:       | 1.00      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |      |
| MLF Adj:       | 1.00      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |      |
| FinalVolume:   | 213       | 657  | 0    | 0    | 662  | 253  | 0    | 0    | 209  | 9    | 398  |      |

| Saturation Flow Module: | Sat/Lane: | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
|-------------------------|-----------|------|------|------|------|------|------|------|------|------|------|
| Adjustment:             | 1.00      | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:                  | 1.00      | 2.00 | 0.00 | 0.00 | 1.45 | 0.55 | 0.00 | 0.00 | 0.00 | 1.00 | 0.02 |
| Final Sat.:             | 1800      | 3420 | 0    | 0    | 2475 | 945  | 0    | 0    | 0    | 1800 | 42   |

| Capacity Analysis Module: | Vol/Sat: | 0.12 | 0.19 | 0.00 | 0.00 | 0.27 | 0.27 | 0.00 | 0.00 | 0.00 | 0.12 | 0.23 |
|---------------------------|----------|------|------|------|------|------|------|------|------|------|------|------|
| Crit Moves:               | ****     |      |      |      |      | **** |      |      |      |      |      | **** |
| Green/Cycle:              | 0.18     | 0.59 | 0.00 | 0.00 | 0.41 | 0.41 | 0.00 | 0.00 | 0.00 | 0.35 | 0.35 | 0.35 |
| Volume/Cap:               | 0.65     | 0.32 | 0.00 | 0.00 | 0.65 | 0.65 | 0.00 | 0.00 | 0.00 | 0.33 | 0.65 | 0.65 |
| Delay/Veh:                | 42.6     | 10.4 | 0.0  | 0.0  | 24.8 | 24.8 | 0.0  | 0.0  | 0.0  | 24.4 | 29.9 | 29.9 |
| User DelAdj:              | 1.00     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:               | 42.6     | 10.4 | 0.0  | 0.0  | 24.8 | 24.8 | 0.0  | 0.0  | 0.0  | 24.4 | 29.9 | 29.9 |
| LOS by Move:              | D        | B    | A    | A    | C    | C    | A    | A    | A    | C    | C    | C    |
| HCM2kAvgQ:                | 7        | 5    | 0    | 0    | 13   | 13   | 0    | 0    | 0    | 5    | 11   | 11   |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #45 Armstrong Rd/SR-60 EB Ramps

Average Delay (sec/veh): 20.9 Worst Case Level Of Service: F[166.7]

| Approach: | North Bound  | South Bound  | East Bound | West Bound |
|-----------|--------------|--------------|------------|------------|
| Movement: | L - T - R    | L - T - R    | L - T - R  | L - T - R  |
| Control:  | Uncontrolled | Uncontrolled | Stop Sign  | Stop Sign  |
| Rights:   | Include      | Include      | Include    | Include    |
| Lanes:    | 0 0 1 1 0    | 1 0 2 0 0    | 0 1 0 1 0  | 0 0 0 0 0  |

| Volume Module: | Base Vol: | 0    | 638  | 363  | 300  | 485  | 0    | 88   | 1    | 151  | 0    | 0    | 0    |
|----------------|-----------|------|------|------|------|------|------|------|------|------|------|------|------|
| Growth Adj:    | 1.00      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:   | 0         | 638  | 363  | 300  | 485  | 0    | 88   | 1    | 151  | 0    | 0    | 0    | 0    |
| Added Vol:     | 0         | 112  | 0    | 0    | 18   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol:   | 0         | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:   | 0         | 750  | 363  | 300  | 503  | 0    | 88   | 1    | 151  | 0    | 0    | 0    | 0    |
| User Adj:      | 1.00      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:       | 0.95      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:    | 0         | 789  | 382  | 316  | 529  | 0    | 93   | 1    | 159  | 0    | 0    | 0    | 0    |
| Reduct Vol:    | 0         | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| FinalVolume:   | 0         | 789  | 382  | 316  | 529  | 0    | 93   | 1    | 159  | 0    | 0    | 0    | 0    |

| Critical Gap Module: | Critical Gp: | xxxxx | xxxx  | xxxxx | 4.1  | xxxx  | xxxxx | 6.8 | 6.5 | 6.9   | xxxxx | xxxx  | xxxxx |
|----------------------|--------------|-------|-------|-------|------|-------|-------|-----|-----|-------|-------|-------|-------|
| FollowUpTim:         | xxxxx        | xxxx  | xxxxx | 2.2   | xxxx | xxxxx | 3.5   | 4.0 | 3.3 | xxxxx | xxxx  | xxxxx |       |

| Capacity Module: | Cnflct Vol: | xxxx | xxxx  | xxxxx | 1172 | xxxx  | xxxxx | 1556 | 2333 | 265  | xxxx | xxxx  | xxxxx |
|------------------|-------------|------|-------|-------|------|-------|-------|------|------|------|------|-------|-------|
| Potent Cap.:     | xxxx        | xxxx | xxxxx | 603   | xxxx | xxxxx | 106   | 37   | 740  | xxxx | xxxx | xxxxx |       |
| Move Cap.:       | xxxx        | xxxx | xxxxx | 603   | xxxx | xxxxx | 62    | 18   | 740  | xxxx | xxxx | xxxxx |       |
| Volume/Cap:      | xxxx        | xxxx | xxxx  | 0.52  | xxxx | xxxx  | 1.49  | 0.06 | 0.21 | xxxx | xxxx | xxxx  |       |

| Level Of Service Module: | 2Way95thQ:    | xxxx          | xxxx          | xxxxx         | 3.0           | xxxx          | xxxxx         | xxxx          | xxxx          | xxxxx         | xxxx          | xxxx          | xxxxx |
|--------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-------|
| Control Del:             | xxxxx         | xxxx          | xxxxx         | 17.3          | xxxx          | xxxxx         | xxxxx         | xxxx          | xxxxx         | xxxxx         | xxxx          | xxxxx         |       |
| LOS by Move:             | *             | *             | *             | C             | *             | *             | *             | *             | *             | *             | *             | *             |       |
| Movement:                | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT |       |
| Shared Cap.:             | xxxx          | xxxx          | xxxxx         | xxxx          | xxxx          | xxxxx         | 60            | xxxx          | 584           | xxxx          | xxxx          | xxxxx         |       |
| SharedQueue:             | xxxxx         | xxxx          | xxxxx         | xxxxx         | xxxx          | xxxxx         | 8.4           | xxxx          | 1.1           | xxxxx         | xxxx          | xxxxx         |       |
| Shrd ConDel:             | xxxxx         | xxxx          | xxxxx         | xxxxx         | xxxx          | xxxxx         | 428.3         | xxxx          | 13.5          | xxxxx         | xxxx          | xxxxx         |       |
| Shared LOS:              | *             | *             | *             | *             | *             | *             | F             | *             | B             | *             | *             | *             |       |
| ApproachDel:             | xxxxxx        |               |               | xxxxxx        |               |               | 166.7         |               |               | xxxxxx        |               |               |       |
| ApproachLOS:             | *             |               |               | *             |               |               | F             |               |               | *             |               |               |       |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 I-15 SB Ramps/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.744  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 22.3  
Optimal Cycle: 48 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |   |
| Control:    | Split Phase |   |   | Split Phase |   |   | Protected  |   |   | Protected  |   |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |   |
| Lanes:      | 0           | 0 | 0 | 1           | 0 | 1 | 0          | 0 | 3 | 0          | 1 | 2 | 0 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 0    | 0    | 0    | 405  | 27   | 376  | 0    | 938  | 554  | 435  | 419  | 0    |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 0    | 0    | 0    | 405  | 27   | 376  | 0    | 938  | 554  | 435  | 419  | 0    |
| Added Vol:    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 273  | 0    | 0    | 1685 | 0    |
| PasserByVol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:  | 0    | 0    | 0    | 405  | 27   | 376  | 0    | 1211 | 554  | 435  | 2104 | 0    |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 0    | 0    | 0    | 426  | 28   | 396  | 0    | 1275 | 583  | 458  | 2215 | 0    |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 0    | 0    | 0    | 426  | 28   | 396  | 0    | 1275 | 583  | 458  | 2215 | 0    |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 0    | 0    | 0    | 426  | 28   | 396  | 0    | 1275 | 583  | 458  | 2215 | 0    |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 1.00 | 0.97 | 0.91 | 1.00 |
| Lanes:      | 0.00 | 0.00 | 0.00 | 1.49 | 0.06 | 1.45 | 0.00 | 3.00 | 1.00 | 2.00 | 3.00 | 0.00 |
| Final Sat.: | 0    | 0    | 0    | 2673 | 116  | 2611 | 0    | 4914 | 1800 | 3492 | 4914 | 0    |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.00 | 0.00 | 0.00 | 0.16 | 0.24 | 0.15 | 0.00 | 0.26 | 0.32 | 0.13 | 0.45 | 0.00 |
| Crit Moves:  |      |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.00 | 0.00 | 0.00 | 0.33 | 0.33 | 0.33 | 0.00 | 0.44 | 0.44 | 0.18 | 0.61 | 0.00 |
| Volume/Cap:  | 0.00 | 0.00 | 0.00 | 0.49 | 0.74 | 0.46 | 0.00 | 0.60 | 0.74 | 0.74 | 0.74 | 0.00 |
| Delay/Veh:   | 0.0  | 0.0  | 0.0  | 27.1 | 32.5 | 26.8 | 0.0  | 22.0 | 27.4 | 43.9 | 14.7 | 0.0  |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 0.0  | 0.0  | 0.0  | 27.1 | 32.5 | 26.8 | 0.0  | 22.0 | 27.4 | 43.9 | 14.7 | 0.0  |
| LOS by Move: | A    | A    | A    | C    | C    | C    | A    | C    | C    | D    | B    | A    |
| HCM2kAvgQ:   | 0    | 0    | 0    | 7    | 13   | 7    | 0    | 11   | 16   | 9    | 19   | 0    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 I-15 NB Ramps/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.851  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 20.8  
Optimal Cycle: 72 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Split Phase |   |   | Split Phase |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 0           | 1 | 0 | 2          | 0 | 3 | 0          | 0 | 1 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 134  | 1    | 202  | 0    | 0    | 0    | 614  | 730  | 0    | 0    | 706  | 883  |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 134  | 1    | 202  | 0    | 0    | 0    | 614  | 730  | 0    | 0    | 706  | 883  |
| Added Vol:    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 273  | 0    | 0    | 1685 | 0    |
| PasserByVol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:  | 134  | 1    | 202  | 0    | 0    | 0    | 614  | 1003 | 0    | 0    | 2391 | 883  |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 141  | 1    | 213  | 0    | 0    | 0    | 646  | 1056 | 0    | 0    | 2517 | 929  |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 141  | 1    | 213  | 0    | 0    | 0    | 646  | 1056 | 0    | 0    | 2517 | 929  |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 141  | 1    | 213  | 0    | 0    | 0    | 646  | 1056 | 0    | 0    | 2517 | 929  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.97 | 0.91 | 1.00 | 1.00 | 0.91 | 1.00 |
| Lanes:      | 1.39 | 0.01 | 1.60 | 0.00 | 0.00 | 0.00 | 2.00 | 3.00 | 0.00 | 0.00 | 3.00 | 1.00 |
| Final Sat.: | 2514 | 11   | 2876 | 0    | 0    | 0    | 3492 | 4914 | 0    | 0    | 4914 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.06 | 0.10 | 0.07 | 0.00 | 0.00 | 0.00 | 0.19 | 0.21 | 0.00 | 0.00 | 0.51 | 0.52 |
| Crit Moves:  |      |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.12 | 0.12 | 0.12 | 0.00 | 0.00 | 0.00 | 0.22 | 0.82 | 0.00 | 0.00 | 0.61 | 0.61 |
| Volume/Cap:  | 0.48 | 0.85 | 0.64 | 0.00 | 0.00 | 0.00 | 0.85 | 0.26 | 0.00 | 0.00 | 0.84 | 0.85 |
| Delay/Veh:   | 41.9 | 58.7 | 44.6 | 0.0  | 0.0  | 0.0  | 46.7 | 2.0  | 0.0  | 0.0  | 18.3 | 22.6 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 41.9 | 58.7 | 44.6 | 0.0  | 0.0  | 0.0  | 46.7 | 2.0  | 0.0  | 0.0  | 18.3 | 22.6 |
| LOS by Move: | D    | E    | D    | A    | A    | A    | D    | A    | A    | A    | B    | C    |
| HCM2kAvgQ:   | 4    | 8    | 5    | 0    | 0    | 0    | 13   | 3    | 0    | 0    | 25   | 26   |

Note: Queue reported is the number of cars per lane.



FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Etiwanda Ave/San Bernardino Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.608  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 26.1  
Optimal Cycle: 39 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 2 | 0           | 1 | 1 | 0          | 2 | 0 | 1          | 2 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 242  | 694  | 52   | 42   | 603  | 113  | 274  | 407  | 348  | 55   | 178  | 21   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 242  | 694  | 52   | 42   | 603  | 113  | 274  | 407  | 348  | 55   | 178  | 21   |
| Added Vol:   | 0    | 368  | 0    | 0    | 93   | 0    | 0    | 9    | 0    | 0    | 54   | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 242  | 1062 | 52   | 42   | 696  | 113  | 274  | 416  | 348  | 55   | 232  | 21   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 255  | 1118 | 55   | 44   | 733  | 119  | 288  | 438  | 366  | 58   | 244  | 22   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 255  | 1118 | 55   | 44   | 733  | 119  | 288  | 438  | 366  | 58   | 244  | 22   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 255  | 1118 | 55   | 44   | 733  | 119  | 288  | 438  | 366  | 58   | 244  | 22   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 0.95 | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 0.95 |
| Lanes:      | 2.00 | 2.00 | 1.00 | 2.00 | 1.72 | 0.28 | 2.00 | 2.00 | 1.00 | 2.00 | 1.83 | 0.17 |
| Final Sat.: | 3492 | 3420 | 1800 | 3492 | 2942 | 478  | 3492 | 3420 | 1800 | 3492 | 3136 | 284  |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.07 | 0.33 | 0.03 | 0.01 | 0.25 | 0.25 | 0.08 | 0.13 | 0.20 | 0.02 | 0.08 | 0.08 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.13 | 0.54 | 0.54 | 0.02 | 0.43 | 0.43 | 0.19 | 0.33 | 0.33 | 0.03 | 0.18 | 0.18 |
| Volume/Cap:  | 0.58 | 0.61 | 0.06 | 0.61 | 0.58 | 0.58 | 0.44 | 0.38 | 0.61 | 0.61 | 0.44 | 0.44 |
| Delay/Veh:   | 43.0 | 16.5 | 11.1 | 62.6 | 22.1 | 22.1 | 36.6 | 25.6 | 29.6 | 59.0 | 37.4 | 37.4 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 43.0 | 16.5 | 11.1 | 62.6 | 22.1 | 22.1 | 36.6 | 25.6 | 29.6 | 59.0 | 37.4 | 37.4 |
| LOS by Move: | D    | B    | B    | E    | C    | C    | D    | C    | C    | E    | D    | D    |
| HCM2kAvgQ:   | 5    | 13   | 1    | 2    | 11   | 11   | 4    | 5    | 10   | 2    | 4    | 4    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Etiwanda Ave/I-10 WB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.436  
Loss Time (sec): 4 (Y+R=4.0 sec) Average Delay (sec/veh): 9.0  
Optimal Cycle: 20 Level Of Service: A

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound  |   |   | West Bound  |   |   |
|-------------|-------------|---|---|-------------|---|---|-------------|---|---|-------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L           | T | R | L           | T | R |
| Control:    | Permitted   |   |   | Permitted   |   |   | Split Phase |   |   | Split Phase |   |   |
| Rights:     | Ignore      |   |   | Ignore      |   |   | Include     |   |   | Include     |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 |
| Lanes:      | 0           | 0 | 2 | 0           | 0 | 3 | 0           | 0 | 0 | 0           | 0 | 2 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 0    | 761  | 537  | 0    | 903  | 212  | 0    | 0    | 0    | 148  | 0    | 237  |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0    | 761  | 537  | 0    | 903  | 212  | 0    | 0    | 0    | 148  | 0    | 237  |
| Added Vol:   | 0    | 319  | 210  | 0    | 83   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 0    | 1080 | 747  | 0    | 986  | 212  | 0    | 0    | 0    | 148  | 0    | 237  |
| User Adj:    | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.00 | 0.95 | 0.95 | 0.00 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 0    | 1137 | 0    | 0    | 1038 | 0    | 0    | 0    | 0    | 156  | 0    | 249  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 0    | 1137 | 0    | 0    | 1038 | 0    | 0    | 0    | 0    | 156  | 0    | 249  |
| PCE Adj:     | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 0    | 1137 | 0    | 0    | 1038 | 0    | 0    | 0    | 0    | 156  | 0    | 249  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.88 |
| Lanes:      | 0.00 | 2.00 | 1.00 | 0.00 | 3.00 | 1.00 | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 2.00 |
| Final Sat.: | 0    | 3420 | 1800 | 0    | 4914 | 1800 | 0    | 0    | 0    | 1800 | 0    | 3168 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.00 | 0.33 | 0.00 | 0.00 | 0.21 | 0.00 | 0.00 | 0.00 | 0.00 | 0.09 | 0.00 | 0.08 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.00 | 0.76 | 0.00 | 0.00 | 0.76 | 0.00 | 0.00 | 0.00 | 0.00 | 0.20 | 0.00 | 0.20 |
| Volume/Cap:  | 0.00 | 0.44 | 0.00 | 0.00 | 0.28 | 0.00 | 0.00 | 0.00 | 0.00 | 0.44 | 0.00 | 0.40 |
| Delay/Veh:   | 0.0  | 4.4  | 0.0  | 0.0  | 3.6  | 0.0  | 0.0  | 0.0  | 0.0  | 36.0 | 0.0  | 35.3 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 0.0  | 4.4  | 0.0  | 0.0  | 3.6  | 0.0  | 0.0  | 0.0  | 0.0  | 36.0 | 0.0  | 35.3 |
| LOS by Move: | A    | A    | A    | A    | A    | A    | A    | A    | A    | D    | A    | D    |
| HCM2kAvgQ:   | 0    | 7    | 0    | 0    | 4    | 0    | 0    | 0    | 0    | 5    | 0    | 4    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 Etiwanda Ave/I-10 EB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.560  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 14.2  
Optimal Cycle: 30 Level Of Service: B

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound  |   |   | West Bound  |   |   |
|-------------|-------------|---|---|-------------|---|---|-------------|---|---|-------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L           | T | R | L           | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Split Phase |   |   | Split Phase |   |   |
| Rights:     | Ignore      |   |   | Ignore      |   |   | Include     |   |   | Include     |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 |
| Lanes:      | 0           | 0 | 3 | 0           | 0 | 2 | 0           | 0 | 0 | 0           | 0 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 0    | 1041 | 714  | 0    | 839  | 252  | 126  | 0    | 250  | 0    | 0    | 0    |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0    | 1041 | 714  | 0    | 839  | 252  | 126  | 0    | 250  | 0    | 0    | 0    |
| Added Vol:   | 0    | 529  | 0    | 0    | 83   | 0    | 0    | 0    | 75   | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 0    | 1570 | 714  | 0    | 922  | 252  | 126  | 0    | 325  | 0    | 0    | 0    |
| User Adj:    | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.00 | 0.95 | 0.95 | 0.00 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 0    | 1653 | 0    | 0    | 971  | 0    | 133  | 0    | 342  | 0    | 0    | 0    |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 0    | 1653 | 0    | 0    | 971  | 0    | 133  | 0    | 342  | 0    | 0    | 0    |
| PCE Adj:     | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 0    | 1653 | 0    | 0    | 971  | 0    | 133  | 0    | 342  | 0    | 0    | 0    |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.91 | 1.00 | 1.00 | 0.95 | 1.00 | 0.97 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 0.00 | 3.00 | 1.00 | 0.00 | 2.00 | 1.00 | 2.00 | 0.00 | 1.00 | 0.00 | 0.00 | 0.00 |
| Final Sat.: | 0    | 4914 | 1800 | 0    | 3420 | 1800 | 3492 | 0    | 1800 | 0    | 0    | 0    |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.00 | 0.34 | 0.00 | 0.00 | 0.28 | 0.00 | 0.04 | 0.00 | 0.19 | 0.00 | 0.00 | 0.00 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.00 | 0.60 | 0.00 | 0.00 | 0.60 | 0.00 | 0.34 | 0.00 | 0.34 | 0.00 | 0.00 | 0.00 |
| Volume/Cap:  | 0.00 | 0.56 | 0.00 | 0.00 | 0.47 | 0.00 | 0.11 | 0.00 | 0.56 | 0.00 | 0.00 | 0.00 |
| Delay/Veh:   | 0.0  | 12.3 | 0.0  | 0.0  | 11.3 | 0.0  | 22.7 | 0.0  | 28.1 | 0.0  | 0.0  | 0.0  |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 0.0  | 12.3 | 0.0  | 0.0  | 11.3 | 0.0  | 22.7 | 0.0  | 28.1 | 0.0  | 0.0  | 0.0  |
| LOS by Move: | A    | B    | A    | A    | B    | A    | C    | A    | C    | A    | A    | A    |
| HCM2kAvgQ:   | 0    | 11   | 0    | 0    | 9    | 0    | 1    | 0    | 9    | 0    | 0    | 0    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #6 Etiwanda Ave/ East Airport Dr-Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 1.398  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 208.8  
Optimal Cycle: 180 Level Of Service: F

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound  |   |   | West Bound  |   |   |
|-------------|-------------|---|---|-------------|---|---|-------------|---|---|-------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L           | T | R | L           | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Prot+Permit |   |   | Prot+Permit |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include     |   |   | Include     |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 1           | 0 | 1 | 1           | 0 | 1 | 1           | 0 | 1 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 26   | 839  | 30   | 188  | 713  | 74   | 316  | 97   | 72   | 69   | 93   | 582  |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 26   | 839  | 30   | 188  | 713  | 74   | 316  | 97   | 72   | 69   | 93   | 582  |
| Added Vol:   | 288  | 85   | 0    | 132  | 26   | 0    | 0    | 326  | 173  | 0    | 1087 | 444  |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 314  | 924  | 30   | 320  | 739  | 74   | 316  | 423  | 245  | 69   | 1180 | 1026 |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 331  | 973  | 32   | 337  | 778  | 78   | 333  | 445  | 258  | 73   | 1242 | 1080 |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 331  | 973  | 32   | 337  | 778  | 78   | 333  | 445  | 258  | 73   | 1242 | 1080 |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 331  | 973  | 32   | 337  | 778  | 78   | 333  | 445  | 258  | 73   | 1242 | 1080 |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Lanes:      | 1.00 | 1.94 | 0.06 | 1.00 | 1.82 | 0.18 | 1.00 | 1.27 | 0.73 | 1.00 | 1.07 | 0.93 |
| Final Sat.: | 1800 | 3312 | 108  | 1800 | 3109 | 311  | 1800 | 2166 | 1254 | 1800 | 1829 | 1591 |

Capacity Analysis Module:

|              |       |      |       |       |      |       |       |      |      |      |      |       |
|--------------|-------|------|-------|-------|------|-------|-------|------|------|------|------|-------|
| Vol/Sat:     | 0.18  | 0.29 | 0.29  | 0.19  | 0.25 | 0.25  | 0.00  | 0.21 | 0.21 | 0.00 | 0.68 | 0.68  |
| Crit Moves:  | ****  |      |       | ****  |      |       | ****  |      |      | **** |      |       |
| Green/Cycle: | 0.14  | 0.20 | 0.20  | 0.13  | 0.19 | 0.19  | 0.13  | 0.49 | 0.49 | 0.10 | 0.46 | 0.46  |
| Volume/Cap:  | 1.32  | 1.46 | 1.46  | 1.46  | 1.32 | 1.32  | 1.46  | 0.42 | 0.42 | 0.42 | 1.46 | 1.46  |
| Delay/Veh:   | 211.8 | 256  | 255.6 | 273.6 | 195  | 194.7 | 273.9 | 16.3 | 16.3 | 44.1 | 238  | 238.0 |
| User DelAdj: | 1.00  | 1.00 | 1.00  | 1.00  | 1.00 | 1.00  | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  |
| AdjDel/Veh:  | 211.8 | 256  | 255.6 | 273.6 | 195  | 194.7 | 273.9 | 16.3 | 16.3 | 44.1 | 238  | 238.0 |
| LOS by Move: | F     | F    | F     | F     | F    | F     | F     | B    | B    | D    | F    | F     |
| HCM2kAvgQ:   | 22    | 38   | 38    | 25    | 29   | 29    | 25    | 7    | 7    | 3    | 85   | 85    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 Etiwanda Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 1.201  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 90.6  
Optimal Cycle: 180 Level Of Service: F

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 2 | 0           | 2 | 0 | 1          | 2 | 0 | 0          | 2 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 323  | 595  | 140  | 390  | 771  | 231  | 169  | 964  | 355  | 71   | 561  | 100  |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 323  | 595  | 140  | 390  | 771  | 231  | 169  | 964  | 355  | 71   | 561  | 100  |
| Added Vol:   | 24   | 43   | 38   | 186  | 13   | 0    | 0    | 266  | 8    | 53   | 1660 | 331  |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 347  | 638  | 178  | 576  | 784  | 231  | 169  | 1230 | 363  | 124  | 2221 | 431  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 365  | 672  | 187  | 606  | 825  | 243  | 178  | 1295 | 382  | 131  | 2338 | 454  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 365  | 672  | 187  | 606  | 825  | 243  | 178  | 1295 | 382  | 131  | 2338 | 454  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 365  | 672  | 187  | 606  | 825  | 243  | 178  | 1295 | 382  | 131  | 2338 | 454  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 |
| Lanes:      | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 |
| Final Sat.: | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 |

Capacity Analysis Module:

|              |       |      |      |       |      |      |       |      |      |      |      |      |
|--------------|-------|------|------|-------|------|------|-------|------|------|------|------|------|
| Vol/Sat:     | 0.10  | 0.20 | 0.10 | 0.17  | 0.24 | 0.14 | 0.05  | 0.38 | 0.21 | 0.04 | 0.68 | 0.25 |
| Crit Moves:  | ****  |      |      | ****  |      |      | ****  |      |      | **** |      |      |
| Green/Cycle: | 0.09  | 0.16 | 0.16 | 0.14  | 0.21 | 0.21 | 0.04  | 0.56 | 0.56 | 0.05 | 0.57 | 0.57 |
| Volume/Cap:  | 1.12  | 1.20 | 0.64 | 1.20  | 1.12 | 0.63 | 1.20  | 0.68 | 0.38 | 0.68 | 1.20 | 0.44 |
| Delay/Veh:   | 132.5 | 148  | 43.6 | 150.8 | 111  | 38.9 | 185.7 | 16.8 | 12.7 | 55.9 | 117  | 12.7 |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 132.5 | 148  | 43.6 | 150.8 | 111  | 38.9 | 185.7 | 16.8 | 12.7 | 55.9 | 117  | 12.7 |
| LOS by Move: | F     | F    | D    | F     | F    | D    | F     | B    | B    | E    | F    | B    |
| HCM2kAvgQ:   | 12    | 21   | 6    | 19    | 23   | 8    | 7     | 16   | 7    | 3    | 65   | 8    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Etiwanda Ave/Marlay Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.381  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 15.3  
Optimal Cycle: 22 Level Of Service: B

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Permitted  |   |   | Permitted  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 1           | 0 | 2 | 1          | 0 | 1 | 1          | 0 | 1 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 18   | 590  | 79   | 61   | 659  | 15   | 31   | 41   | 61   | 74   | 77   | 113  |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 18   | 590  | 79   | 61   | 659  | 15   | 31   | 41   | 61   | 74   | 77   | 113  |
| Added Vol:   | 0    | 81   | 8    | 8    | 66   | 0    | 0    | 8    | 0    | 27   | 24   | 24   |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 18   | 671  | 87   | 69   | 725  | 15   | 31   | 49   | 61   | 101  | 101  | 137  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 19   | 706  | 92   | 73   | 763  | 16   | 33   | 52   | 64   | 106  | 106  | 144  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 19   | 706  | 92   | 73   | 763  | 16   | 33   | 52   | 64   | 106  | 106  | 144  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 19   | 706  | 92   | 73   | 763  | 16   | 33   | 52   | 64   | 106  | 106  | 144  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 0.95 | 1.00 | 0.91 | 0.91 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Lanes:      | 1.00 | 1.77 | 0.23 | 1.00 | 2.94 | 0.06 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Sat.: | 1800 | 3027 | 393  | 1800 | 4814 | 100  | 1800 | 1710 | 1710 | 1800 | 1710 | 1710 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.01 | 0.23 | 0.23 | 0.04 | 0.16 | 0.16 | 0.02 | 0.03 | 0.04 | 0.06 | 0.06 | 0.08 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.04 | 0.61 | 0.61 | 0.11 | 0.67 | 0.67 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 |
| Volume/Cap:  | 0.24 | 0.38 | 0.38 | 0.38 | 0.24 | 0.24 | 0.08 | 0.14 | 0.17 | 0.27 | 0.28 | 0.38 |
| Delay/Veh:   | 47.6 | 9.9  | 9.9  | 42.9 | 6.4  | 6.4  | 31.0 | 31.3 | 31.6 | 32.6 | 32.5 | 33.5 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 47.6 | 9.9  | 9.9  | 42.9 | 6.4  | 6.4  | 31.0 | 31.3 | 31.6 | 32.6 | 32.5 | 33.5 |
| LOS by Move: | D    | A    | A    | D    | A    | A    | C    | C    | C    | C    | C    | C    |
| HCM2kAvgQ:   | 1    | 7    | 7    | 2    | 3    | 3    | 1    | 1    | 2    | 3    | 3    | 4    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #9 Etiwanda Ave/Philadelphia Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.331  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 16.4  
Optimal Cycle: 21 Level Of Service: B

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Permitted  |   |   | Permitted  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 1 | 0 | 1          | 0 | 1 | 0          | 1 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 43   | 539  | 6    | 2    | 766  | 44   | 115  | 4    | 87   | 21   | 10   | 78   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 43   | 539  | 6    | 2    | 766  | 44   | 115  | 4    | 87   | 21   | 10   | 78   |
| Added Vol:   | 0    | 14   | 5    | 37   | 44   | 12   | 4    | 4    | 0    | 15   | 12   | 72   |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 43   | 553  | 11   | 39   | 810  | 56   | 119  | 8    | 87   | 36   | 22   | 150  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 45   | 582  | 12   | 41   | 853  | 59   | 125  | 8    | 92   | 38   | 23   | 158  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 45   | 582  | 12   | 41   | 853  | 59   | 125  | 8    | 92   | 38   | 23   | 158  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 45   | 582  | 12   | 41   | 853  | 59   | 125  | 8    | 92   | 38   | 23   | 158  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.91 | 0.91 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 2.81 | 0.19 | 1.00 | 1.00 | 1.00 | 1.00 | 0.13 | 0.87 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 4596 | 318  | 1800 | 1800 | 1800 | 1800 | 230  | 1570 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.03 | 0.17 | 0.01 | 0.02 | 0.19 | 0.19 | 0.07 | 0.00 | 0.05 | 0.02 | 0.10 | 0.10 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.08 | 0.56 | 0.56 | 0.08 | 0.56 | 0.56 | 0.30 | 0.30 | 0.30 | 0.30 | 0.30 | 0.30 |
| Volume/Cap:  | 0.33 | 0.30 | 0.01 | 0.30 | 0.33 | 0.33 | 0.23 | 0.02 | 0.17 | 0.07 | 0.33 | 0.33 |
| Delay/Veh:   | 45.2 | 11.7 | 9.7  | 45.0 | 11.9 | 11.9 | 26.3 | 24.4 | 25.7 | 24.8 | 27.3 | 27.3 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 45.2 | 11.7 | 9.7  | 45.0 | 11.9 | 11.9 | 26.3 | 24.4 | 25.7 | 24.8 | 27.3 | 27.3 |
| LOS by Move: | D    | B    | A    | D    | B    | B    | C    | C    | C    | C    | C    | C    |
| HCM2kAvgQ:   | 2    | 5    | 0    | 1    | 5    | 5    | 3    | 0    | 2    | 1    | 4    | 4    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #10 Etiwanda Ave/SR-60 WB Ramp

Cycle (sec): 100 Critical Vol./Cap.(X): 0.550  
Loss Time (sec): 4 (Y+R=4.0 sec) Average Delay (sec/veh): 12.0  
Optimal Cycle: 25 Level Of Service: B

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound  |   |   | West Bound  |   |   |
|-------------|-------------|---|---|-------------|---|---|-------------|---|---|-------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L           | T | R | L           | T | R |
| Control:    | Permitted   |   |   | Permitted   |   |   | Split Phase |   |   | Split Phase |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include     |   |   | Include     |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 |
| Lanes:      | 0           | 0 | 2 | 0           | 0 | 2 | 0           | 0 | 0 | 1           | 0 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 0    | 453  | 0    | 0    | 1174 | 0    | 0    | 0    | 0    | 255  | 0    | 149  |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0    | 453  | 0    | 0    | 1174 | 0    | 0    | 0    | 0    | 255  | 0    | 149  |
| Added Vol:   | 0    | 18   | 0    | 0    | 58   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 0    | 471  | 0    | 0    | 1232 | 0    | 0    | 0    | 0    | 255  | 0    | 149  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 0    | 496  | 0    | 0    | 1297 | 0    | 0    | 0    | 0    | 268  | 0    | 157  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 0    | 496  | 0    | 0    | 1297 | 0    | 0    | 0    | 0    | 268  | 0    | 157  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 0    | 496  | 0    | 0    | 1297 | 0    | 0    | 0    | 0    | 268  | 0    | 157  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 0.00 | 2.00 | 0.00 | 0.00 | 2.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 |
| Final Sat.: | 0    | 3420 | 0    | 0    | 3420 | 0    | 0    | 0    | 0    | 1800 | 0    | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.00 | 0.14 | 0.00 | 0.00 | 0.38 | 0.00 | 0.00 | 0.00 | 0.00 | 0.15 | 0.00 | 0.09 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.00 | 0.69 | 0.00 | 0.00 | 0.69 | 0.00 | 0.00 | 0.00 | 0.00 | 0.27 | 0.00 | 0.27 |
| Volume/Cap:  | 0.00 | 0.21 | 0.00 | 0.00 | 0.55 | 0.00 | 0.00 | 0.00 | 0.00 | 0.55 | 0.00 | 0.32 |
| Delay/Veh:   | 0.0  | 5.7  | 0.0  | 0.0  | 8.1  | 0.0  | 0.0  | 0.0  | 0.0  | 32.6 | 0.0  | 29.5 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 0.0  | 5.7  | 0.0  | 0.0  | 8.1  | 0.0  | 0.0  | 0.0  | 0.0  | 32.6 | 0.0  | 29.5 |
| LOS by Move: | A    | A    | A    | A    | A    | A    | A    | A    | A    | C    | A    | C    |
| HCM2kAvgQ:   | 0    | 3    | 0    | 0    | 11   | 0    | 0    | 0    | 0    | 8    | 0    | 4    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #11 Etiwanda Ave/SR-60 EB Ramp

Average Delay (sec/veh): 1.7 Worst Case Level Of Service: B[ 12.3]

| Approach: | North Bound  | South Bound  | East Bound | West Bound |
|-----------|--------------|--------------|------------|------------|
| Movement: | L - T - R    | L - T - R    | L - T - R  | L - T - R  |
| Control:  | Uncontrolled | Uncontrolled | Stop Sign  | Stop Sign  |
| Rights:   | Include      | Include      | Include    | Include    |
| Lanes:    | 0 0 1 1 0    | 1 0 2 0 0    | 0 0 0 0 0  | 0 0 0 0 0  |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 0    | 447  | 316  | 310  | 1090 | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0    | 447  | 316  | 310  | 1090 | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Added Vol:   | 0    | 18   | 0    | 0    | 58   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 0    | 465  | 316  | 310  | 1148 | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 0    | 489  | 333  | 326  | 1208 | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| FinalVolume: | 0    | 489  | 333  | 326  | 1208 | 0    | 0    | 0    | 0    | 0    | 0    | 0    |

Critical Gap Module:

|                   |      |      |      |     |      |       |       |      |       |       |      |       |
|-------------------|------|------|------|-----|------|-------|-------|------|-------|-------|------|-------|
| Critical Gp:xxxxx | xxxx | xxxx | xxxx | 4.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |
| FollowUpTim:xxxxx | xxxx | xxxx | xxxx | 2.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx |

Capacity Module:

|              |      |      |       |      |      |       |      |      |       |      |      |       |
|--------------|------|------|-------|------|------|-------|------|------|-------|------|------|-------|
| Cnflct Vol:  | xxxx | xxxx | xxxxx | 822  | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Potent Cap.: | xxxx | xxxx | xxxxx | 816  | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Move Cap.:   | xxxx | xxxx | xxxxx | 816  | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx |
| Volume/Cap:  | xxxx | xxxx | xxxx  | 0.40 | xxxx | xxxx  | xxxx | xxxx | xxxx  | xxxx | xxxx | xxxx  |

Level Of Service Module:

|                   |               |               |               |               |               |               |               |               |               |               |               |               |
|-------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| 2Way95thQ:        | xxxx          | xxxx          | xxxxx         | 1.9           | xxxx          | xxxxx         | xxxx          | xxxx          | xxxxx         | xxxx          | xxxx          | xxxxx         |
| Control Del:xxxxx | xxxxx         | xxxxx         | xxxxx         | 12.3          | xxxx          | xxxxx         | xxxxx         | xxxx          | xxxxx         | xxxxx         | xxxx          | xxxxx         |
| LOS by Move:      | *             | *             | *             | B             | *             | *             | *             | *             | *             | *             | *             | *             |
| Movement:         | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT |
| Shared Cap.:      | xxxx          | xxxx          | xxxxx         | xxxx          | xxxx          | xxxxx         | xxxx          | xxxx          | xxxxx         | xxxx          | xxxx          | xxxxx         |
| SharedQueue:xxxxx | xxxx          | xxxx          | xxxxx         | xxxx          | xxxx          | xxxxx         | xxxx          | xxxx          | xxxxx         | xxxx          | xxxx          | xxxxx         |
| Shrd ConDel:xxxxx | xxxx          | xxxx          | xxxxx         | xxxx          | xxxx          | xxxxx         | xxxx          | xxxx          | xxxxx         | xxxx          | xxxx          | xxxxx         |
| Shared LOS:       | *             | *             | *             | *             | *             | *             | *             | *             | *             | *             | *             | *             |
| ApproachDel:      | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        |
| ApproachLOS:      | *             | *             | *             | *             | *             | *             | *             | *             | *             | *             | *             | *             |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 Commerce Way/Ontario Mills Pkwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.765

Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 30.1

Optimal Cycle: 58 Level Of Service: C

| Approach:   | North Bound | South Bound | East Bound | West Bound |
|-------------|-------------|-------------|------------|------------|
| Movement:   | L - T - R   | L - T - R   | L - T - R  | L - T - R  |
| Control:    | Protected   | Protected   | Protected  | Protected  |
| Rights:     | Include     | Include     | Include    | Include    |
| Min. Green: | 0 0 0       | 0 0 0       | 0 0 0      | 0 0 0      |
| Lanes:      | 2 0 1 0 1   | 1 0 1 1 0   | 1 0 2 0 1  | 2 0 2 0 1  |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 16   | 159  | 798  | 24   | 121  | 16   | 232  | 11   | 446  | 301  | 18   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 16   | 159  | 798  | 24   | 121  | 16   | 232  | 11   | 446  | 301  | 18   |
| Added Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 55   | 0    | 0    | 165  | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 16   | 159  | 798  | 24   | 121  | 16   | 287  | 11   | 446  | 466  | 18   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 17   | 167  | 840  | 25   | 127  | 17   | 302  | 12   | 469  | 491  | 19   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 17   | 167  | 840  | 25   | 127  | 17   | 302  | 12   | 469  | 491  | 19   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 17   | 167  | 840  | 25   | 127  | 17   | 302  | 12   | 469  | 491  | 19   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 1.00 | 0.97 | 0.95 |
| Lanes:      | 2.00 | 1.00 | 1.00 | 1.00 | 1.77 | 0.23 | 1.00 | 2.00 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 3492 | 1800 | 1800 | 1800 | 3021 | 399  | 1800 | 3420 | 1800 | 3492 | 1800 |

Capacity Analysis Module:

|              |      |      |      |       |      |      |      |      |      |      |      |      |
|--------------|------|------|------|-------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.00 | 0.09 | 0.47 | 0.01  | 0.04 | 0.04 | 0.01 | 0.09 | 0.01 | 0.13 | 0.14 | 0.01 |
| Crit Moves:  | **** | **** | **** | ****  | **** | **** | **** | **** | **** | **** | **** | **** |
| Green/Cycle: | 0.06 | 0.61 | 0.61 | 0.02  | 0.56 | 0.56 | 0.02 | 0.12 | 0.12 | 0.18 | 0.27 | 0.27 |
| Volume/Cap:  | 0.07 | 0.15 | 0.76 | 0.76  | 0.07 | 0.07 | 0.52 | 0.76 | 0.06 | 0.76 | 0.52 | 0.04 |
| Delay/Veh:   | 44.1 | 8.4  | 17.5 | 116.8 | 9.9  | 9.9  | 63.7 | 51.5 | 39.5 | 44.9 | 31.4 | 26.7 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 44.1 | 8.4  | 17.5 | 116.8 | 9.9  | 9.9  | 63.7 | 51.5 | 39.5 | 44.9 | 31.4 | 26.7 |
| LOS by Move: | D    | A    | B    | F     | A    | A    | E    | D    | D    | D    | C    | C    |
| HCM2kAvgQ:   | 0    | 2    | 20   | 2     | 1    | 1    | 1    | 7    | 0    | 9    | 7    | 0    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #13 Mulberry Ave/Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.777  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 20.7  
Optimal Cycle: 53 Level Of Service: C

| Approach:   | North Bound | South Bound | East Bound | West Bound |
|-------------|-------------|-------------|------------|------------|
| Movement:   | L - T - R   | L - T - R   | L - T - R  | L - T - R  |
| Control:    | Split Phase | Split Phase | Protected  | Protected  |
| Rights:     | Include     | Include     | Include    | Include    |
| Min. Green: | 0 0 0       | 0 0 0       | 0 0 0      | 0 0 0      |
| Lanes:      | 1 0 0 0 1   | 0 0 0 0 0   | 0 0 2 1 0  | 1 0 2 0 0  |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 145  | 0    | 107  | 0    | 0    | 0    | 258  | 81   | 136  | 404  | 0    |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 145  | 0    | 107  | 0    | 0    | 0    | 258  | 81   | 136  | 404  | 0    |
| Added Vol:   | 180  | 0    | 67   | 0    | 0    | 0    | 417  | 41   | 165  | 1351 | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 325  | 0    | 174  | 0    | 0    | 0    | 675  | 122  | 301  | 1755 | 0    |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 342  | 0    | 183  | 0    | 0    | 0    | 711  | 128  | 317  | 1847 | 0    |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 342  | 0    | 183  | 0    | 0    | 0    | 711  | 128  | 317  | 1847 | 0    |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 342  | 0    | 183  | 0    | 0    | 0    | 711  | 128  | 317  | 1847 | 0    |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 0.91 | 1.00 | 0.95 | 1.00 |
| Lanes:      | 1.00 | 0.00 | 1.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.54 | 0.46 | 1.00 | 2.00 |
| Final Sat.: | 1800 | 0    | 1800 | 0    | 0    | 0    | 0    | 4162 | 752  | 1800 | 3420 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.19 | 0.00 | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 0.17 | 0.17 | 0.18 | 0.54 | 0.00 |
| Crit Moves:  | **** |      |      |      |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.24 | 0.00 | 0.24 | 0.00 | 0.00 | 0.00 | 0.00 | 0.34 | 0.34 | 0.35 | 0.70 | 0.00 |
| Volume/Cap:  | 0.78 | 0.00 | 0.42 | 0.00 | 0.00 | 0.00 | 0.00 | 0.50 | 0.50 | 0.50 | 0.78 | 0.00 |
| Delay/Veh:   | 43.7 | 0.0  | 32.4 | 0.0  | 0.0  | 0.0  | 0.0  | 26.3 | 26.3 | 26.0 | 11.8 | 0.0  |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 43.7 | 0.0  | 32.4 | 0.0  | 0.0  | 0.0  | 0.0  | 26.3 | 26.3 | 26.0 | 11.8 | 0.0  |
| LOS by Move: | D    | A    | C    | A    | A    | A    | A    | C    | C    | C    | B    | A    |
| HCM2kAvgQ:   | 12   | 0    | 5    | 0    | 0    | 0    | 0    | 8    | 8    | 8    | 21   | 0    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #14 Mulberry Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.581  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 22.3  
Optimal Cycle: 32 Level Of Service: C

| Approach:   | North Bound | South Bound | East Bound | West Bound |
|-------------|-------------|-------------|------------|------------|
| Movement:   | L - T - R   | L - T - R   | L - T - R  | L - T - R  |
| Control:    | Protected   | Protected   | Permitted  | Permitted  |
| Rights:     | Include     | Include     | Include    | Include    |
| Min. Green: | 0 0 0       | 0 0 0       | 0 0 0      | 0 0 0      |
| Lanes:      | 1 0 1 0 1   | 1 0 0 1 0   | 0 1 0 0 1  | 0 0 1! 0 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 8    | 180  | 44   | 29   | 226  | 7    | 8    | 13   | 66   | 62   | 13   | 84   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 8    | 180  | 44   | 29   | 226  | 7    | 8    | 13   | 66   | 62   | 13   | 84   |
| Added Vol:   | 0    | 196  | 174  | 12   | 194  | 0    | 0    | 0    | 0    | 289  | 0    | 51   |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 8    | 376  | 218  | 41   | 420  | 7    | 8    | 13   | 66   | 351  | 13   | 135  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 8    | 396  | 229  | 43   | 442  | 7    | 8    | 14   | 69   | 369  | 14   | 142  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 8    | 396  | 229  | 43   | 442  | 7    | 8    | 14   | 69   | 369  | 14   | 142  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 8    | 396  | 229  | 43   | 442  | 7    | 8    | 14   | 69   | 369  | 14   | 142  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 1.00 | 1.00 | 1.00 | 0.98 | 0.02 | 0.38 | 0.62 | 1.00 | 0.70 | 0.03 | 0.27 |
| Final Sat.: | 1800 | 1800 | 1800 | 1800 | 1770 | 30   | 686  | 1114 | 1800 | 1266 | 47   | 487  |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.00 | 0.22 | 0.13 | 0.02 | 0.25 | 0.25 | 0.01 | 0.01 | 0.04 | 0.29 | 0.29 | 0.29 |
| Crit Moves:  | **** |      |      |      | **** |      |      |      |      | **** |      |      |
| Green/Cycle: | 0.01 | 0.39 | 0.39 | 0.04 | 0.43 | 0.43 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 |
| Volume/Cap:  | 0.58 | 0.56 | 0.32 | 0.56 | 0.58 | 0.58 | 0.02 | 0.02 | 0.08 | 0.58 | 0.58 | 0.58 |
| Delay/Veh:   | 97.4 | 24.5 | 21.3 | 55.6 | 22.8 | 22.8 | 12.6 | 12.6 | 12.9 | 18.5 | 18.5 | 18.5 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 97.4 | 24.5 | 21.3 | 55.6 | 22.8 | 22.8 | 12.6 | 12.6 | 12.9 | 18.5 | 18.5 | 18.5 |
| LOS by Move: | F    | C    | C    | E    | C    | C    | B    | B    | B    | B    | B    | B    |
| HCM2kAvgQ:   | 1    | 10   | 5    | 2    | 11   | 11   | 0    | 0    | 1    | 12   | 12   | 12   |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #15 Mulberry Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 1.398  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 159.8  
Optimal Cycle: 180 Level Of Service: F

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 2 | 0           | 1 | 0 | 2          | 0 | 1 | 1          | 0 | 2 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 129  | 278  | 338  | 55   | 427  | 188  | 149  | 1232 | 417  | 387  | 758  | 49   |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 129  | 278  | 338  | 55   | 427  | 188  | 149  | 1232 | 417  | 387  | 758  | 49   |
| Added Vol:    | 22   | 113  | 92   | 0    | 178  | 301  | 216  | 307  | 34   | 265  | 1651 | 43   |
| PasserByVol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:  | 151  | 391  | 430  | 55   | 605  | 489  | 365  | 1539 | 451  | 652  | 2409 | 92   |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 159  | 412  | 453  | 58   | 637  | 515  | 384  | 1620 | 475  | 686  | 2536 | 97   |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 159  | 412  | 453  | 58   | 637  | 515  | 384  | 1620 | 475  | 686  | 2536 | 97   |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 159  | 412  | 453  | 58   | 637  | 515  | 384  | 1620 | 475  | 686  | 2536 | 97   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 |
| Lanes:      | 2.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 3492 | 3420 | 1800 | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 |

Capacity Analysis Module:

|              |       |      |       |       |      |       |       |      |      |       |      |      |
|--------------|-------|------|-------|-------|------|-------|-------|------|------|-------|------|------|
| Vol/Sat:     | 0.05  | 0.12 | 0.25  | 0.03  | 0.19 | 0.29  | 0.21  | 0.47 | 0.26 | 0.38  | 0.74 | 0.05 |
| Crit Moves:  | ****  |      |       | ****  |      |       | ****  |      |      | ****  |      |      |
| Green/Cycle: | 0.03  | 0.21 | 0.21  | 0.03  | 0.20 | 0.20  | 0.15  | 0.38 | 0.38 | 0.30  | 0.53 | 0.53 |
| Volume/Cap:  | 1.40  | 0.57 | 1.20  | 1.20  | 0.91 | 1.40  | 1.40  | 1.25 | 0.70 | 1.25  | 1.40 | 0.10 |
| Delay/Veh:   | 272.1 | 36.6 | 150.9 | 241.1 | 54.9 | 234.8 | 242.2 | 151  | 29.4 | 162.6 | 206  | 11.7 |
| User DelAdj: | 1.00  | 1.00 | 1.00  | 1.00  | 1.00 | 1.00  | 1.00  | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 |
| AdjDel/Veh:  | 272.1 | 36.6 | 150.9 | 241.1 | 54.9 | 234.8 | 242.2 | 151  | 29.4 | 162.6 | 206  | 11.7 |
| LOS by Move: | F     | D    | F     | F     | D    | F     | F     | F    | C    | F     | F    | B    |
| HCM2kAvgQ:   | 7     | 7    | 26    | 5     | 14   | 36    | 27    | 49   | 13   | 40    | 88   | 1    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #16 Mulberry Ave/Marlay Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.556  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 18.2  
Optimal Cycle: 35 Level Of Service: B

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 1 | 0 | 1          | 0 | 1 | 1          | 0 | 1 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 40   | 377  | 70   | 47   | 688  | 37   | 93   | 125  | 142  | 65   | 21   | 25   |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 40   | 377  | 70   | 47   | 688  | 37   | 93   | 125  | 142  | 65   | 21   | 25   |
| Added Vol:    | 5    | 190  | 0    | 0    | 466  | 11   | 36   | 0    | 16   | 0    | 0    | 0    |
| PasserByVol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:  | 45   | 567  | 70   | 47   | 1154 | 48   | 129  | 125  | 158  | 65   | 21   | 25   |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 47   | 597  | 74   | 49   | 1215 | 51   | 136  | 132  | 166  | 68   | 22   | 26   |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 47   | 597  | 74   | 49   | 1215 | 51   | 136  | 132  | 166  | 68   | 22   | 26   |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 47   | 597  | 74   | 49   | 1215 | 51   | 136  | 132  | 166  | 68   | 22   | 26   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.03 | 0.17 | 0.04 | 0.03 | 0.36 | 0.03 | 0.08 | 0.07 | 0.09 | 0.04 | 0.01 | 0.01 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.05 | 0.59 | 0.59 | 0.09 | 0.64 | 0.64 | 0.20 | 0.17 | 0.17 | 0.07 | 0.04 | 0.04 |
| Volume/Cap:  | 0.56 | 0.29 | 0.07 | 0.29 | 0.56 | 0.04 | 0.38 | 0.44 | 0.56 | 0.56 | 0.32 | 0.38 |
| Delay/Veh:   | 54.5 | 10.1 | 8.7  | 43.2 | 10.5 | 6.7  | 35.6 | 38.6 | 40.6 | 50.7 | 49.6 | 50.5 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 54.5 | 10.1 | 8.7  | 43.2 | 10.5 | 6.7  | 35.6 | 38.6 | 40.6 | 50.7 | 49.6 | 50.5 |
| LOS by Move: | D    | B    | A    | D    | B    | A    | D    | D    | D    | D    | D    | D    |
| HCM2kAvgQ:   | 2    | 5    | 1    | 2    | 11   | 1    | 4    | 4    | 5    | 3    | 1    | 1    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #17 Mulberry Ave/Philadelphia Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.590  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 9.5  
Optimal Cycle: 32 Level Of Service: A

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Permitted  |   |   | Permitted  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 1 | 0 | 1          | 0 | 1 | 0          | 1 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 30   | 1023 | 74   | 18   | 1026 | 42   | 63   | 18   | 83   | 48   | 15   | 9    |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 30   | 1023 | 74   | 18   | 1026 | 42   | 63   | 18   | 83   | 48   | 15   | 9    |
| Added Vol:   | 10   | 123  | 0    | 0    | 446  | 35   | 71   | 0    | 32   | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 40   | 1146 | 74   | 18   | 1472 | 77   | 134  | 18   | 115  | 48   | 15   | 9    |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 42   | 1206 | 78   | 19   | 1549 | 81   | 141  | 19   | 121  | 51   | 16   | 9    |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 42   | 1206 | 78   | 19   | 1549 | 81   | 141  | 19   | 121  | 51   | 16   | 9    |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 42   | 1206 | 78   | 19   | 1549 | 81   | 141  | 19   | 121  | 51   | 16   | 9    |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.63 | 0.37 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 | 1800 | 1800 | 1800 | 1800 | 1125 | 675  |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.02 | 0.35 | 0.04 | 0.01 | 0.45 | 0.05 | 0.08 | 0.01 | 0.07 | 0.03 | 0.01 | 0.01 |
| Crit Moves:  | **** |      |      | **** |      | **** |      |      |      |      |      |      |
| Green/Cycle: | 0.04 | 0.78 | 0.78 | 0.02 | 0.77 | 0.77 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 |
| Volume/Cap:  | 0.59 | 0.45 | 0.06 | 0.45 | 0.59 | 0.06 | 0.59 | 0.08 | 0.51 | 0.21 | 0.11 | 0.11 |
| Delay/Veh:   | 59.6 | 3.7  | 2.5  | 55.7 | 5.3  | 2.8  | 44.7 | 38.1 | 42.1 | 39.1 | 38.3 | 38.3 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 59.6 | 3.7  | 2.5  | 55.7 | 5.3  | 2.8  | 44.7 | 38.1 | 42.1 | 39.1 | 38.3 | 38.3 |
| LOS by Move: | E    | A    | A    | E    | A    | A    | D    | D    | D    | D    | D    | D    |
| HCM2kAvgQ:   | 2    | 7    | 1    | 1    | 11   | 1    | 5    | 1    | 4    | 2    | 1    | 1    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #18 Mulberry Ave/SR-60 WB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.909  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 26.2  
Optimal Cycle: 99 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound  |   |   | West Bound  |   |   |
|-------------|-------------|---|---|-------------|---|---|-------------|---|---|-------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L           | T | R | L           | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Split Phase |   |   | Split Phase |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include     |   |   | Include     |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 0 | 1 | 0           | 0 | 0 | 0           | 1 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 341  | 1046 | 0    | 0    | 605  | 565  | 0    | 0    | 0    | 123  | 1    | 253  |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 341  | 1046 | 0    | 0    | 605  | 565  | 0    | 0    | 0    | 123  | 1    | 253  |
| Added Vol:   | 0    | 133  | 0    | 0    | 478  | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 341  | 1179 | 0    | 0    | 1083 | 565  | 0    | 0    | 0    | 123  | 1    | 253  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 359  | 1241 | 0    | 0    | 1140 | 595  | 0    | 0    | 0    | 129  | 1    | 266  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 359  | 1241 | 0    | 0    | 1140 | 595  | 0    | 0    | 0    | 129  | 1    | 266  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 359  | 1241 | 0    | 0    | 1140 | 595  | 0    | 0    | 0    | 129  | 1    | 266  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 0.00 | 0.00 | 1.31 | 0.69 | 0.00 | 0.00 | 0.00 | 0.99 | 0.01 | 1.00 |
| Final Sat.: | 1800 | 3420 | 0    | 0    | 2247 | 1173 | 0    | 0    | 0    | 1785 | 15   | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.20 | 0.36 | 0.00 | 0.00 | 0.51 | 0.51 | 0.00 | 0.00 | 0.00 | 0.07 | 0.07 | 0.15 |
| Crit Moves:  | **** |      |      | **** |      |      |      |      |      |      |      |      |
| Green/Cycle: | 0.22 | 0.78 | 0.00 | 0.00 | 0.56 | 0.56 | 0.00 | 0.00 | 0.00 | 0.16 | 0.16 | 0.16 |
| Volume/Cap:  | 0.91 | 0.47 | 0.00 | 0.00 | 0.91 | 0.91 | 0.00 | 0.00 | 0.00 | 0.45 | 0.45 | 0.91 |
| Delay/Veh:   | 62.5 | 4.0  | 0.0  | 0.0  | 26.7 | 26.7 | 0.0  | 0.0  | 0.0  | 38.9 | 38.9 | 71.4 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 62.5 | 4.0  | 0.0  | 0.0  | 26.7 | 26.7 | 0.0  | 0.0  | 0.0  | 38.9 | 38.9 | 71.4 |
| LOS by Move: | E    | A    | A    | A    | C    | C    | A    | A    | A    | D    | D    | E    |
| HCM2kAvgQ:   | 15   | 7    | 0    | 0    | 29   | 29   | 0    | 0    | 0    | 4    | 4    | 12   |

Note: Queue reported is the number of cars per lane.



FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #19 Mulberry Ave/SR-60 EB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.878  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 30.6  
Optimal Cycle: 82 Level Of Service: C

| Approach:      | North Bound |      |      | South Bound |      |      | East Bound  |      |      | West Bound  |      |      |
|----------------|-------------|------|------|-------------|------|------|-------------|------|------|-------------|------|------|
| Movement:      | L           | T    | R    | L           | T    | R    | L           | T    | R    | L           | T    | R    |
| Control:       | Protected   |      |      | Protected   |      |      | Split Phase |      |      | Split Phase |      |      |
| Rights:        | Include     |      |      | Include     |      |      | Include     |      |      | Include     |      |      |
| Min. Green:    | 0           | 0    | 0    | 0           | 0    | 0    | 0           | 0    | 0    | 0           | 0    | 0    |
| Lanes:         | 0           | 0    | 1    | 1           | 0    | 0    | 1           | 0    | 1    | 0           | 0    | 0    |
| Volume Module: |             |      |      |             |      |      |             |      |      |             |      |      |
| Base Vol:      | 0           | 634  | 157  | 235         | 496  | 0    | 745         | 0    | 317  | 0           | 0    | 0    |
| Growth Adj:    | 1.00        | 1.00 | 1.00 | 1.00        | 1.00 | 1.00 | 1.00        | 1.00 | 1.00 | 1.00        | 1.00 | 1.00 |
| Initial Bse:   | 0           | 634  | 157  | 235         | 496  | 0    | 745         | 0    | 317  | 0           | 0    | 0    |
| Added Vol:     | 0           | 133  | 0    | 0           | 478  | 0    | 0           | 0    | 0    | 0           | 0    | 0    |
| PasserByVol:   | 0           | 0    | 0    | 0           | 0    | 0    | 0           | 0    | 0    | 0           | 0    | 0    |
| Initial Fut:   | 0           | 767  | 157  | 235         | 974  | 0    | 745         | 0    | 317  | 0           | 0    | 0    |
| User Adj:      | 1.00        | 1.00 | 1.00 | 1.00        | 1.00 | 1.00 | 1.00        | 1.00 | 1.00 | 1.00        | 1.00 | 1.00 |
| PHF Adj:       | 0.95        | 0.95 | 0.95 | 0.95        | 0.95 | 0.95 | 0.95        | 0.95 | 0.95 | 0.95        | 0.95 | 0.95 |
| PHF Volume:    | 0           | 807  | 165  | 247         | 1025 | 0    | 784         | 0    | 334  | 0           | 0    | 0    |
| Reduct Vol:    | 0           | 0    | 0    | 0           | 0    | 0    | 0           | 0    | 0    | 0           | 0    | 0    |
| Reduced Vol:   | 0           | 807  | 165  | 247         | 1025 | 0    | 784         | 0    | 334  | 0           | 0    | 0    |
| PCE Adj:       | 1.00        | 1.00 | 1.00 | 1.00        | 1.00 | 1.00 | 1.00        | 1.00 | 1.00 | 1.00        | 1.00 | 1.00 |
| MLF Adj:       | 1.00        | 1.00 | 1.00 | 1.00        | 1.00 | 1.00 | 1.00        | 1.00 | 1.00 | 1.00        | 1.00 | 1.00 |
| FinalVolume:   | 0           | 807  | 165  | 247         | 1025 | 0    | 784         | 0    | 334  | 0           | 0    | 0    |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 0.00 | 1.66 | 0.34 | 1.00 | 2.00 | 0.00 | 1.54 | 0.00 | 0.46 | 0.00 | 0.00 | 0.00 |
| Final Sat.: | 0    | 2839 | 581  | 1800 | 3420 | 0    | 2772 | 0    | 828  | 0    | 0    | 0    |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.00 | 0.28 | 0.28 | 0.14 | 0.30 | 0.00 | 0.28 | 0.00 | 0.40 | 0.00 | 0.00 | 0.00 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.00 | 0.32 | 0.32 | 0.16 | 0.48 | 0.00 | 0.46 | 0.00 | 0.46 | 0.00 | 0.00 | 0.00 |
| Volume/Cap:  | 0.00 | 0.88 | 0.88 | 0.88 | 0.62 | 0.00 | 0.62 | 0.00 | 0.88 | 0.00 | 0.00 | 0.00 |
| Delay/Veh:   | 0.0  | 40.1 | 40.1 | 66.5 | 20.0 | 0.0  | 21.0 | 0.0  | 31.7 | 0.0  | 0.0  | 0.0  |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 0.0  | 40.1 | 40.1 | 66.5 | 20.0 | 0.0  | 21.0 | 0.0  | 31.7 | 0.0  | 0.0  | 0.0  |
| LOS by Move: | A    | D    | D    | E    | C    | A    | C    | A    | C    | A    | A    | A    |
| HCM2kAvgQ:   | 0    | 18   | 18   | 11   | 13   | 0    | 12   | 0    | 23   | 0    | 0    | 0    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #20 Banana Ave/San Bernardino Ave

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: B[ 12.1]

| Approach:      | North Bound |      |      | South Bound |      |      | East Bound   |      |      | West Bound   |      |      |
|----------------|-------------|------|------|-------------|------|------|--------------|------|------|--------------|------|------|
| Movement:      | L           | T    | R    | L           | T    | R    | L            | T    | R    | L            | T    | R    |
| Control:       | Stop Sign   |      |      | Stop Sign   |      |      | Uncontrolled |      |      | Uncontrolled |      |      |
| Rights:        | Include     |      |      | Include     |      |      | Include      |      |      | Include      |      |      |
| Lanes:         | 0           | 0    | 1    | 0           | 0    | 0    | 0            | 0    | 2    | 0            | 1    | 0    |
| Volume Module: |             |      |      |             |      |      |              |      |      |              |      |      |
| Base Vol:      | 6           | 0    | 42   | 0           | 0    | 0    | 0            | 652  | 12   | 9            | 331  | 0    |
| Growth Adj:    | 1.00        | 1.00 | 1.00 | 1.00        | 1.00 | 1.00 | 1.00         | 1.00 | 1.00 | 1.00         | 1.00 | 1.00 |
| Initial Bse:   | 6           | 0    | 42   | 0           | 0    | 0    | 0            | 652  | 12   | 9            | 331  | 0    |
| Added Vol:     | 0           | 0    | 0    | 0           | 0    | 0    | 0            | 9    | 0    | 0            | 54   | 0    |
| PasserByVol:   | 0           | 0    | 0    | 0           | 0    | 0    | 0            | 0    | 0    | 0            | 0    | 0    |
| Initial Fut:   | 6           | 0    | 42   | 0           | 0    | 0    | 0            | 661  | 12   | 9            | 385  | 0    |
| User Adj:      | 1.00        | 1.00 | 1.00 | 1.00        | 1.00 | 1.00 | 1.00         | 1.00 | 1.00 | 1.00         | 1.00 | 1.00 |
| PHF Adj:       | 0.95        | 0.95 | 0.95 | 0.95        | 0.95 | 0.95 | 0.95         | 0.95 | 0.95 | 0.95         | 0.95 | 0.95 |
| PHF Volume:    | 6           | 0    | 44   | 0           | 0    | 0    | 0            | 696  | 13   | 9            | 405  | 0    |
| Reduct Vol:    | 0           | 0    | 0    | 0           | 0    | 0    | 0            | 0    | 0    | 0            | 0    | 0    |
| FinalVolume:   | 6           | 0    | 44   | 0           | 0    | 0    | 0            | 696  | 13   | 9            | 405  | 0    |

Critical Gap Module:

|               |     |     |     |       |      |       |       |      |       |     |      |       |
|---------------|-----|-----|-----|-------|------|-------|-------|------|-------|-----|------|-------|
| Critical Gap: | 6.8 | 6.5 | 6.9 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim:  | 3.5 | 4.0 | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |

Capacity Module:

|              |      |      |      |      |      |       |      |      |       |      |      |       |
|--------------|------|------|------|------|------|-------|------|------|-------|------|------|-------|
| Cnflct Vol:  | 917  | 1120 | 348  | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 708  | xxxx | xxxxx |
| Potent Cap.: | 275  | 208  | 654  | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 900  | xxxx | xxxxx |
| Move Cap.:   | 273  | 206  | 654  | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 900  | xxxx | xxxxx |
| Volume/Cap:  | 0.02 | 0.00 | 0.07 | xxxx | xxxx | xxxx  | xxxx | xxxx | xxxx  | 0.01 | xxxx | xxxx  |

Level Of Service Module:

|              |       |      |       |         |      |       |         |      |       |         |      |       |
|--------------|-------|------|-------|---------|------|-------|---------|------|-------|---------|------|-------|
| 2Way95thQ:   | xxxx  | xxxx | xxxxx | xxxx    | xxxx | xxxxx | xxxx    | xxxx | xxxxx | 0.0     | xxxx | xxxxx |
| Control Del: | xxxxx | xxxx | xxxxx | xxxxx   | xxxx | xxxxx | xxxxx   | xxxx | xxxxx | 9.0     | xxxx | xxxxx |
| LOS by Move: | *     | *    | *     | *       | *    | *     | *       | *    | *     | A       | *    | *     |
| Movement:    | LT    | LTR  | RT    | LT      | LTR  | RT    | LT      | LTR  | RT    | LT      | LTR  | RT    |
| Shared Cap.: | xxxx  | 557  | xxxxx | xxxx    | xxxx | xxxxx | xxxx    | xxxx | xxxxx | xxxx    | xxxx | xxxxx |
| SharedQueue: | xxxxx | 0.3  | xxxxx | xxxxx   | xxxx | xxxxx | xxxxx   | xxxx | xxxxx | xxxxx   | xxxx | xxxxx |
| Shrd ConDel: | xxxxx | 12.1 | xxxxx | xxxxx   | xxxx | xxxxx | xxxxx   | xxxx | xxxxx | xxxxx   | xxxx | xxxxx |
| Shared LOS:  | *     | B    | *     | *       | *    | *     | *       | *    | *     | *       | *    | *     |
| ApproachDel: | 12.1  |      |       | xxxxxxx |      |       | xxxxxxx |      |       | xxxxxxx |      |       |
| ApproachLOS: | B     |      |       | *       |      |       | *       |      |       | *       |      |       |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #21 Banana Ave/Valley Blvd

Average Delay (sec/veh): 2.4 Worst Case Level Of Service: F [ 53.5]

Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Stop Sign Stop Sign Uncontrolled Uncontrolled  
Rights: Include Include Include Include  
Lanes: 0 0 1! 0 0 0 0 1! 0 0 1 0 2 0 1 1 0 1 1 0

Volume Module:

Base Vol: 15 0 15 27 0 34 50 1023 12 8 577 36  
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
Initial Bse: 15 0 15 27 0 34 50 1023 12 8 577 36  
Added Vol: 0 0 0 0 0 0 0 55 0 0 165 0  
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0  
Initial Fut: 15 0 15 27 0 34 50 1078 12 8 742 36  
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95  
PHF Volume: 16 0 16 28 0 36 53 1135 13 8 781 38  
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
FinalVolume: 16 0 16 28 0 36 53 1135 13 8 781 38

Critical Gap Module:

Critical Gp: 7.5 6.5 6.9 7.5 6.5 6.9 4.1 xxxx xxxxx 4.1 xxxx xxxxx  
FollowUpTim: 3.5 4.0 3.3 3.5 4.0 3.3 2.2 xxxx xxxxx 2.2 xxxx xxxxx

Capacity Module:

Cnflct Vol: 1647 2076 567 1489 2069 409 819 xxxx xxxxx 1147 xxxx xxxxx  
Potent Cap.: 67 54 472 87 55 597 818 xxxx xxxxx 616 xxxx xxxxx  
Move Cap.: 59 50 472 80 51 597 818 xxxx xxxxx 616 xxxx xxxxx  
Volume/Cap: 0.27 0.00 0.03 0.36 0.00 0.06 0.06 xxxx xxxxx 0.01 xxxx xxxxx

Level Of Service Module:

2Way95thQ: xxxx xxxx xxxxx xxxx xxxx xxxxx 0.2 xxxx xxxxx 0.0 xxxx xxxxx  
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx 9.7 xxxx xxxxx 10.9 xxxx xxxxx  
LOS by Move: \* \* \* \* \* A \* \* \* \* \* B \* \* \* \* \*  
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT  
Shared Cap.: xxxx 105 xxxxx xxxx 154 xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx  
SharedQueue:xxxxx 1.1 xxxxx xxxxx 1.8 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx  
Shrd ConDel:xxxxx 53.5 xxxxx xxxxx 44.2 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx  
Shared LOS: \* F \* \* E \* \* \* \* \*  
ApproachDel: 53.5 44.2 xxxxxx xxxxxx  
ApproachLOS: F E \* \*

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #22 Cherry Ave/San Bernardino Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 1.408

Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 152.8

Optimal Cycle: 180 Level Of Service: F

Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected  
Rights: Include Ignore Ignore Include  
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0  
Lanes: 1 0 2 1 0 1 0 3 0 1 1 0 2 0 1 1 0 1 1 0

Volume Module:

Base Vol: 19 834 87 58 731 143 315 426 88 119 157 48  
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
Initial Bse: 19 834 87 58 731 143 315 426 88 119 157 48  
Added Vol: 0 3477 16 0 964 18 113 47 0 3 8 0  
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0  
Initial Fut: 19 4311 103 58 1695 161 428 473 88 122 165 48  
User Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 0.00 1.00 1.00 1.00  
PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.00 0.95 0.95 0.00 0.95 0.95 0.95  
PHF Volume: 20 4538 108 61 1784 0 451 498 0 128 174 51  
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
Reduced Vol: 20 4538 108 61 1784 0 451 498 0 128 174 51  
PCE Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 0.00 1.00 1.00 1.00  
MLF Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 0.00 1.00 1.00 1.00  
FinalVolume: 20 4538 108 61 1784 0 451 498 0 128 174 51

Saturation Flow Module:

Sat/Lane: 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800  
Adjustment: 1.00 0.91 0.91 1.00 0.91 1.00 1.00 0.95 1.00 1.00 0.95 0.95  
Lanes: 1.00 2.93 0.07 1.00 3.00 1.00 1.00 2.00 1.00 1.00 1.55 0.45  
Final Sat.: 1800 4799 115 1800 4914 1800 1800 3420 1800 1800 2649 771

Capacity Analysis Module:

Vol/Sat: 0.01 0.95 0.95 0.03 0.36 0.00 0.25 0.15 0.00 0.07 0.07 0.07  
Crit Moves: \*\*\*\* \*\*\*\* \*\*\*\*  
Green/Cycle: 0.02 0.67 0.67 0.02 0.68 0.00 0.18 0.15 0.00 0.07 0.05 0.05  
Volume/Cap: 0.54 1.41 1.41 1.41 0.54 0.00 1.41 0.97 0.00 0.97 1.41 1.41  
Delay/Veh: 63.3 202 201.9 326.9 8.5 0.0 242.4 73.5 0.0 113.9 264 264.3  
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
AdjDel/Veh: 63.3 202 201.9 326.9 8.5 0.0 242.4 73.5 0.0 113.9 264 264.3  
LOS by Move: E F F F A A F E A F F F  
HCM2kAvgQ: 1 112 112 6 10 0 32 12 0 7 10 10

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #23 Cherry Ave/Valley Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 1.919  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 289.2  
Optimal Cycle: 180 Level Of Service: F

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 1 | 1 | 1          | 0 | 2 | 0          | 1 | 1 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 118  | 531  | 306  | 139  | 632  | 127  | 124  | 699  | 197  | 275  | 408  | 63   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 118  | 531  | 306  | 139  | 632  | 127  | 124  | 699  | 197  | 275  | 408  | 63   |
| Added Vol:   | 59   | 3425 | 54   | 18   | 1320 | 0    | 0    | 91   | 69   | 89   | 70   | 3    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 177  | 3956 | 360  | 157  | 1952 | 127  | 124  | 790  | 266  | 364  | 478  | 66   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 186  | 4164 | 379  | 165  | 2055 | 134  | 131  | 832  | 280  | 383  | 503  | 69   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 186  | 4164 | 379  | 165  | 2055 | 134  | 131  | 832  | 280  | 383  | 503  | 69   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 186  | 4164 | 379  | 165  | 2055 | 134  | 131  | 832  | 280  | 383  | 503  | 69   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 |

Capacity Analysis Module:

|              |       |      |      |       |      |      |      |      |       |       |      |      |
|--------------|-------|------|------|-------|------|------|------|------|-------|-------|------|------|
| Vol/Sat:     | 0.10  | 1.22 | 0.21 | 0.09  | 0.60 | 0.07 | 0.07 | 0.24 | 0.16  | 0.21  | 0.15 | 0.04 |
| Crit Moves:  | ****  |      |      | ****  |      |      | **** |      |       | ****  |      |      |
| Green/Cycle: | 0.10  | 0.63 | 0.63 | 0.05  | 0.58 | 0.58 | 0.08 | 0.13 | 0.13  | 0.11  | 0.16 | 0.16 |
| Volume/Cap:  | 1.03  | 1.92 | 0.33 | 1.92  | 1.03 | 0.13 | 0.92 | 1.92 | 1.23  | 1.92  | 0.92 | 0.24 |
| Delay/Veh:   | 120.7 | 434  | 8.6  | 500.9 | 49.9 | 9.5  | 99.1 | 466  | 178.5 | 476.0 | 63.1 | 37.2 |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00  | 1.00 | 1.00 |
| AdjDel/Veh:  | 120.7 | 434  | 8.6  | 500.9 | 49.9 | 9.5  | 99.1 | 466  | 178.5 | 476.0 | 63.1 | 37.2 |
| LOS by Move: | F     | F    | A    | F     | D    | A    | F    | F    | F     | F     | E    | D    |
| HCM2kAvgQ:   | 10    | 194  | 5    | 16    | 44   | 2    | 7    | 40   | 18    | 36    | 12   | 2    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #26 Cherry Ave/Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 3.128  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 642.1  
Optimal Cycle: 180 Level Of Service: F

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 1 | 1 | 1          | 0 | 2 | 0          | 1 | 1 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 34   | 405  | 23   | 245  | 392  | 304  | 307  | 724  | 52   | 44   | 280  | 294  |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 34   | 405  | 23   | 245  | 392  | 304  | 307  | 724  | 52   | 44   | 280  | 294  |
| Added Vol:   | 382  | 3281 | 366  | 540  | 885  | 309  | 694  | 610  | 267  | 156  | 759  | 1008 |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 416  | 3686 | 389  | 785  | 1277 | 613  | 1001 | 1334 | 319  | 200  | 1039 | 1302 |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 438  | 3880 | 409  | 826  | 1344 | 645  | 1054 | 1404 | 336  | 211  | 1094 | 1371 |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 438  | 3880 | 409  | 826  | 1344 | 645  | 1054 | 1404 | 336  | 211  | 1094 | 1371 |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 438  | 3880 | 409  | 826  | 1344 | 645  | 1054 | 1404 | 336  | 211  | 1094 | 1371 |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 1.35 | 0.65 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 2311 | 1109 | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 |

Capacity Analysis Module:

|              |       |      |      |      |      |       |      |      |      |       |      |      |
|--------------|-------|------|------|------|------|-------|------|------|------|-------|------|------|
| Vol/Sat:     | 0.24  | 1.13 | 0.23 | 0.46 | 0.58 | 0.58  | 0.59 | 0.41 | 0.19 | 0.12  | 0.32 | 0.76 |
| Crit Moves:  | ****  |      |      | **** |      |       | **** |      |      | ****  |      |      |
| Green/Cycle: | 0.15  | 0.36 | 0.36 | 0.15 | 0.36 | 0.36  | 0.19 | 0.34 | 0.34 | 0.10  | 0.24 | 0.24 |
| Volume/Cap:  | 1.62  | 3.13 | 0.63 | 3.13 | 1.62 | 1.62  | 3.13 | 1.23 | 0.56 | 1.23  | 1.31 | 3.13 |
| Delay/Veh:   | 337.6 | 992  | 28.2 | 1010 | 315  | 314.5 | 1006 | 143  | 28.3 | 187.3 | 188  | 1001 |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 |
| AdjDel/Veh:  | 337.6 | 992  | 28.2 | 1010 | 315  | 314.5 | 1006 | 143  | 28.3 | 187.3 | 188  | 1001 |
| LOS by Move: | F     | F    | C    | F    | F    | F     | F    | F    | C    | F     | F    | F    |
| HCM2kAvgQ:   | 35    | 232  | 11   | 95   | 82   | 82    | 120  | 42   | 9    | 14    | 37   | 156  |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #27 Cherry Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 1.285  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 108.9  
Optimal Cycle: 180 Level Of Service: F

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Permitted  |   |   | Permitted  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 1           | 0 | 2 | 0          | 1 | 0 | 0          | 1 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 12   | 399  | 6    | 17   | 575  | 59   | 117  | 29   | 8    | 7    | 20   | 34   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 12   | 399  | 6    | 17   | 575  | 59   | 117  | 29   | 8    | 7    | 20   | 34   |
| Added Vol:   | 74   | 2119 | 11   | 62   | 846  | 154  | 888  | 0    | 461  | 26   | 0    | 178  |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 86   | 2518 | 17   | 79   | 1421 | 213  | 1005 | 29   | 469  | 33   | 20   | 212  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 91   | 2651 | 18   | 83   | 1496 | 224  | 1058 | 31   | 494  | 35   | 21   | 223  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 91   | 2651 | 18   | 83   | 1496 | 224  | 1058 | 31   | 494  | 35   | 21   | 223  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 91   | 2651 | 18   | 83   | 1496 | 224  | 1058 | 31   | 494  | 35   | 21   | 223  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 2.98 | 0.02 | 1.00 | 2.61 | 0.39 | 1.00 | 0.06 | 0.94 | 0.62 | 0.38 |
| Final Sat.: | 1800 | 4881 | 33   | 1800 | 4273 | 641  | 1710 | 100  | 1610 | 1121 | 679  |

Capacity Analysis Module:

|              |      |      |       |       |      |      |       |      |      |      |      |
|--------------|------|------|-------|-------|------|------|-------|------|------|------|------|
| Vol/Sat:     | 0.05 | 0.54 | 0.54  | 0.05  | 0.35 | 0.35 | 0.62  | 0.31 | 0.31 | 0.03 | 0.03 |
| Crit Moves:  | **** | **** | ****  | ****  | **** | **** | ****  | **** | **** | **** | **** |
| Green/Cycle: | 0.06 | 0.42 | 0.42  | 0.04  | 0.40 | 0.40 | 0.48  | 0.48 | 0.48 | 0.48 | 0.48 |
| Volume/Cap:  | 0.87 | 1.28 | 1.28  | 1.28  | 0.87 | 0.87 | 1.28  | 0.64 | 0.64 | 0.06 | 0.06 |
| Delay/Veh:   | 97.2 | 161  | 160.9 | 254.4 | 32.2 | 32.2 | 160.4 | 19.9 | 19.9 | 13.9 | 13.9 |
| User DelAdj: | 1.00 | 1.00 | 1.00  | 1.00  | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 97.2 | 161  | 160.9 | 254.4 | 32.2 | 32.2 | 160.4 | 19.9 | 19.9 | 13.9 | 13.9 |
| LOS by Move: | F    | F    | F     | F     | C    | C    | F     | B    | B    | B    | B    |
| HCM2kAvgQ:   | 5    | 58   | 58    | 7     | 21   | 21   | 66    | 13   | 13   | 1    | 1    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #28 Cherry Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 1.296  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 104.8  
Optimal Cycle: 180 Level Of Service: F

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 2 | 0           | 2 | 0 | 2          | 0 | 2 | 1          | 0 | 2 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 183  | 260  | 40   | 123  | 423  | 105  | 138  | 813  | 213  | 87   | 734  | 69   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 183  | 260  | 40   | 123  | 423  | 105  | 138  | 813  | 213  | 87   | 734  | 69   |
| Added Vol:   | 14   | 202  | 25   | 413  | 641  | 550  | 568  | 418  | 77   | 135  | 1011 | 482  |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 197  | 462  | 65   | 536  | 1064 | 655  | 706  | 1231 | 290  | 222  | 1745 | 551  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 207  | 486  | 68   | 564  | 1120 | 689  | 743  | 1296 | 305  | 234  | 1837 | 580  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 207  | 486  | 68   | 564  | 1120 | 689  | 743  | 1296 | 305  | 234  | 1837 | 580  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 207  | 486  | 68   | 564  | 1120 | 689  | 743  | 1296 | 305  | 234  | 1837 | 580  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.91 | 0.91 | 0.97 | 0.95 |
| Lanes:      | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 2.43 | 0.57 | 2.00 | 2.00 |
| Final Sat.: | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 | 3492 | 3977 | 937  | 3492 | 3420 |

Capacity Analysis Module:

|              |       |      |      |      |      |       |       |      |      |      |      |
|--------------|-------|------|------|------|------|-------|-------|------|------|------|------|
| Vol/Sat:     | 0.06  | 0.14 | 0.04 | 0.16 | 0.33 | 0.38  | 0.21  | 0.33 | 0.33 | 0.07 | 0.54 |
| Crit Moves:  | ****  | **** | **** | **** | **** | ****  | ****  | **** | **** | **** | **** |
| Green/Cycle: | 0.05  | 0.16 | 0.16 | 0.18 | 0.30 | 0.30  | 0.16  | 0.48 | 0.48 | 0.10 | 0.41 |
| Volume/Cap:  | 1.30  | 0.89 | 0.24 | 0.89 | 1.11 | 1.30  | 1.30  | 0.68 | 0.68 | 0.68 | 1.30 |
| Delay/Veh:   | 219.2 | 57.6 | 37.1 | 54.5 | 98.0 | 181.9 | 187.6 | 20.9 | 20.9 | 48.9 | 168  |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 219.2 | 57.6 | 37.1 | 54.5 | 98.0 | 181.9 | 187.6 | 20.9 | 20.9 | 48.9 | 168  |
| LOS by Move: | F     | E    | D    | D    | F    | F     | F     | C    | C    | D    | F    |
| HCM2kAvgQ:   | 8     | 11   | 2    | 12   | 29   | 43    | 25    | 15   | 15   | 5    | 58   |

Note: Queue reported is the number of cars per lane.

Lanes, Volumes, Timings  
3: VALLEY BLVD & HEMLOCK

EXISTING WITH PROJECT - PM PEAK HOUR

6/25/2009

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL2                                                                              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                                | WBR2                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | NBR2                                                                                |
| Lane Configurations     |                                                                                   |  |  |  |  |  |                                                                                    |  |                                                                                     |  |                                                                                     |  |
| Volume (vph)            | 55                                                                                | 268                                                                               | 759                                                                               | 24                                                                                | 23                                                                                | 697                                                                               | 64                                                                                 | 19                                                                                  | 5                                                                                   | 5                                                                                   | 4                                                                                   | 11                                                                                  |
| Ideal Flow (vphpl)      | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Lane Util. Factor       | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 0.91                                                                              | 0.91                                                                               | 0.91                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Frt                     |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   | 0.987                                                                             |                                                                                    | 0.850                                                                               |                                                                                     | 0.957                                                                               |                                                                                     | 0.850                                                                               |
| Flt Protected           |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                    |                                                                                     |                                                                                     | 0.982                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)       | 0                                                                                 | 1710                                                                              | 3420                                                                              | 1530                                                                              | 1710                                                                              | 3233                                                                              | 0                                                                                  | 1392                                                                                | 0                                                                                   | 1692                                                                                | 0                                                                                   | 1530                                                                                |
| Flt Permitted           |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                    |                                                                                     |                                                                                     | 0.893                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)       | 0                                                                                 | 1710                                                                              | 3420                                                                              | 1530                                                                              | 1710                                                                              | 3233                                                                              | 0                                                                                  | 1392                                                                                | 0                                                                                   | 1538                                                                                | 0                                                                                   | 1530                                                                                |
| Right Turn on Red       |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                    | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)       |                                                                                   |                                                                                   |                                                                                   | 25                                                                                |                                                                                   |                                                                                   |                                                                                    | 18                                                                                  |                                                                                     |                                                                                     |                                                                                     | 12                                                                                  |
| Link Speed (mph)        |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                    |                                                                                     |                                                                                     | 30                                                                                  |                                                                                     |                                                                                     |
| Link Distance (ft)      |                                                                                   |                                                                                   | 807                                                                               |                                                                                   |                                                                                   | 830                                                                               |                                                                                    |                                                                                     |                                                                                     | 743                                                                                 |                                                                                     |                                                                                     |
| Travel Time (s)         |                                                                                   |                                                                                   | 18.3                                                                              |                                                                                   |                                                                                   | 18.9                                                                              |                                                                                    |                                                                                     |                                                                                     | 16.9                                                                                |                                                                                     |                                                                                     |
| Peak Hour Factor        | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                               | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                |
| Heavy Vehicles (%)      | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                 | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Shared Lane Traffic (%) |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 10%                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)   | 0                                                                                 | 340                                                                               | 799                                                                               | 25                                                                                | 24                                                                                | 803                                                                               | 0                                                                                  | 18                                                                                  | 0                                                                                   | 14                                                                                  | 0                                                                                   | 12                                                                                  |
| Turn Type               | Prot                                                                              | Prot                                                                              |                                                                                   | Perm                                                                              | Prot                                                                              |                                                                                   |                                                                                    | Perm                                                                                | Perm                                                                                |                                                                                     |                                                                                     | Perm                                                                                |
| Protected Phases        | 7                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 3                                                                                 | 8                                                                                 |                                                                                    |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |                                                                                     |
| Permitted Phases        |                                                                                   |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   |                                                                                    | 8                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |
| Detector Phase          | 7                                                                                 | 7                                                                                 | 4                                                                                 | 4                                                                                 | 3                                                                                 | 8                                                                                 |                                                                                    | 8                                                                                   | 2                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |                                                                                    | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 |                                                                                     | 4.0                                                                                 |
| Minimum Split (s)       | 8.0                                                                               | 8.0                                                                               | 20.0                                                                              | 20.0                                                                              | 8.0                                                                               | 20.0                                                                              |                                                                                    | 20.0                                                                                | 20.0                                                                                | 20.0                                                                                |                                                                                     | 20.0                                                                                |
| Total Split (s)         | 22.0                                                                              | 22.0                                                                              | 40.0                                                                              | 40.0                                                                              | 9.0                                                                               | 27.0                                                                              | 0.0                                                                                | 27.0                                                                                | 21.0                                                                                | 21.0                                                                                | 0.0                                                                                 | 21.0                                                                                |
| Total Split (%)         | 24.4%                                                                             | 24.4%                                                                             | 44.4%                                                                             | 44.4%                                                                             | 10.0%                                                                             | 30.0%                                                                             | 0.0%                                                                               | 30.0%                                                                               | 23.3%                                                                               | 23.3%                                                                               | 0.0%                                                                                | 23.3%                                                                               |
| Maximum Green (s)       | 18.0                                                                              | 18.0                                                                              | 36.0                                                                              | 36.0                                                                              | 5.0                                                                               | 23.0                                                                              |                                                                                    | 23.0                                                                                | 17.0                                                                                | 17.0                                                                                |                                                                                     | 17.0                                                                                |
| Yellow Time (s)         | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               |                                                                                    | 3.5                                                                                 | 3.5                                                                                 | 3.5                                                                                 |                                                                                     | 3.5                                                                                 |
| All-Red Time (s)        | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               |                                                                                    | 0.5                                                                                 | 0.5                                                                                 | 0.5                                                                                 |                                                                                     | 0.5                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               | Lag                                                                               | Lead                                                                              | Lag                                                                               |                                                                                    | Lag                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               |                                                                                    | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                    | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |                                                                                     | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              |                                                                                    | None                                                                                | None                                                                                | None                                                                                |                                                                                     | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               |                                                                                    | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |                                                                                     | 5.0                                                                                 |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 11.0                                                                              | 11.0                                                                              |                                                                                   | 11.0                                                                              |                                                                                    | 11.0                                                                                | 11.0                                                                                | 11.0                                                                                |                                                                                     | 11.0                                                                                |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                    | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |
| Act Effect Green (s)    |                                                                                   | 18.3                                                                              | 41.8                                                                              | 41.8                                                                              | 5.1                                                                               | 22.7                                                                              |                                                                                    | 22.7                                                                                |                                                                                     | 8.5                                                                                 |                                                                                     | 8.5                                                                                 |
| Actuated g/C Ratio      |                                                                                   | 0.24                                                                              | 0.54                                                                              | 0.54                                                                              | 0.07                                                                              | 0.30                                                                              |                                                                                    | 0.30                                                                                |                                                                                     | 0.11                                                                                |                                                                                     | 0.11                                                                                |
| v/c Ratio               |                                                                                   | 0.83                                                                              | 0.43                                                                              | 0.03                                                                              | 0.21                                                                              | 0.84                                                                              |                                                                                    | 0.04                                                                                |                                                                                     | 0.08                                                                                |                                                                                     | 0.07                                                                                |
| Control Delay           |                                                                                   | 50.3                                                                              | 14.0                                                                              | 6.0                                                                               | 42.0                                                                              | 36.8                                                                              |                                                                                    | 10.8                                                                                |                                                                                     | 33.4                                                                                |                                                                                     | 17.7                                                                                |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                    | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |
| Total Delay             |                                                                                   | 50.3                                                                              | 14.0                                                                              | 6.0                                                                               | 42.0                                                                              | 36.8                                                                              |                                                                                    | 10.8                                                                                |                                                                                     | 33.4                                                                                |                                                                                     | 17.7                                                                                |
| LOS                     |                                                                                   | D                                                                                 | B                                                                                 | A                                                                                 | D                                                                                 | D                                                                                 |                                                                                    | B                                                                                   |                                                                                     | C                                                                                   |                                                                                     | B                                                                                   |
| Approach Delay          |                                                                                   |                                                                                   | 24.5                                                                              |                                                                                   |                                                                                   | 36.4                                                                              |                                                                                    |                                                                                     |                                                                                     | 26.2                                                                                |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                    |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |                                                                                     |
| Queue Length 50th (ft)  |                                                                                   | 167                                                                               | 112                                                                               | 0                                                                                 | 12                                                                                | 210                                                                               |                                                                                    | 0                                                                                   |                                                                                     | 7                                                                                   |                                                                                     | 0                                                                                   |

Lanes, Volumes, Timings  
3: VALLEY BLVD & HEMLOCK

EXISTING WITH PROJECT - PM PEAK HOUR

6/25/2009

|                         |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| Lane Group              | SBL                                                                               | SBT                                                                               | SBR                                                                               | SWL2                                                                              | SWL                                                                               | SWR                                                                               | SWR2                                                                               |
| Lane Configurations     |                                                                                   |  |  |                                                                                   |  |                                                                                   |                                                                                    |
| Volume (vph)            | 48                                                                                | 1                                                                                 | 40                                                                                | 6                                                                                 | 11                                                                                | 163                                                                               | 1                                                                                  |
| Ideal Flow (vphpl)      | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               |
| Lane Util. Factor       | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               |
| Frt                     |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   | 0.878                                                                             |                                                                                   |                                                                                    |
| Flt Protected           |                                                                                   | 0.953                                                                             |                                                                                   |                                                                                   | 0.995                                                                             |                                                                                   |                                                                                    |
| Satd. Flow (prot)       | 0                                                                                 | 1715                                                                              | 1530                                                                              | 0                                                                                 | 1572                                                                              | 0                                                                                 | 0                                                                                  |
| Flt Permitted           |                                                                                   | 0.720                                                                             |                                                                                   |                                                                                   | 0.995                                                                             |                                                                                   |                                                                                    |
| Satd. Flow (perm)       | 0                                                                                 | 1296                                                                              | 1530                                                                              | 0                                                                                 | 1572                                                                              | 0                                                                                 | 0                                                                                  |
| Right Turn on Red       |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                   | No                                                                                 |
| Satd. Flow (RTOR)       |                                                                                   |                                                                                   | 42                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                    |
| Link Speed (mph)        |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                    |
| Link Distance (ft)      |                                                                                   | 792                                                                               |                                                                                   |                                                                                   | 998                                                                               |                                                                                   |                                                                                    |
| Travel Time (s)         |                                                                                   | 18.0                                                                              |                                                                                   |                                                                                   | 22.7                                                                              |                                                                                   |                                                                                    |
| Peak Hour Factor        | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                               |
| Heavy Vehicles (%)      | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                 |
| Shared Lane Traffic (%) |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |
| Lane Group Flow (vph)   | 0                                                                                 | 52                                                                                | 42                                                                                | 0                                                                                 | 191                                                                               | 0                                                                                 | 0                                                                                  |
| Turn Type               | Perm                                                                              |                                                                                   | Perm                                                                              | Perm                                                                              |                                                                                   |                                                                                   |                                                                                    |
| Protected Phases        |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                    |
| Permitted Phases        | 2                                                                                 |                                                                                   | 2                                                                                 | 6                                                                                 |                                                                                   |                                                                                   |                                                                                    |
| Detector Phase          | 2                                                                                 | 2                                                                                 | 2                                                                                 | 6                                                                                 | 6                                                                                 |                                                                                   |                                                                                    |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |
| Minimum Initial (s)     | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |                                                                                   |                                                                                    |
| Minimum Split (s)       | 20.0                                                                              | 20.0                                                                              | 20.0                                                                              | 20.0                                                                              | 20.0                                                                              |                                                                                   |                                                                                    |
| Total Split (s)         | 21.0                                                                              | 21.0                                                                              | 21.0                                                                              | 20.0                                                                              | 20.0                                                                              | 0.0                                                                               | 0.0                                                                                |
| Total Split (%)         | 23.3%                                                                             | 23.3%                                                                             | 23.3%                                                                             | 22.2%                                                                             | 22.2%                                                                             | 0.0%                                                                              | 0.0%                                                                               |
| Maximum Green (s)       | 17.0                                                                              | 17.0                                                                              | 17.0                                                                              | 16.0                                                                              | 16.0                                                                              |                                                                                   |                                                                                    |
| Yellow Time (s)         | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               |                                                                                   |                                                                                    |
| All-Red Time (s)        | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               |                                                                                   |                                                                                    |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                |
| Total Lost Time (s)     | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   |                                                                                    |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              |                                                                                   |                                                                                    |
| Walk Time (s)           | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                   |                                                                                    |
| Flash Dont Walk (s)     | 11.0                                                                              | 11.0                                                                              | 11.0                                                                              | 11.0                                                                              | 11.0                                                                              |                                                                                   |                                                                                    |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    |
| Act Effect Green (s)    |                                                                                   | 8.5                                                                               | 8.5                                                                               |                                                                                   | 13.5                                                                              |                                                                                   |                                                                                    |
| Actuated g/C Ratio      |                                                                                   | 0.11                                                                              | 0.11                                                                              |                                                                                   | 0.18                                                                              |                                                                                   |                                                                                    |
| v/c Ratio               |                                                                                   | 0.36                                                                              | 0.20                                                                              |                                                                                   | 0.69                                                                              |                                                                                   |                                                                                    |
| Control Delay           |                                                                                   | 41.0                                                                              | 13.4                                                                              |                                                                                   | 44.9                                                                              |                                                                                   |                                                                                    |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    |
| Total Delay             |                                                                                   | 41.0                                                                              | 13.4                                                                              |                                                                                   | 44.9                                                                              |                                                                                   |                                                                                    |
| LOS                     |                                                                                   | D                                                                                 | B                                                                                 |                                                                                   | D                                                                                 |                                                                                   |                                                                                    |
| Approach Delay          |                                                                                   | 28.7                                                                              |                                                                                   |                                                                                   | 44.9                                                                              |                                                                                   |                                                                                    |
| Approach LOS            |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    |
| Queue Length 50th (ft)  |                                                                                   | 25                                                                                | 0                                                                                 |                                                                                   | 90                                                                                |                                                                                   |                                                                                    |

Lanes, Volumes, Timings  
3: VALLEY BLVD & HEMLOCK

EXISTING WITH PROJECT - PM PEAK HOUR

6/25/2009

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL2                                                                              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                                | WBR2                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | NBR2                                                                                |
| Queue Length 95th (ft)  |                                                                                   | #341                                                                              | 220                                                                               | 14                                                                                | 37                                                                                | #345                                                                              |                                                                                    | 17                                                                                  |                                                                                     | 24                                                                                  |                                                                                     | 15                                                                                  |
| Internal Link Dist (ft) |                                                                                   |                                                                                   | 727                                                                               |                                                                                   |                                                                                   | 750                                                                               |                                                                                    |                                                                                     |                                                                                     | 663                                                                                 |                                                                                     |                                                                                     |
| Turn Bay Length (ft)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 408                                                                               | 1860                                                                              | 844                                                                               | 113                                                                               | 985                                                                               |                                                                                    | 437                                                                                 |                                                                                     | 346                                                                                 |                                                                                     | 354                                                                                 |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 0                                                                                   |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.83                                                                              | 0.43                                                                              | 0.03                                                                              | 0.21                                                                              | 0.82                                                                              |                                                                                    | 0.04                                                                                |                                                                                     | 0.04                                                                                |                                                                                     | 0.03                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 76.8

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.84

Intersection Signal Delay: 30.7

Intersection LOS: C

Intersection Capacity Utilization 76.1%

ICU Level of Service D

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 3: VALLEY BLVD & HEMLOCK

Lanes, Volumes, Timings  
3: VALLEY BLVD & HEMLOCK

EXISTING WITH PROJECT - PM PEAK HOUR

6/25/2009

|                         |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| Lane Group              | SBL                                                                               | SBT                                                                               | SBR                                                                               | SWL2                                                                              | SWL                                                                               | SWR                                                                               | SWR2                                                                               |
| Queue Length 95th (ft)  |                                                                                   | 59                                                                                | 28                                                                                |                                                                                   | #177                                                                              |                                                                                   |                                                                                    |
| Internal Link Dist (ft) |                                                                                   | 712                                                                               |                                                                                   |                                                                                   | 918                                                                               |                                                                                   |                                                                                    |
| Turn Bay Length (ft)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |
| Base Capacity (vph)     |                                                                                   | 292                                                                               | 377                                                                               |                                                                                   | 333                                                                               |                                                                                   |                                                                                    |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    |
| Reduced v/c Ratio       |                                                                                   | 0.18                                                                              | 0.11                                                                              |                                                                                   | 0.57                                                                              |                                                                                   |                                                                                    |
| Intersection Summary    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |



FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

## Level Of Service Computation Report

## 2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #30 Beech Ave/Valley Blvd

Average Delay (sec/veh): OVERFLOW

Worst Case Level Of Service: F[xxxxx]

Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Stop Sign Stop Sign Uncontrolled Uncontrolled  
Rights: Include Include Include Include  
Lanes: 0 1 0 0 1 0 1 0 0 1 1 0 1 0 2 0 1

## Volume Module:

Base Vol: 12 9 25 53 5 19 47 748 9 10 504 76  
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
Initial Bse: 12 9 25 53 5 19 47 748 9 10 504 76  
Added Vol: 0 70 35 0 42 42 70 215 0 42 76 0  
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0  
Initial Fut: 12 79 60 53 47 61 117 963 9 52 580 76  
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95  
PHF Volume: 13 83 63 56 49 64 123 1014 9 55 611 80  
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
FinalVolume: 13 83 63 56 49 64 123 1014 9 55 611 80

## Critical Gap Module:

Critical Gap: 7.5 6.5 6.9 7.5 6.5 6.9 4.1 xxxx xxxxx 4.1 xxxx xxxxx  
FollowUpTim: 3.5 4.0 3.3 3.5 4.0 3.3 2.2 xxxx xxxxx 2.2 xxxx xxxxx

## Capacity Module:

Cnflct Vol: 1704 2065 512 1515 1989 305 691 xxxx xxxxx 1023 xxxx xxxxx  
Potent Cap.: 60 55 513 84 62 697 914 xxxx xxxxx 686 xxxx xxxxx  
Move Cap.: 0 44 513 0 49 697 914 xxxx xxxxx 686 xxxx xxxxx  
Volume/Cap: xxxx 1.89 0.12 xxxx 1.01 0.09 0.13 xxxx xxxxx 0.08 xxxx xxxxx

## Level Of Service Module:

2Way95thQ: xxxx xxxx 0.4 xxxx xxxx 0.3 0.5 xxxx xxxxx 0.3 xxxx xxxxx  
Control Del:xxxxx xxxx 13.0 xxxxx xxxx 10.7 9.6 xxxx xxxxx 10.7 xxxx xxxxx  
LOS by Move: \* \* B \* \* B A \* \* B \* \*  
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT  
Shared Cap.: 0 xxxx xxxxx 0 xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx  
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx  
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx  
Shared LOS: \* \* \* \* \* \* \* \* \* \* \* \*  
ApproachDel: xxxxxx xxxxxx xxxxxx xxxxxx  
ApproachLOS: F F \* \*

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

## Level Of Service Computation Report

## 2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #31 Beech Ave/Slover Ave

Cycle (sec): 100

Critical Vol./Cap.(X): 2.366

Loss Time (sec): 10 (Y+R=4.0 sec)

Average Delay (sec/veh): 410.5

Optimal Cycle: 0

Level Of Service: F

Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Stop Sign Stop Sign Stop Sign Stop Sign  
Rights: Include Include Include Include  
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0  
Lanes: 0 0 1! 0 0 0 0 1! 0 0 1 0 1 1 0 1 0 1 1 0

## Volume Module:

Base Vol: 84 0 123 48 20 2 8 462 83 104 400 19  
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
Initial Bse: 84 0 123 48 20 2 8 462 83 104 400 19  
Added Vol: 74 0 256 0 0 0 0 1274 74 151 986 0  
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0  
Initial Fut: 158 0 379 48 20 2 8 1736 157 255 1386 19  
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95  
PHF Volume: 166 0 399 51 21 2 8 1827 165 268 1459 20  
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
Reduced Vol: 166 0 399 51 21 2 8 1827 165 268 1459 20  
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
FinalVolume: 166 0 399 51 21 2 8 1827 165 268 1459 20

## Saturation Flow Module:

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
Lanes: 0.29 0.00 0.71 0.68 0.29 0.03 1.00 1.83 0.17 1.00 1.97 0.03  
Final Sat.: 153 0 367 267 111 11 392 772 70 425 892 12

## Capacity Analysis Module:

Vol/Sat: 1.09 xxxx 1.09 0.19 0.19 0.19 0.02 2.37 2.35 0.63 1.64 1.63  
Crit Moves: \*\*\*\*  
Delay/Veh: 90.4 0.0 90.4 14.4 14.4 14.4 12.0 640 632.4 24.6 316 315.1  
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
AdjDel/Veh: 90.4 0.0 90.4 14.4 14.4 14.4 12.0 640 632.4 24.6 316 315.1  
LOS by Move: F \* F B B B B F F C F F  
ApproachDel: 90.4 14.4 637.1 271.2  
Delay Adj: 1.00 1.00 1.00 1.00  
ApprAdjDel: 90.4 14.4 637.1 271.2  
LOS by Appr: F B F F  
AllWayAvgQ: 11.6 11.6 11.6 0.2 0.2 0.2 0.0 73.9 73.2 1.6 38.4 38.3

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #32 Beech Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.718  
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 19.6  
Optimal Cycle: 0 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Stop Sign   |   |   | Stop Sign   |   |   | Stop Sign  |   |   | Stop Sign  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 0           | 1 | 0 | 0          | 1 | 0 | 0          | 1 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 9    | 79   | 59   | 52   | 115  | 50   | 36   | 195  | 24   | 50   | 99   | 38   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 9    | 79   | 59   | 52   | 115  | 50   | 36   | 195  | 24   | 50   | 99   | 38   |
| Added Vol:   | 16   | 217  | 0    | 0    | 175  | 50   | 112  | 0    | 56   | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 25   | 296  | 59   | 52   | 290  | 100  | 148  | 195  | 80   | 50   | 99   | 38   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 26   | 312  | 62   | 55   | 305  | 105  | 156  | 205  | 84   | 53   | 104  | 40   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 26   | 312  | 62   | 55   | 305  | 105  | 156  | 205  | 84   | 53   | 104  | 40   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 26   | 312  | 62   | 55   | 305  | 105  | 156  | 205  | 84   | 53   | 104  | 40   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.70 | 0.92 | 0.38 | 0.53 | 1.06 | 0.41 |
| Final Sat.: | 400  | 434  | 464  | 408  | 441  | 474  | 307  | 427  | 179  | 216  | 443  | 174  |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.07 | 0.72 | 0.13 | 0.13 | 0.69 | 0.22 | 0.51 | 0.48 | 0.47 | 0.24 | 0.24 | 0.23 |
| Crit Moves:  | ***  |      |      | ***  |      |      | ***  |      |      | ***  |      |      |
| Delay/Veh:   | 11.9 | 27.6 | 11.2 | 12.4 | 25.8 | 11.9 | 18.1 | 16.6 | 15.9 | 13.5 | 13.0 | 12.6 |
| Delay Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 11.9 | 27.6 | 11.2 | 12.4 | 25.8 | 11.9 | 18.1 | 16.6 | 15.9 | 13.5 | 13.0 | 12.6 |
| LOS by Move: | B    | D    | B    | B    | D    | B    | C    | C    | C    | B    | B    | B    |
| ApproachDel: | 24.1 |      | 21.1 |      |      | 17.0 |      |      | 13.1 |      |      |      |
| Delay Adj:   | 1.00 |      | 1.00 |      |      | 1.00 |      |      | 1.00 |      |      |      |
| ApprAdjDel:  | 24.1 |      | 21.1 |      |      | 17.0 |      |      | 13.1 |      |      |      |
| LOS by Appr: | C    |      | C    |      |      | C    |      |      | B    |      |      |      |
| AllWayAvgQ:  | 0.1  | 2.0  | 0.1  | 0.1  | 1.9  | 0.3  | 0.9  | 0.8  | 0.8  | 0.3  | 0.3  | 0.3  |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #33 Beech Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 3.021  
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): 738.4  
Optimal Cycle: 0 Level Of Service: F

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Stop Sign   |   |   | Stop Sign   |   |   | Stop Sign  |   |   | Stop Sign  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 0           | 1 | 0 | 0          | 1 | 0 | 0          | 0 | 1 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 180  | 21   | 11   | 10   | 39   | 125  | 78   | 584  | 266  | 8    | 332  | 7    |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 180  | 21   | 11   | 10   | 39   | 125  | 78   | 584  | 266  | 8    | 332  | 7    |
| Added Vol:   | 21   | 118  | 18   | 0    | 247  | 0    | 0    | 1267 | 87   | 116  | 668  | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 201  | 139  | 29   | 10   | 286  | 125  | 78   | 1851 | 353  | 124  | 1000 | 7    |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 212  | 146  | 31   | 11   | 301  | 132  | 82   | 1948 | 372  | 131  | 1053 | 7    |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 212  | 146  | 31   | 11   | 301  | 132  | 82   | 1948 | 372  | 131  | 1053 | 7    |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 212  | 146  | 31   | 11   | 301  | 132  | 82   | 1948 | 372  | 131  | 1053 | 7    |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.07 | 1.62 | 0.31 | 0.11 | 0.88 | 0.01 |
| Final Sat.: | 324  | 339  | 360  | 328  | 347  | 371  | 28   | 668  | 129  | 43   | 348  | 2    |

Capacity Analysis Module:

|              |      |      |      |      |      |       |       |      |       |       |      |       |
|--------------|------|------|------|------|------|-------|-------|------|-------|-------|------|-------|
| Vol/Sat:     | 0.65 | 0.43 | 0.08 | 0.03 | 0.87 | 0.35  | 2.95  | 2.92 | 2.87  | 3.02  | 3.02 | 3.02  |
| Crit Moves:  | ***  |      |      | ***  |      |       | ***   |      |       | ***   |      |       |
| Delay/Veh:   | 32.0 | 20.9 | 13.4 | 13.9 | 53.3 | 17.5  | 903.8 | 888  | 865.7 | 934.8 | 935  | 934.8 |
| Delay Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00  | 1.00 | 1.00  | 1.00  | 1.00 | 1.00  |
| AdjDel/Veh:  | 32.0 | 20.9 | 13.4 | 13.9 | 53.3 | 17.5  | 903.8 | 888  | 865.7 | 934.8 | 935  | 934.8 |
| LOS by Move: | D    | C    | B    | B    | F    | C     | F     | F    | F     | F     | F    | F     |
| ApproachDel: | 26.4 |      | 41.7 |      |      | 884.8 |       |      | 934.8 |       |      |       |
| Delay Adj:   | 1.00 |      | 1.00 |      |      | 1.00  |       |      | 1.00  |       |      |       |
| ApprAdjDel:  | 26.4 |      | 41.7 |      |      | 884.8 |       |      | 934.8 |       |      |       |
| LOS by Appr: | D    |      | E    |      |      | F     |       |      | F     |       |      |       |
| AllWayAvgQ:  | 1.6  | 0.7  | 0.1  | 0.0  | 3.9  | 0.5   | 101   | 99.3 | 99.3  | 101   | 101  | 101.0 |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

## Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

## Intersection #34 Citrus Ave/Valley Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 1.622  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 224.6  
Optimal Cycle: 180 Level Of Service: F

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 1           | 0 | 1 | 2          | 0 | 1 | 2          | 0 | 1 |

## Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 290  | 836  | 216  | 122  | 763  | 43   | 108  | 578  | 358  | 346  | 452  | 133  |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 290  | 836  | 216  | 122  | 763  | 43   | 108  | 578  | 358  | 346  | 452  | 133  |
| Added Vol:   | 65   | 2040 | 0    | 0    | 494  | 0    | 0    | 142  | 108  | 0    | 54   | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 355  | 2876 | 216  | 122  | 1257 | 43   | 108  | 720  | 466  | 346  | 506  | 133  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 374  | 3027 | 227  | 128  | 1323 | 45   | 114  | 758  | 491  | 364  | 533  | 140  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 374  | 3027 | 227  | 128  | 1323 | 45   | 114  | 758  | 491  | 364  | 533  | 140  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 374  | 3027 | 227  | 128  | 1323 | 45   | 114  | 758  | 491  | 364  | 533  | 140  |

## Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 0.97 | 0.95 | 0.95 | 0.97 | 0.95 | 0.95 |
| Lanes:      | 1.00 | 1.86 | 0.14 | 1.00 | 1.93 | 0.07 | 2.00 | 1.21 | 0.79 | 2.00 | 1.58 | 0.42 |
| Final Sat.: | 1800 | 3181 | 239  | 1800 | 3307 | 113  | 3492 | 2076 | 1344 | 3492 | 2708 | 712  |

## Capacity Analysis Module:

|              |      |      |       |       |      |      |      |      |       |       |      |      |
|--------------|------|------|-------|-------|------|------|------|------|-------|-------|------|------|
| Vol/Sat:     | 0.21 | 0.95 | 0.95  | 0.07  | 0.40 | 0.40 | 0.03 | 0.37 | 0.37  | 0.10  | 0.20 | 0.20 |
| Crit Moves:  | **** |      |       | ****  |      |      | **** |      |       | ****  |      |      |
| Green/Cycle: | 0.22 | 0.59 | 0.59  | 0.04  | 0.42 | 0.42 | 0.04 | 0.23 | 0.23  | 0.06  | 0.25 | 0.25 |
| Volume/Cap:  | 0.96 | 1.62 | 1.62  | 1.62  | 0.96 | 0.96 | 0.79 | 1.62 | 1.62  | 1.62  | 0.79 | 0.79 |
| Delay/Veh:   | 75.0 | 303  | 302.9 | 378.0 | 44.5 | 44.5 | 72.7 | 325  | 324.7 | 346.3 | 40.3 | 40.3 |
| User DelAdj: | 1.00 | 1.00 | 1.00  | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00  | 1.00 | 1.00 |
| AdjDel/Veh:  | 75.0 | 303  | 302.9 | 378.0 | 44.5 | 44.5 | 72.7 | 325  | 324.7 | 346.3 | 40.3 | 40.3 |
| LOS by Move: | E    | F    | F     | F     | D    | D    | E    | F    | F     | F     | D    | D    |
| HCM2kAvgQ:   | 16   | 132  | 132   | 12    | 27   | 27   | 4    | 52   | 52    | 16    | 12   | 12   |

Note: Queue reported is the number of cars per lane.

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FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

## Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

## Intersection #37 Citrus Ave/Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 2.478  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 469.4  
Optimal Cycle: 180 Level Of Service: F

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 0 | 1           | 0 | 1 | 1          | 0 | 2 | 1          | 0 | 1 |

## Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 25   | 249  | 72   | 155  | 302  | 296  | 302  | 862  | 50   | 75   | 267  | 95   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 25   | 249  | 72   | 155  | 302  | 296  | 302  | 862  | 50   | 75   | 267  | 95   |
| Added Vol:   | 65   | 1326 | 163  | 0    | 269  | 442  | 1174 | 1304 | 108  | 29   | 507  | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 90   | 1575 | 235  | 155  | 571  | 738  | 1476 | 2166 | 158  | 104  | 774  | 95   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 95   | 1658 | 247  | 163  | 601  | 777  | 1554 | 2280 | 166  | 109  | 815  | 100  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 95   | 1658 | 247  | 163  | 601  | 777  | 1554 | 2280 | 166  | 109  | 815  | 100  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 95   | 1658 | 247  | 163  | 601  | 777  | 1554 | 2280 | 166  | 109  | 815  | 100  |

## Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 |
| Lanes:      | 1.00 | 0.87 | 0.13 | 1.00 | 1.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 1.78 | 0.22 |
| Final Sat.: | 1800 | 1566 | 234  | 1800 | 1800 | 1800 | 1800 | 3420 | 1800 | 1800 | 3046 | 374  |

## Capacity Analysis Module:

|              |       |      |       |       |      |      |       |      |      |       |      |       |
|--------------|-------|------|-------|-------|------|------|-------|------|------|-------|------|-------|
| Vol/Sat:     | 0.05  | 1.06 | 1.06  | 0.09  | 0.33 | 0.43 | 0.86  | 0.67 | 0.09 | 0.06  | 0.27 | 0.27  |
| Crit Moves:  | ****  |      |       | ****  |      |      | ****  |      |      | ****  |      |       |
| Green/Cycle: | 0.05  | 0.43 | 0.43  | 0.04  | 0.41 | 0.41 | 0.35  | 0.42 | 0.42 | 0.04  | 0.11 | 0.11  |
| Volume/Cap:  | 1.04  | 2.48 | 2.48  | 2.48  | 0.81 | 1.04 | 2.48  | 1.59 | 0.22 | 1.59  | 2.48 | 2.48  |
| Delay/Veh:   | 154.5 | 698  | 697.6 | 756.3 | 32.4 | 74.4 | 702.5 | 300  | 18.8 | 373.4 | 718  | 717.8 |
| User DelAdj: | 1.00  | 1.00 | 1.00  | 1.00  | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00  | 1.00 | 1.00  |
| AdjDel/Veh:  | 154.5 | 698  | 697.6 | 756.3 | 32.4 | 74.4 | 702.5 | 300  | 18.8 | 373.4 | 718  | 717.8 |
| LOS by Move: | F     | F    | F     | F     | C    | E    | F     | F    | B    | F     | F    | F     |
| HCM2kAvgQ:   | 6     | 197  | 197   | 18    | 18   | 34   | 161   | 92   | 3    | 10    | 51   | 51    |

Note: Queue reported is the number of cars per lane.

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FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #38 Citrus Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 2.651  
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): 595.0  
Optimal Cycle: 0 Level Of Service: F

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Stop Sign   |   |   | Stop Sign   |   |   | Stop Sign  |   |   | Stop Sign  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 0           | 0 | 1 | 0           | 0 | 1 | 0          | 0 | 1 | 0          | 1 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 4    | 169  | 37   | 41   | 284  | 18   | 64   | 267  | 5    | 50   | 117  | 35   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 4    | 169  | 37   | 41   | 284  | 18   | 64   | 267  | 5    | 50   | 117  | 35   |
| Added Vol:   | 13   | 898  | 0    | 0    | 339  | 77   | 492  | 116  | 81   | 0    | 18   | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 17   | 1067 | 37   | 41   | 623  | 95   | 556  | 383  | 86   | 50   | 135  | 35   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 18   | 1123 | 39   | 43   | 656  | 100  | 585  | 403  | 91   | 53   | 142  | 37   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 18   | 1123 | 39   | 43   | 656  | 100  | 585  | 403  | 91   | 53   | 142  | 37   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 18   | 1123 | 39   | 43   | 656  | 100  | 585  | 403  | 91   | 53   | 142  | 37   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 0.02 | 0.95 | 0.03 | 0.05 | 0.82 | 0.13 | 0.55 | 0.37 | 0.08 | 0.27 | 0.73 | 1.00 |
| Final Sat.: | 7    | 424  | 15   | 24   | 368  | 56   | 236  | 163  | 37   | 104  | 280  | 420  |

Capacity Analysis Module:

|              |       |      |       |       |      |       |       |      |       |      |      |      |
|--------------|-------|------|-------|-------|------|-------|-------|------|-------|------|------|------|
| Vol/Sat:     | 2.65  | 2.65 | 2.65  | 1.78  | 1.78 | 1.78  | 2.48  | 2.48 | 2.48  | 0.51 | 0.51 | 0.09 |
| Crit Moves:  | ****  |      |       | ****  |      |       | ****  |      |       | **** |      |      |
| Delay/Veh:   | 766.6 | 767  | 766.6 | 381.3 | 381  | 381.3 | 689.0 | 689  | 689.0 | 21.4 | 21.4 | 12.1 |
| Delay Adj:   | 1.00  | 1.00 | 1.00  | 1.00  | 1.00 | 1.00  | 1.00  | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 766.6 | 767  | 766.6 | 381.3 | 381  | 381.3 | 689.0 | 689  | 689.0 | 21.4 | 21.4 | 12.1 |
| LOS by Move: | F     | F    | F     | F     | F    | F     | F     | F    | F     | C    | C    | B    |
| ApproachDel: | 766.6 |      | 381.3 |       |      | 689.0 |       |      | 19.9  |      |      |      |
| Delay Adj:   | 1.00  |      | 1.00  |       |      | 1.00  |       |      | 1.00  |      |      |      |
| ApprAdjDel:  | 766.6 |      | 381.3 |       |      | 689.0 |       |      | 19.9  |      |      |      |
| LOS by Appr: | F     |      | F     |       |      | F     |       |      | C     |      |      |      |
| AllWayAvgQ:  | 93.4  | 93.4 | 93.4  | 46.1  | 46.1 | 46.1  | 82.0  | 82.0 | 82.0  | 1.0  | 1.0  | 0.1  |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #39 Citrus Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 2.811  
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): 538.0  
Optimal Cycle: 0 Level Of Service: F

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Stop Sign   |   |   | Stop Sign   |   |   | Stop Sign  |   |   | Stop Sign  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 0           | 0 | 1 | 1          | 0 | 2 | 1          | 0 | 1 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 37   | 109  | 123  | 90   | 139  | 141  | 91   | 684  | 83   | 140  | 366  | 35   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 37   | 109  | 123  | 90   | 139  | 141  | 91   | 684  | 83   | 140  | 366  | 35   |
| Added Vol:   | 14   | 105  | 0    | 172  | 282  | 123  | 334  | 1552 | 87   | 0    | 260  | 35   |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 51   | 214  | 123  | 262  | 421  | 264  | 425  | 2236 | 170  | 140  | 626  | 70   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 54   | 225  | 129  | 276  | 443  | 278  | 447  | 2354 | 179  | 147  | 659  | 74   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 54   | 225  | 129  | 276  | 443  | 278  | 447  | 2354 | 179  | 147  | 659  | 74   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 54   | 225  | 129  | 276  | 443  | 278  | 447  | 2354 | 179  | 147  | 659  | 74   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 1.00 | 1.00 | 1.00 | 0.61 | 0.39 | 1.00 | 2.79 | 0.21 | 1.00 | 1.80 | 0.20 |
| Final Sat.: | 273  | 283  | 300  | 319  | 210  | 132  | 287  | 837  | 64   | 273  | 514  | 58   |

Capacity Analysis Module:

|              |      |      |       |      |      |       |       |      |       |      |      |       |
|--------------|------|------|-------|------|------|-------|-------|------|-------|------|------|-------|
| Vol/Sat:     | 0.20 | 0.80 | 0.43  | 0.87 | 2.11 | 2.11  | 1.56  | 2.81 | 2.79  | 0.54 | 1.28 | 1.27  |
| Crit Moves:  | **** |      |       | **** |      |       | ****  |      |       | **** |      |       |
| Delay/Veh:   | 19.1 | 51.1 | 23.5  | 56.7 | 532  | 531.7 | 297.1 | 848  | 836.5 | 30.2 | 185  | 181.7 |
| Delay Adj:   | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00  | 1.00  | 1.00 | 1.00  | 1.00 | 1.00 | 1.00  |
| AdjDel/Veh:  | 19.1 | 51.1 | 23.5  | 56.7 | 532  | 531.7 | 297.1 | 848  | 836.5 | 30.2 | 185  | 181.7 |
| LOS by Move: | C    | F    | C     | F    | F    | F     | F     | F    | F     | D    | F    | F     |
| ApproachDel: | 38.1 |      | 400.3 |      |      | 764.6 |       |      | 158.9 |      |      |       |
| Delay Adj:   | 1.00 |      | 1.00  |      |      | 1.00  |       |      | 1.00  |      |      |       |
| ApprAdjDel:  | 38.1 |      | 400.3 |      |      | 764.6 |       |      | 158.9 |      |      |       |
| LOS by Appr: | E    |      | F     |      |      | F     |       |      | F     |      |      |       |
| AllWayAvgQ:  | 0.2  | 2.8  | 0.7   | 3.8  | 49.2 | 49.2  | 22.5  | 69.6 | 69.2  | 1.1  | 13.6 | 13.3  |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #40 Sierra Ave/Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 1.076  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 57.9  
Optimal Cycle: 180 Level Of Service: E

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Ovl        |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 3 | 0           | 2 | 1 | 2          | 0 | 2 | 0          | 2 | 2 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 51   | 945  | 97   | 500  | 770  | 173  | 586  | 471  | 71   | 132  | 213  | 637  |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 51   | 945  | 97   | 500  | 770  | 173  | 586  | 471  | 71   | 132  | 213  | 637  |
| Added Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1468 | 0    | 0    | 536  | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 51   | 945  | 97   | 500  | 770  | 173  | 586  | 1939 | 71   | 132  | 749  | 637  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 54   | 995  | 102  | 526  | 811  | 182  | 617  | 2041 | 75   | 139  | 788  | 671  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 54   | 995  | 102  | 526  | 811  | 182  | 617  | 2041 | 75   | 139  | 788  | 671  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 54   | 995  | 102  | 526  | 811  | 182  | 617  | 2041 | 75   | 139  | 788  | 671  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.91 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 0.88 |
| Lanes:      | 2.00 | 3.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 2.00 |
| Final Sat.: | 3492 | 4914 | 1800 | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 | 3492 | 3420 | 3168 |

Capacity Analysis Module:

|              |      |      |      |       |      |      |      |      |      |       |      |      |
|--------------|------|------|------|-------|------|------|------|------|------|-------|------|------|
| Vol/Sat:     | 0.02 | 0.20 | 0.06 | 0.15  | 0.24 | 0.10 | 0.18 | 0.60 | 0.04 | 0.04  | 0.23 | 0.21 |
| Crit Moves:  | **** |      |      | ****  |      |      | **** |      |      | ****  |      |      |
| Green/Cycle: | 0.02 | 0.19 | 0.19 | 0.14  | 0.31 | 0.31 | 0.26 | 0.55 | 0.55 | 0.04  | 0.34 | 0.48 |
| Volume/Cap:  | 0.77 | 1.08 | 0.30 | 1.08  | 0.77 | 0.33 | 0.69 | 1.08 | 0.07 | 1.08  | 0.69 | 0.45 |
| Delay/Veh:   | 88.3 | 92.8 | 35.4 | 105.6 | 34.9 | 27.0 | 35.8 | 66.7 | 10.4 | 149.1 | 30.5 | 17.7 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 |
| AdjDel/Veh:  | 88.3 | 92.8 | 35.4 | 105.6 | 34.9 | 27.0 | 35.8 | 66.7 | 10.4 | 149.1 | 30.5 | 17.7 |
| LOS by Move: | F    | F    | D    | F     | C    | C    | D    | E    | B    | F     | C    | B    |
| HCM2kAvgQ:   | 2    | 19   | 3    | 15    | 14   | 4    | 10   | 47   | 1    | 5     | 12   | 8    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #41 Sierra Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.558  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 25.7  
Optimal Cycle: 35 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 3 | 0           | 2 | 1 | 1          | 0 | 2 | 0          | 2 | 1 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 118  | 856  | 20   | 83   | 1010 | 122  | 286  | 148  | 145  | 57   | 92   | 116  |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 118  | 856  | 20   | 83   | 1010 | 122  | 286  | 148  | 145  | 57   | 92   | 116  |
| Added Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 118  | 856  | 20   | 83   | 1010 | 122  | 286  | 148  | 145  | 57   | 92   | 116  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 124  | 901  | 21   | 87   | 1063 | 128  | 301  | 156  | 153  | 60   | 97   | 122  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 124  | 901  | 21   | 87   | 1063 | 128  | 301  | 156  | 153  | 60   | 97   | 122  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 124  | 901  | 21   | 87   | 1063 | 128  | 301  | 156  | 153  | 60   | 97   | 122  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.91 | 1.00 | 0.97 | 0.91 | 0.91 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 |
| Lanes:      | 2.00 | 3.00 | 1.00 | 2.00 | 2.68 | 0.32 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 3492 | 4914 | 1800 | 3492 | 4384 | 530  | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.04 | 0.18 | 0.01 | 0.03 | 0.24 | 0.24 | 0.17 | 0.05 | 0.08 | 0.03 | 0.03 | 0.07 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.06 | 0.44 | 0.44 | 0.06 | 0.43 | 0.43 | 0.30 | 0.30 | 0.30 | 0.12 | 0.12 | 0.12 |
| Volume/Cap:  | 0.56 | 0.42 | 0.03 | 0.42 | 0.56 | 0.56 | 0.56 | 0.15 | 0.28 | 0.28 | 0.23 | 0.56 |
| Delay/Veh:   | 48.6 | 19.4 | 16.0 | 46.7 | 21.4 | 21.4 | 30.7 | 25.6 | 26.9 | 40.9 | 40.0 | 44.6 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 48.6 | 19.4 | 16.0 | 46.7 | 21.4 | 21.4 | 30.7 | 25.6 | 26.9 | 40.9 | 40.0 | 44.6 |
| LOS by Move: | D    | B    | B    | D    | C    | C    | C    | C    | C    | D    | D    | D    |
| HCM2kAvgQ:   | 3    | 7    | 0    | 2    | 10   | 10   | 8    | 2    | 4    | 2    | 2    | 4    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #42 Sierra Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 1.219  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 108.6  
Optimal Cycle: 180 Level Of Service: F

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound  |   |   | West Bound  |   |   |
|-------------|-------------|---|---|-------------|---|---|-------------|---|---|-------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L           | T | R | L           | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Split Phase |   |   | Split Phase |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include     |   |   | Include     |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 2 | 0 | 1           | 1 | 0 | 1           | 0 | 1 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 99   | 469  | 107  | 109  | 488  | 273  | 424  | 235  | 184  | 83   | 196  | 60   |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 99   | 469  | 107  | 109  | 488  | 273  | 424  | 235  | 184  | 83   | 196  | 60   |
| Added Vol:    | 21   | 0    | 0    | 0    | 0    | 0    | 0    | 1735 | 105  | 0    | 292  | 0    |
| PasserByVol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:  | 120  | 469  | 107  | 109  | 488  | 273  | 424  | 1970 | 289  | 83   | 488  | 60   |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 126  | 494  | 113  | 115  | 514  | 287  | 446  | 2074 | 304  | 87   | 514  | 63   |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 126  | 494  | 113  | 115  | 514  | 287  | 446  | 2074 | 304  | 87   | 514  | 63   |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 126  | 494  | 113  | 115  | 514  | 287  | 446  | 2074 | 304  | 87   | 514  | 63   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Sat.: | 1800 | 3420 | 1800 | 3492 | 3420 | 1800 | 1710 | 3420 | 1800 | 1800 | 1800 | 1800 |

Capacity Analysis Module:

|              |       |      |      |       |      |       |      |      |      |      |      |      |
|--------------|-------|------|------|-------|------|-------|------|------|------|------|------|------|
| Vol/Sat:     | 0.07  | 0.14 | 0.06 | 0.03  | 0.15 | 0.16  | 0.26 | 0.61 | 0.17 | 0.05 | 0.29 | 0.04 |
| Crit Moves:  | ****  |      |      | ****  |      |       | **** |      |      | **** |      |      |
| Green/Cycle: | 0.06  | 0.15 | 0.15 | 0.03  | 0.13 | 0.13  | 0.50 | 0.50 | 0.50 | 0.23 | 0.23 | 0.23 |
| Volume/Cap:  | 1.22  | 0.94 | 0.41 | 0.94  | 1.15 | 1.22  | 0.52 | 1.22 | 0.34 | 0.21 | 1.22 | 0.15 |
| Delay/Veh:   | 205.8 | 67.0 | 39.2 | 110.9 | 133  | 174.1 | 17.2 | 128  | 15.4 | 31.1 | 157  | 30.6 |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00  | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 205.8 | 67.0 | 39.2 | 110.9 | 133  | 174.1 | 17.2 | 128  | 15.4 | 31.1 | 157  | 30.6 |
| LOS by Move: | F     | E    | D    | F     | F    | F     | B    | F    | B    | C    | F    | C    |
| HCM2kAvgQ:   | 9     | 12   | 3    | 4     | 16   | 18    | 10   | 60   | 6    | 2    | 30   | 2    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #43 Armstrong Rd/Sierra Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.380  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 16.8  
Optimal Cycle: 26 Level Of Service: B

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Ignore     |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 0 | 1           | 0 | 0 | 1          | 0 | 2 | 1          | 0 | 1 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 665  | 261  | 22   | 18   | 170  | 24   | 32   | 34   | 677  | 15   | 25   | 9    |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 665  | 261  | 22   | 18   | 170  | 24   | 32   | 34   | 677  | 15   | 25   | 9    |
| Added Vol:    | 21   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 105  | 0    | 0    | 0    |
| PasserByVol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:  | 686  | 261  | 22   | 18   | 170  | 24   | 32   | 34   | 782  | 15   | 25   | 9    |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.00 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 722  | 275  | 23   | 19   | 179  | 25   | 34   | 36   | 0    | 16   | 26   | 9    |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 722  | 275  | 23   | 19   | 179  | 25   | 34   | 36   | 0    | 16   | 26   | 9    |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 722  | 275  | 23   | 19   | 179  | 25   | 34   | 36   | 0    | 16   | 26   | 9    |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 |
| Lanes:      | 2.00 | 0.92 | 0.08 | 1.00 | 0.88 | 0.12 | 1.00 | 2.00 | 1.00 | 1.00 | 1.47 | 0.53 |
| Final Sat.: | 3492 | 1660 | 140  | 1800 | 1577 | 223  | 1800 | 3420 | 1800 | 1800 | 2515 | 905  |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.21 | 0.17 | 0.17 | 0.01 | 0.11 | 0.11 | 0.02 | 0.01 | 0.00 | 0.01 | 0.01 | 0.01 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.54 | 0.79 | 0.79 | 0.05 | 0.30 | 0.30 | 0.05 | 0.04 | 0.00 | 0.04 | 0.03 | 0.03 |
| Volume/Cap:  | 0.38 | 0.21 | 0.21 | 0.21 | 0.38 | 0.38 | 0.38 | 0.25 | 0.00 | 0.25 | 0.38 | 0.38 |
| Delay/Veh:   | 13.2 | 2.6  | 2.6  | 46.7 | 28.2 | 28.2 | 48.8 | 47.3 | 0.0  | 49.1 | 50.3 | 50.3 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 13.2 | 2.6  | 2.6  | 46.7 | 28.2 | 28.2 | 48.8 | 47.3 | 0.0  | 49.1 | 50.3 | 50.3 |
| LOS by Move: | B    | A    | A    | D    | C    | C    | D    | D    | A    | D    | D    | D    |
| HCM2kAvgQ:   | 7    | 2    | 2    | 1    | 5    | 5    | 1    | 1    | 0    | 1    | 1    | 1    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #44 Armstrong Rd/SR-60 WB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.711  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 22.8  
Optimal Cycle: 43 Level Of Service: C

| Approach:   | North Bound | South Bound | East Bound  | West Bound  |
|-------------|-------------|-------------|-------------|-------------|
| Movement:   | L - T - R   | L - T - R   | L - T - R   | L - T - R   |
| Control:    | Protected   | Protected   | Split Phase | Split Phase |
| Rights:     | Include     | Include     | Include     | Include     |
| Min. Green: | 0 0 0       | 0 0 0       | 0 0 0       | 0 0 0       |
| Lanes:      | 1 0 2 0 0   | 0 0 1 1 0   | 0 0 0 0 0   | 1 0 0 1 0   |

| Volume Module: | Base Vol: | 203  | 700  | 0    | 0    | 835  | 196  | 0    | 0    | 0    | 290  | 1    | 341  |
|----------------|-----------|------|------|------|------|------|------|------|------|------|------|------|------|
| Growth Adj:    | 1.00      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:   | 203       | 700  | 0    | 0    | 835  | 196  | 0    | 0    | 0    | 290  | 1    | 341  |      |
| Added Vol:     | 0         | 21   | 0    | 0    | 105  | 0    | 0    | 0    | 0    | 0    | 0    | 0    |      |
| PasserByVol:   | 0         | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |      |
| Initial Fut:   | 203       | 721  | 0    | 0    | 940  | 196  | 0    | 0    | 0    | 290  | 1    | 341  |      |
| User Adj:      | 1.00      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |      |
| PHF Adj:       | 0.95      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |      |
| PHF Volume:    | 214       | 759  | 0    | 0    | 989  | 206  | 0    | 0    | 0    | 305  | 1    | 359  |      |
| Reduct Vol:    | 0         | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |      |
| Reduced Vol:   | 214       | 759  | 0    | 0    | 989  | 206  | 0    | 0    | 0    | 305  | 1    | 359  |      |
| PCE Adj:       | 1.00      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |      |
| MLF Adj:       | 1.00      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |      |
| FinalVolume:   | 214       | 759  | 0    | 0    | 989  | 206  | 0    | 0    | 0    | 305  | 1    | 359  |      |

| Saturation Flow Module: | Sat/Lane: | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
|-------------------------|-----------|------|------|------|------|------|------|------|------|------|------|
| Adjustment:             | 1.00      | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:                  | 1.00      | 2.00 | 0.00 | 0.00 | 1.65 | 0.35 | 0.00 | 0.00 | 0.00 | 1.00 | 0.01 |
| Final Sat.:             | 1800      | 3420 | 0    | 0    | 2830 | 590  | 0    | 0    | 0    | 1800 | 5    |

| Capacity Analysis Module: | Vol/Sat: | 0.12 | 0.22 | 0.00 | 0.00 | 0.35 | 0.35 | 0.00 | 0.00 | 0.00 | 0.17 | 0.20 | 0.20 |
|---------------------------|----------|------|------|------|------|------|------|------|------|------|------|------|------|
| Crit Moves:               | ****     |      |      |      |      | **** |      |      |      |      | **** |      |      |
| Green/Cycle:              | 0.17     | 0.66 | 0.00 | 0.00 | 0.49 | 0.49 | 0.00 | 0.00 | 0.00 | 0.28 | 0.28 | 0.28 |      |
| Volume/Cap:               | 0.71     | 0.34 | 0.00 | 0.00 | 0.71 | 0.71 | 0.00 | 0.00 | 0.00 | 0.60 | 0.71 | 0.71 |      |
| Delay/Veh:                | 47.1     | 7.6  | 0.0  | 0.0  | 21.3 | 21.3 | 0.0  | 0.0  | 0.0  | 33.2 | 37.0 | 37.0 |      |
| User DelAdj:              | 1.00     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |      |
| AdjDel/Veh:               | 47.1     | 7.6  | 0.0  | 0.0  | 21.3 | 21.3 | 0.0  | 0.0  | 0.0  | 33.2 | 37.0 | 37.0 |      |
| LOS by Move:              | D        | A    | A    | A    | C    | C    | A    | A    | A    | C    | D    | D    |      |
| HCM2kAvgQ:                | 8        | 5    | 0    | 0    | 16   | 16   | 0    | 0    | 0    | 9    | 11   | 11   |      |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #45 Armstrong Rd/SR-60 EB Ramps

Average Delay (sec/veh): 210.4 Worst Case Level Of Service: F[1395.4]

| Approach: | North Bound  | South Bound  | East Bound | West Bound |
|-----------|--------------|--------------|------------|------------|
| Movement: | L - T - R    | L - T - R    | L - T - R  | L - T - R  |
| Control:  | Uncontrolled | Uncontrolled | Stop Sign  | Stop Sign  |
| Rights:   | Include      | Include      | Include    | Include    |
| Lanes:    | 0 0 1 1 0    | 1 0 2 0 0    | 0 1 0 1 0  | 0 0 0 0 0  |

| Volume Module: | Base Vol: | 0    | 696  | 153  | 296  | 804  | 0    | 212  | 1    | 152  | 0    | 0    | 0    |
|----------------|-----------|------|------|------|------|------|------|------|------|------|------|------|------|
| Growth Adj:    | 1.00      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:   | 0         | 696  | 153  | 296  | 804  | 0    | 212  | 1    | 152  | 0    | 0    | 0    |      |
| Added Vol:     | 0         | 21   | 0    | 0    | 105  | 0    | 0    | 0    | 0    | 0    | 0    | 0    |      |
| PasserByVol:   | 0         | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |      |
| Initial Fut:   | 0         | 717  | 153  | 296  | 909  | 0    | 212  | 1    | 152  | 0    | 0    | 0    |      |
| User Adj:      | 1.00      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |      |
| PHF Adj:       | 0.95      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |      |
| PHF Volume:    | 0         | 755  | 161  | 312  | 957  | 0    | 223  | 1    | 160  | 0    | 0    | 0    |      |
| Reduct Vol:    | 0         | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |      |
| FinalVolume:   | 0         | 755  | 161  | 312  | 957  | 0    | 223  | 1    | 160  | 0    | 0    | 0    |      |

| Critical Gap Module: | Critical Gap: | 4.1  | xxxx | xxxx | xxxx | 6.8  | 6.5  | 6.9 | xxxx | xxxx | xxxx |
|----------------------|---------------|------|------|------|------|------|------|-----|------|------|------|
| FollowUpTim:         | xxxx          | xxxx | xxxx | xxxx | 2.2  | xxxx | xxxx | 3.5 | 4.0  | 3.3  | xxxx |

| Capacity Module: | Cnflct Vol: | xxxx | xxxx | xxxx | 916  | xxxx | xxxx | 1957 | 2496 | 478  | xxxx | xxxx | xxxx |
|------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Potent Cap.:     | xxxx        | xxxx | xxxx | xxxx | 753  | xxxx | xxxx | 57   | 29   | 539  | xxxx | xxxx | xxxx |
| Move Cap.:       | xxxx        | xxxx | xxxx | xxxx | 753  | xxxx | xxxx | 39   | 17   | 539  | xxxx | xxxx | xxxx |
| Volume/Cap:      | xxxx        | xxxx | xxxx | xxxx | 0.41 | xxxx | xxxx | 5.78 | 0.06 | 0.30 | xxxx | xxxx | xxxx |

| Level Of Service Module: | 2Way95thQ:    | xxxx          | xxxx          | xxxx          | 2.0           | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          |
|--------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Control Del:             | xxxx          | xxxx          | xxxx          | xxxx          | 13.1          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          |
| LOS by Move:             | *             | *             | *             | *             | B             | *             | *             | *             | *             | *             | *             | *             | *             |
| Movement:                | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT |
| Shared Cap.:             | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | 38            | xxxx          | 450           | xxxx          | xxxx          | xxxx          |
| SharedQueue:             | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | 26.4          | xxxx          | 1.6           | xxxx          | xxxx          | xxxx          |
| Shrd ConDel:             | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | 2385          | xxxx          | 17.4          | xxxx          | xxxx          | xxxx          |
| Shared LOS:              | *             | *             | *             | *             | *             | *             | *             | F             | *             | C             | *             | *             | *             |
| ApproachDel:             | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | 1395.4        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        |
| ApproachLOS:             | *             | *             | *             | *             | F             | *             | *             | F             | *             | F             | *             | *             | *             |

Note: Queue reported is the number of cars per lane.

**Improved Forecast Existing  
With Project Conditions**



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FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Etiwanda Ave/San Bernardino Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.630  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 24.2  
Optimal Cycle: 41 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Ovl        |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 3 | 0           | 1 | 0 | 2          | 0 | 2 | 0          | 1 | 0 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 270  | 466  | 81   | 27   | 536  | 102  | 88   | 189  | 118  | 67   | 188  | 27   |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 270  | 466  | 81   | 27   | 536  | 102  | 88   | 189  | 118  | 67   | 188  | 27   |
| Added Vol:    | 0    | 118  | 0    | 876  | 673  | 0    | 0    | 52   | 0    | 0    | 8    | 151  |
| PasserByVol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:  | 270  | 584  | 81   | 903  | 1209 | 102  | 88   | 241  | 118  | 67   | 196  | 178  |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 284  | 615  | 85   | 951  | 1273 | 107  | 93   | 254  | 124  | 71   | 206  | 187  |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 284  | 615  | 85   | 951  | 1273 | 107  | 93   | 254  | 124  | 71   | 206  | 187  |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 284  | 615  | 85   | 951  | 1273 | 107  | 93   | 254  | 124  | 71   | 206  | 187  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.91 | 1.00 | 0.97 | 0.95 | 0.95 | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 |
| Lanes:      | 2.00 | 3.00 | 1.00 | 2.00 | 1.84 | 0.16 | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 |
| Final Sat.: | 3492 | 4914 | 1800 | 3492 | 3154 | 266  | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.08 | 0.13 | 0.05 | 0.27 | 0.40 | 0.40 | 0.03 | 0.07 | 0.07 | 0.02 | 0.06 | 0.10 |
| Crit Moves:  | ***  |      |      | ***  |      |      | ***  |      |      | ***  |      |      |
| Green/Cycle: | 0.13 | 0.24 | 0.24 | 0.53 | 0.64 | 0.64 | 0.05 | 0.12 | 0.12 | 0.03 | 0.10 | 0.63 |
| Volume/Cap:  | 0.63 | 0.52 | 0.20 | 0.52 | 0.63 | 0.63 | 0.58 | 0.63 | 0.59 | 0.63 | 0.58 | 0.16 |
| Delay/Veh:   | 44.1 | 33.2 | 30.3 | 15.6 | 11.4 | 11.4 | 52.0 | 45.2 | 46.0 | 58.8 | 45.1 | 7.6  |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 44.1 | 33.2 | 30.3 | 15.6 | 11.4 | 11.4 | 52.0 | 45.2 | 46.0 | 58.8 | 45.1 | 7.6  |
| LOS by Move: | D    | C    | C    | B    | B    | B    | D    | D    | D    | E    | D    | A    |
| HCM2kAvgQ:   | 5    | 6    | 2    | 10   | 14   | 14   | 2    | 5    | 5    | 2    | 4    | 2    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #6 Etiwanda Ave/ East Airport Dr-Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.941  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 44.5  
Optimal Cycle: 128 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound  |   |   | West Bound  |   |   |
|-------------|-------------|---|---|-------------|---|---|-------------|---|---|-------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L           | T | R | L           | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Prot+Permit |   |   | Prot+Permit |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include     |   |   | Include     |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 |
| Lanes:      | 2           | 0 | 1 | 1           | 0 | 0 | 2           | 0 | 1 | 1           | 0 | 2 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 44   | 599  | 183  | 338  | 846  | 256  | 91   | 63   | 36   | 46   | 91   | 345  |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 44   | 599  | 183  | 338  | 846  | 256  | 91   | 63   | 36   | 46   | 91   | 345  |
| Added Vol:    | 66   | 20   | 0    | 175  | 85   | 0    | 0    | 1095 | 227  | 0    | 217  | 59   |
| PasserByVol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:  | 110  | 619  | 183  | 513  | 931  | 256  | 91   | 1158 | 263  | 46   | 308  | 404  |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 116  | 652  | 193  | 540  | 980  | 269  | 96   | 1219 | 277  | 48   | 324  | 425  |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 116  | 652  | 193  | 540  | 980  | 269  | 96   | 1219 | 277  | 48   | 324  | 425  |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 116  | 652  | 193  | 540  | 980  | 269  | 96   | 1219 | 277  | 48   | 324  | 425  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.95 | 0.95 | 0.97 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.88 |
| Lanes:      | 2.00 | 1.54 | 0.46 | 2.00 | 1.57 | 0.43 | 1.00 | 1.63 | 0.37 | 1.00 | 2.00 | 2.00 |
| Final Sat.: | 3492 | 2640 | 780  | 3492 | 2682 | 738  | 1800 | 2787 | 633  | 1800 | 3420 | 3168 |

Capacity Analysis Module:

|              |       |      |      |      |      |      |      |      |      |       |      |      |
|--------------|-------|------|------|------|------|------|------|------|------|-------|------|------|
| Vol/Sat:     | 0.03  | 0.25 | 0.25 | 0.15 | 0.37 | 0.37 | 0.00 | 0.44 | 0.44 | 0.00  | 0.09 | 0.13 |
| Crit Moves:  | ***   |      |      | ***  |      |      | ***  |      |      | ***   |      |      |
| Green/Cycle: | 0.04  | 0.26 | 0.26 | 0.16 | 0.39 | 0.39 | 0.14 | 0.46 | 0.46 | 0.03  | 0.35 | 0.35 |
| Volume/Cap:  | 0.93  | 0.94 | 0.94 | 0.94 | 0.93 | 0.93 | 0.38 | 0.94 | 0.94 | 0.94  | 0.27 | 0.38 |
| Delay/Veh:   | 108.6 | 53.6 | 53.6 | 65.2 | 41.3 | 41.3 | 40.0 | 36.9 | 36.9 | 151.8 | 23.2 | 24.4 |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 |
| AdjDel/Veh:  | 108.6 | 53.6 | 53.6 | 65.2 | 41.3 | 41.3 | 40.0 | 36.9 | 36.9 | 151.8 | 23.2 | 24.4 |
| LOS by Move: | F     | D    | D    | E    | D    | D    | D    | D    | D    | F     | C    | C    |
| HCM2kAvgQ:   | 4     | 18   | 18   | 13   | 24   | 24   | 3    | 28   | 28   | 4     | 4    | 6    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 Etiwanda Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.854  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 31.3  
Optimal Cycle: 80 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 2 | 0           | 2 | 0 | 1          | 2 | 0 | 3          | 0 | 1 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 208  | 559  | 52   | 115  | 640  | 159  | 145  | 358  | 218  | 75   | 677  | 126  |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 208  | 559  | 52   | 115  | 640  | 159  | 145  | 358  | 218  | 75   | 677  | 126  |
| Added Vol:   | 6    | 10   | 50   | 269  | 42   | 0    | 0    | 1799 | 24   | 35   | 253  | 76   |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 214  | 569  | 102  | 384  | 682  | 159  | 145  | 2157 | 242  | 110  | 930  | 202  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 225  | 599  | 107  | 404  | 718  | 167  | 153  | 2271 | 255  | 116  | 979  | 213  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 225  | 599  | 107  | 404  | 718  | 167  | 153  | 2271 | 255  | 116  | 979  | 213  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 225  | 599  | 107  | 404  | 718  | 167  | 153  | 2271 | 255  | 116  | 979  | 213  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.91 | 1.00 | 0.97 | 0.91 |
| Lanes:      | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 3.00 | 1.00 | 2.00 | 3.00 |
| Final Sat.: | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 | 3492 | 4914 | 1800 | 3492 | 4914 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.06 | 0.18 | 0.06 | 0.12 | 0.21 | 0.09 | 0.04 | 0.46 | 0.14 | 0.03 | 0.20 | 0.12 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.08 | 0.20 | 0.20 | 0.14 | 0.26 | 0.26 | 0.10 | 0.54 | 0.54 | 0.04 | 0.48 | 0.48 |
| Volume/Cap:  | 0.81 | 0.85 | 0.29 | 0.85 | 0.81 | 0.36 | 0.42 | 0.85 | 0.26 | 0.85 | 0.42 | 0.25 |
| Delay/Veh:   | 60.9 | 48.3 | 34.0 | 56.4 | 40.1 | 30.6 | 42.7 | 22.5 | 12.4 | 85.7 | 17.3 | 15.8 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 60.9 | 48.3 | 34.0 | 56.4 | 40.1 | 30.6 | 42.7 | 22.5 | 12.4 | 85.7 | 17.3 | 15.8 |
| LOS by Move: | E    | D    | C    | E    | D    | C    | D    | C    | B    | F    | B    | B    |
| HCM2kAvgQ:   | 6    | 12   | 3    | 9    | 13   | 4    | 3    | 24   | 4    | 4    | 7    | 4    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #13 Mulberry Ave/Slover Avenue

Cycle (sec): 100 Critical Vol./Cap.(X): 1.004  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 52.9  
Optimal Cycle: 180 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 1 | 1 | 0          | 1 | 0 | 2          | 1 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 158  | 0    | 131  | 0    | 0    | 0    | 0    | 203  | 81   | 161  | 367  | 0    |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 158  | 0    | 131  | 0    | 0    | 0    | 0    | 203  | 81   | 161  | 367  | 0    |
| Added Vol:   | 30   | 185  | 145  | 414  | 1260 | 0    | 0    | 1184 | 86   | 33   | 246  | 91   |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 188  | 185  | 276  | 414  | 1260 | 0    | 0    | 1387 | 167  | 194  | 613  | 91   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 198  | 195  | 291  | 436  | 1326 | 0    | 0    | 1460 | 176  | 204  | 645  | 96   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 198  | 195  | 291  | 436  | 1326 | 0    | 0    | 1460 | 176  | 204  | 645  | 96   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 198  | 195  | 291  | 436  | 1326 | 0    | 0    | 1460 | 176  | 204  | 645  | 96   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.91 | 0.91 | 1.00 | 0.95 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 0.00 | 1.00 | 2.68 | 0.32 | 1.00 | 2.00 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 3420 | 0    | 1800 | 4386 | 528  | 1800 | 3420 |

Capacity Analysis Module:

|              |       |      |      |      |      |      |      |      |      |       |      |      |
|--------------|-------|------|------|------|------|------|------|------|------|-------|------|------|
| Vol/Sat:     | 0.11  | 0.06 | 0.16 | 0.24 | 0.39 | 0.00 | 0.00 | 0.33 | 0.33 | 0.11  | 0.19 | 0.05 |
| Crit Moves:  | ****  |      |      | **** |      |      | **** |      |      | ****  |      |      |
| Green/Cycle: | 0.11  | 0.20 | 0.20 | 0.30 | 0.39 | 0.00 | 0.00 | 0.33 | 0.33 | 0.11  | 0.44 | 0.44 |
| Volume/Cap:  | 1.00  | 0.29 | 0.81 | 0.81 | 1.00 | 0.00 | 0.00 | 1.00 | 1.00 | 1.00  | 0.42 | 0.12 |
| Delay/Veh:   | 109.8 | 34.3 | 51.7 | 41.9 | 56.5 | 0.0  | 0.0  | 56.8 | 56.8 | 108.6 | 19.2 | 16.4 |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 |
| AdjDel/Veh:  | 109.8 | 34.3 | 51.7 | 41.9 | 56.5 | 0.0  | 0.0  | 56.8 | 56.8 | 108.6 | 19.2 | 16.4 |
| LOS by Move: | F     | C    | D    | D    | E    | A    | A    | E    | E    | F     | B    | B    |
| HCM2kAvgQ:   | 11    | 3    | 11   | 15   | 29   | 0    | 0    | 25   | 25   | 11    | 7    | 2    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #14 Mulberry Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.842  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 27.5  
Optimal Cycle: 76 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 1 | 0 | 1          | 0 | 0 | 1          | 0 | 1 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 80   | 240  | 51   | 25   | 171  | 17   | 2    | 10   | 24   | 52   | 14   | 43   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 80   | 240  | 51   | 25   | 171  | 17   | 2    | 10   | 24   | 52   | 14   | 43   |
| Added Vol:   | 0    | 284  | 227  | 474  | 904  | 0    | 0    | 0    | 0    | 67   | 0    | 76   |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 80   | 524  | 278  | 499  | 1075 | 17   | 2    | 10   | 24   | 119  | 14   | 119  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 84   | 552  | 293  | 525  | 1132 | 18   | 2    | 11   | 25   | 125  | 15   | 125  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 84   | 552  | 293  | 525  | 1132 | 18   | 2    | 11   | 25   | 125  | 15   | 125  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 84   | 552  | 293  | 525  | 1132 | 18   | 2    | 11   | 25   | 125  | 15   | 125  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 0.98 | 0.02 | 1.00 | 0.29 | 0.71 | 1.00 | 1.00 | 1.00 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 1772 | 28   | 1800 | 529  | 1271 | 1800 | 1710 | 1710 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |       |      |       |      |      |      |
|--------------|------|------|------|------|------|------|-------|------|-------|------|------|------|
| Vol/Sat:     | 0.05 | 0.16 | 0.16 | 0.29 | 0.64 | 0.64 | 0.00  | 0.02 | 0.02  | 0.07 | 0.01 | 0.07 |
| Crit Moves:  | **** |      |      | **** |      |      | ****  |      |       | **** |      |      |
| Green/Cycle: | 0.06 | 0.29 | 0.29 | 0.52 | 0.76 | 0.76 | 0.00  | 0.02 | 0.02  | 0.08 | 0.10 | 0.10 |
| Volume/Cap:  | 0.84 | 0.55 | 0.56 | 0.56 | 0.84 | 0.84 | 0.70  | 0.84 | 0.84  | 0.84 | 0.08 | 0.70 |
| Delay/Veh:   | 91.0 | 30.6 | 31.4 | 16.8 | 13.0 | 13.0 | 309.1 | 128  | 128.3 | 78.2 | 40.5 | 53.8 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 91.0 | 30.6 | 31.4 | 16.8 | 13.0 | 13.0 | 309.1 | 128  | 128.3 | 78.2 | 40.5 | 53.8 |
| LOS by Move: | F    | C    | C    | B    | B    | B    | F     | F    | F     | E    | D    | D    |
| HCM2kAvgQ:   | 5    | 8    | 8    | 11   | 26   | 26   | 1     | 3    | 3     | 6    | 0    | 5    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #15 Mulberry Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.938  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 39.7  
Optimal Cycle: 125 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Ovl         |   |   | Ovl         |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 2 | 0           | 2 | 0 | 2          | 0 | 3 | 0          | 3 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 417  | 378  | 222  | 8    | 217  | 61   | 84   | 227  | 72   | 205  | 723  | 35   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 417  | 378  | 222  | 8    | 217  | 61   | 84   | 227  | 72   | 205  | 723  | 35   |
| Added Vol:   | 33   | 154  | 274  | 462  | 78   | 108  | 237  | 1786 | 19   | 87   | 296  | 71   |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 450  | 532  | 496  | 470  | 295  | 169  | 321  | 2013 | 91   | 292  | 1019 | 106  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 474  | 560  | 522  | 495  | 311  | 178  | 338  | 2119 | 96   | 307  | 1073 | 112  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 474  | 560  | 522  | 495  | 311  | 178  | 338  | 2119 | 96   | 307  | 1073 | 112  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 474  | 560  | 522  | 495  | 311  | 178  | 338  | 2119 | 96   | 307  | 1073 | 112  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.91 | 1.00 | 0.97 | 0.91 | 1.00 |
| Lanes:      | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 3.00 | 1.00 | 2.00 | 3.00 | 1.00 |
| Final Sat.: | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 | 3492 | 4914 | 1800 | 3492 | 4914 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.14 | 0.16 | 0.29 | 0.14 | 0.09 | 0.10 | 0.10 | 0.43 | 0.05 | 0.09 | 0.22 | 0.06 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.22 | 0.22 | 0.31 | 0.15 | 0.15 | 0.32 | 0.17 | 0.46 | 0.46 | 0.09 | 0.38 | 0.38 |
| Volume/Cap:  | 0.62 | 0.76 | 0.94 | 0.94 | 0.62 | 0.31 | 0.57 | 0.94 | 0.12 | 0.94 | 0.57 | 0.16 |
| Delay/Veh:   | 36.8 | 41.4 | 57.4 | 66.7 | 42.4 | 26.2 | 39.4 | 34.0 | 15.5 | 78.8 | 24.7 | 20.4 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 36.8 | 41.4 | 57.4 | 66.7 | 42.4 | 26.2 | 39.4 | 34.0 | 15.5 | 78.8 | 24.7 | 20.4 |
| LOS by Move: | D    | D    | E    | E    | D    | C    | D    | C    | B    | E    | C    | C    |
| HCM2kAvgQ:   | 8    | 10   | 20   | 12   | 6    | 4    | 6    | 28   | 2    | 8    | 10   | 2    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #21 Banana Ave/Valley Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.266  
Loss Time (sec): 6 Average Delay (sec/veh): 2.5  
Optimal Cycle: 19 Level Of Service: A

| Approach:   | North Bound |     |     | South Bound |     |     | East Bound |     |     | West Bound |     |     |
|-------------|-------------|-----|-----|-------------|-----|-----|------------|-----|-----|------------|-----|-----|
| Movement:   | L           | T   | R   | L           | T   | R   | L          | T   | R   | L          | T   | R   |
| Control:    | Permitted   |     |     | Permitted   |     |     | Permitted  |     |     | Permitted  |     |     |
| Rights:     | Include     |     |     | Include     |     |     | Include    |     |     | Include    |     |     |
| Min. Green: | 0           | 0   | 0   | 0           | 0   | 0   | 0          | 0   | 0   | 0          | 0   | 0   |
| Y+R:        | 4.0         | 4.0 | 4.0 | 4.0         | 4.0 | 4.0 | 4.0        | 4.0 | 4.0 | 4.0        | 4.0 | 4.0 |
| Lanes:      | 0           | 0   | 0   | 0           | 0   | 0   | 1          | 0   | 2   | 0          | 1   | 1   |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 0    | 0    | 5    | 0    | 0    | 36   | 50   | 424  | 18   | 12   | 609  | 40   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0    | 0    | 5    | 0    | 0    | 36   | 50   | 424  | 18   | 12   | 609  | 40   |
| Added Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 112  | 0    | 0    | 94   | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 0    | 0    | 5    | 0    | 0    | 36   | 50   | 536  | 18   | 12   | 703  | 40   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 0    | 0    | 5    | 0    | 0    | 38   | 53   | 564  | 19   | 13   | 740  | 42   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 0    | 0    | 5    | 0    | 0    | 38   | 53   | 564  | 19   | 13   | 740  | 42   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 0    | 0    | 5    | 0    | 0    | 38   | 53   | 564  | 19   | 13   | 740  | 42   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 |
| Lanes:      | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 1.89 | 0.11 |
| Final Sat.: | 0    | 0    | 1800 | 0    | 0    | 1800 | 1800 | 3420 | 1800 | 1800 | 3236 | 184  |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.03 | 0.16 | 0.01 | 0.01 | 0.23 | 0.23 |
| Crit Moves:  | **** |      |      |      |      |      |      |      |      |      |      |      |
| Green/Cycle: | 0.00 | 0.00 | 0.08 | 0.00 | 0.00 | 0.08 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 |
| Volume/Cap:  | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 0.27 | 0.03 | 0.19 | 0.01 | 0.01 | 0.27 | 0.27 |
| Delay/Veh:   | 0.0  | 0.0  | 42.6 | 0.0  | 0.0  | 44.3 | 1.0  | 1.2  | 1.0  | 1.0  | 1.3  | 1.3  |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 0.0  | 0.0  | 42.6 | 0.0  | 0.0  | 44.3 | 1.0  | 1.2  | 1.0  | 1.0  | 1.3  | 1.3  |
| LOS by Move: | A    | A    | D    | A    | A    | D    | A    | A    | A    | A    | A    | A    |
| HCM2kAvgQ:   | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 1    | 0    | 0    | 2    | 2    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #23 Cherry Ave/Valley Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.929  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 35.1  
Optimal Cycle: 118 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 3 | 0           | 1 | 1 | 1          | 0 | 2 | 0          | 2 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 152  | 614  | 232  | 93   | 702  | 127  | 86   | 195  | 151  | 368  | 715  | 107  |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 152  | 614  | 232  | 93   | 702  | 127  | 86   | 195  | 151  | 368  | 715  | 107  |
| Added Vol:   | 56   | 584  | 70   | 3    | 1330 | 73   | 12   | 56   | 8    | 20   | 66   | 17   |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 208  | 1198 | 302  | 96   | 2032 | 200  | 98   | 251  | 159  | 388  | 781  | 124  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 219  | 1261 | 318  | 101  | 2139 | 211  | 103  | 264  | 167  | 408  | 822  | 131  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 219  | 1261 | 318  | 101  | 2139 | 211  | 103  | 264  | 167  | 408  | 822  | 131  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 219  | 1261 | 318  | 101  | 2139 | 211  | 103  | 264  | 167  | 408  | 822  | 131  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 |
| Lanes:      | 1.00 | 3.00 | 1.00 | 1.00 | 3.00 | 1.00 | 1.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 |
| Final Sat.: | 1800 | 4914 | 1800 | 1800 | 4914 | 1800 | 1800 | 3420 | 1800 | 3492 | 3420 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |       |      |      |      |      |      |
|--------------|------|------|------|------|------|------|-------|------|------|------|------|------|
| Vol/Sat:     | 0.12 | 0.26 | 0.18 | 0.06 | 0.44 | 0.12 | 0.06  | 0.08 | 0.09 | 0.12 | 0.24 | 0.07 |
| Crit Moves:  | **** |      |      |      |      |      |       |      |      |      |      |      |
| Green/Cycle: | 0.13 | 0.49 | 0.49 | 0.11 | 0.47 | 0.47 | 0.06  | 0.14 | 0.14 | 0.18 | 0.26 | 0.26 |
| Volume/Cap:  | 0.93 | 0.52 | 0.36 | 0.52 | 0.93 | 0.25 | 0.93  | 0.54 | 0.66 | 0.66 | 0.93 | 0.28 |
| Delay/Veh:   | 82.5 | 17.6 | 15.9 | 44.7 | 32.4 | 16.1 | 109.8 | 41.2 | 46.6 | 40.7 | 51.9 | 29.9 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 82.5 | 17.6 | 15.9 | 44.7 | 32.4 | 16.1 | 109.8 | 41.2 | 46.6 | 40.7 | 51.9 | 29.9 |
| LOS by Move: | F    | B    | B    | D    | C    | B    | F     | D    | D    | D    | D    | C    |
| HCM2kAvgQ:   | 10   | 10   | 6    | 4    | 27   | 4    | 6     | 5    | 6    | 7    | 17   | 3    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #26 Cherry Ave/Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.896  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 35.5  
Optimal Cycle: 98 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Ovl        |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 4 | 0           | 1 | 2 | 0          | 4 | 0 | 2          | 0 | 3 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 28   | 474  | 16   | 420  | 347  | 557  | 211  | 148  | 13   | 33   | 321  | 232  |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 28   | 474  | 16   | 420  | 347  | 557  | 211  | 148  | 13   | 33   | 321  | 232  |
| Added Vol:   | 211  | 465  | 117  | 446  | 1992 | 230  | 79   | 652  | 376  | 236  | 455  | 145  |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 239  | 939  | 133  | 866  | 2339 | 787  | 290  | 800  | 389  | 269  | 776  | 377  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 252  | 988  | 140  | 912  | 2462 | 828  | 305  | 842  | 409  | 283  | 817  | 397  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 252  | 988  | 140  | 912  | 2462 | 828  | 305  | 842  | 409  | 283  | 817  | 397  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 252  | 988  | 140  | 912  | 2462 | 828  | 305  | 842  | 409  | 283  | 817  | 397  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.91 | 1.00 | 0.97 | 0.91 | 0.88 | 0.97 | 0.91 | 1.00 | 0.97 | 0.91 | 0.88 |
| Lanes:      | 1.00 | 4.00 | 1.00 | 2.00 | 4.00 | 2.00 | 2.00 | 3.00 | 1.00 | 2.00 | 3.00 | 2.00 |
| Final Sat.: | 1800 | 6552 | 1800 | 3492 | 6552 | 3168 | 3492 | 4914 | 1800 | 3492 | 4914 | 3168 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.14 | 0.15 | 0.08 | 0.26 | 0.38 | 0.26 | 0.09 | 0.17 | 0.23 | 0.08 | 0.17 | 0.13 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      | **** |      |      |      |
| Green/Cycle: | 0.16 | 0.21 | 0.21 | 0.36 | 0.42 | 0.42 | 0.12 | 0.25 | 0.25 | 0.09 | 0.23 | 0.59 |
| Volume/Cap:  | 0.90 | 0.72 | 0.37 | 0.72 | 0.90 | 0.62 | 0.74 | 0.67 | 0.90 | 0.90 | 0.74 | 0.21 |
| Delay/Veh:   | 69.9 | 38.5 | 34.4 | 29.3 | 31.3 | 23.7 | 49.3 | 35.1 | 55.8 | 71.2 | 38.6 | 9.6  |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 69.9 | 38.5 | 34.4 | 29.3 | 31.3 | 23.7 | 49.3 | 35.1 | 55.8 | 71.2 | 38.6 | 9.6  |
| LOS by Move: | E    | D    | C    | C    | C    | C    | D    | D    | E    | E    | D    | A    |
| HCM2kAvgQ:   | 11   | 9    | 4    | 14   | 23   | 12   | 6    | 10   | 16   | 7    | 10   | 3    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #28 Cherry Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.964  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 43.8  
Optimal Cycle: 152 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 3 | 0           | 1 | 2 | 0          | 3 | 0 | 1          | 2 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 387  | 402  | 69   | 151  | 402  | 174  | 161  | 496  | 224  | 85   | 920  | 121  |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 387  | 402  | 69   | 151  | 402  | 174  | 161  | 496  | 224  | 85   | 920  | 121  |
| Added Vol:   | 80   | 605  | 147  | 355  | 116  | 346  | 533  | 1084 | 12   | 22   | 426  | 408  |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 467  | 1007 | 216  | 506  | 518  | 520  | 694  | 1580 | 236  | 107  | 1346 | 529  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 492  | 1060 | 227  | 533  | 545  | 547  | 731  | 1663 | 248  | 113  | 1417 | 557  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 492  | 1060 | 227  | 533  | 545  | 547  | 731  | 1663 | 248  | 113  | 1417 | 557  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 492  | 1060 | 227  | 533  | 545  | 547  | 731  | 1663 | 248  | 113  | 1417 | 557  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.91 | 1.00 | 0.97 | 0.91 | 0.88 | 0.97 | 0.91 | 1.00 | 0.97 | 0.91 | 1.00 |
| Lanes:      | 2.00 | 3.00 | 1.00 | 2.00 | 3.00 | 2.00 | 2.00 | 3.00 | 1.00 | 2.00 | 3.00 | 1.00 |
| Final Sat.: | 3492 | 4914 | 1800 | 3492 | 4914 | 3168 | 3492 | 4914 | 1800 | 3492 | 4914 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.14 | 0.22 | 0.13 | 0.15 | 0.11 | 0.17 | 0.21 | 0.34 | 0.14 | 0.03 | 0.29 | 0.31 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      | **** |      |      |      |
| Green/Cycle: | 0.17 | 0.22 | 0.22 | 0.16 | 0.21 | 0.21 | 0.22 | 0.49 | 0.49 | 0.05 | 0.32 | 0.32 |
| Volume/Cap:  | 0.82 | 0.96 | 0.56 | 0.96 | 0.53 | 0.82 | 0.96 | 0.69 | 0.28 | 0.69 | 0.90 | 0.96 |
| Delay/Veh:   | 48.8 | 57.4 | 36.3 | 71.1 | 35.6 | 45.7 | 62.8 | 20.4 | 15.2 | 58.7 | 39.7 | 61.9 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 48.8 | 57.4 | 36.3 | 71.1 | 35.6 | 45.7 | 62.8 | 20.4 | 15.2 | 58.7 | 39.7 | 61.9 |
| LOS by Move: | D    | E    | D    | E    | D    | D    | E    | C    | B    | E    | D    | E    |
| HCM2kAvgQ:   | 10   | 17   | 7    | 13   | 6    | 12   | 16   | 15   | 4    | 3    | 19   | 22   |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #30 Beech Ave/Valley Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.822  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 24.6  
Optimal Cycle: 63 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Permitted   |   |   | Permitted   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 1           | 0 | 2 | 1          | 0 | 1 | 1          | 0 | 2 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 4    | 2    | 12   | 68   | 3    | 20   | 8    | 376  | 9    | 20   | 348  | 50   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 4    | 2    | 12   | 68   | 3    | 20   | 8    | 376  | 9    | 20   | 348  | 50   |
| Added Vol:   | 0    | 307  | 28   | 97   | 1667 | 55   | 16   | 43   | 0    | 197  | 154  | 28   |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 4    | 309  | 40   | 165  | 1670 | 75   | 24   | 419  | 9    | 217  | 502  | 78   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 4    | 325  | 42   | 174  | 1758 | 79   | 25   | 441  | 9    | 228  | 528  | 82   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 4    | 325  | 42   | 174  | 1758 | 79   | 25   | 441  | 9    | 228  | 528  | 82   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 4    | 325  | 42   | 174  | 1758 | 79   | 25   | 441  | 9    | 228  | 528  | 82   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 1.00 |
| Lanes:      | 1.00 | 1.77 | 0.23 | 1.00 | 2.00 | 1.00 | 1.00 | 1.96 | 0.04 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 1800 | 3028 | 392  | 1800 | 3420 | 1800 | 1800 | 3348 | 72   | 1800 | 3420 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.00 | 0.11 | 0.11 | 0.10 | 0.51 | 0.04 | 0.01 | 0.13 | 0.13 | 0.13 | 0.15 | 0.05 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.63 | 0.63 | 0.63 | 0.63 | 0.63 | 0.63 | 0.03 | 0.16 | 0.16 | 0.15 | 0.29 | 0.29 |
| Volume/Cap:  | 0.00 | 0.17 | 0.17 | 0.15 | 0.82 | 0.07 | 0.54 | 0.82 | 0.82 | 0.82 | 0.54 | 0.16 |
| Delay/Veh:   | 7.0  | 7.9  | 7.9  | 7.8  | 17.1 | 7.4  | 59.6 | 50.3 | 50.3 | 58.5 | 30.5 | 26.7 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 7.0  | 7.9  | 7.9  | 7.8  | 17.1 | 7.4  | 59.6 | 50.3 | 50.3 | 58.5 | 30.5 | 26.7 |
| LOS by Move: | A    | A    | A    | A    | B    | A    | E    | D    | D    | E    | C    | C    |
| HCM2kAvgQ:   | 0    | 2    | 2    | 2    | 24   | 1    | 2    | 9    | 9    | 9    | 8    | 2    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #31 Beech Ave/Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.902  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 38.9  
Optimal Cycle: 101 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 1           | 0 | 2 | 2          | 0 | 3 | 1          | 0 | 3 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 72   | 8    | 73   | 8    | 0    | 5    | 5    | 427  | 111  | 121  | 381  | 16   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 72   | 8    | 73   | 8    | 0    | 5    | 5    | 427  | 111  | 121  | 381  | 16   |
| Added Vol:   | 63   | 166  | 101  | 312  | 1053 | 575  | 128  | 768  | 17   | 145  | 907  | 60   |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 135  | 174  | 174  | 320  | 1053 | 580  | 133  | 1195 | 128  | 266  | 1288 | 76   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 142  | 183  | 183  | 337  | 1108 | 611  | 140  | 1258 | 135  | 280  | 1356 | 80   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 142  | 183  | 183  | 337  | 1108 | 611  | 140  | 1258 | 135  | 280  | 1356 | 80   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 142  | 183  | 183  | 337  | 1108 | 611  | 140  | 1258 | 135  | 280  | 1356 | 80   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 0.97 | 0.91 | 1.00 | 1.00 | 0.91 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 2.00 | 3.00 | 1.00 | 1.00 | 3.00 | 1.00 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 | 3492 | 4914 | 1800 | 1800 | 4914 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.08 | 0.05 | 0.10 | 0.19 | 0.32 | 0.34 | 0.04 | 0.26 | 0.07 | 0.16 | 0.28 | 0.04 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.09 | 0.16 | 0.16 | 0.30 | 0.38 | 0.38 | 0.06 | 0.28 | 0.28 | 0.17 | 0.40 | 0.40 |
| Volume/Cap:  | 0.90 | 0.33 | 0.62 | 0.62 | 0.86 | 0.90 | 0.69 | 0.90 | 0.26 | 0.90 | 0.69 | 0.11 |
| Delay/Veh:   | 89.4 | 37.3 | 43.1 | 32.4 | 35.0 | 44.7 | 56.1 | 42.9 | 28.0 | 68.2 | 26.1 | 19.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 89.4 | 37.3 | 43.1 | 32.4 | 35.0 | 44.7 | 56.1 | 42.9 | 28.0 | 68.2 | 26.1 | 19.0 |
| LOS by Move: | F    | D    | D    | C    | C    | D    | E    | D    | C    | E    | C    | B    |
| HCM2kAvgQ:   | 7    | 3    | 6    | 10   | 19   | 22   | 4    | 17   | 3    | 12   | 14   | 2    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #32 Beech Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.472  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 20.0  
Optimal Cycle: 26 Level Of Service: B

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Permitted  |   |   | Permitted  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 0           | 1 | 0 | 0          | 1 | 0 | 0          | 1 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 8    | 122  | 72   | 22   | 55   | 19   | 50   | 126  | 7    | 38   | 97   | 36   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 8    | 122  | 72   | 22   | 55   | 19   | 50   | 126  | 7    | 38   | 97   | 36   |
| Added Vol:   | 62   | 193  | 0    | 252  | 481  | 483  | 97   | 0    | 12   | 0    | 0    | 32   |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 70   | 315  | 72   | 274  | 536  | 502  | 147  | 126  | 19   | 38   | 97   | 68   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 74   | 332  | 76   | 288  | 564  | 528  | 155  | 133  | 20   | 40   | 102  | 72   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 74   | 332  | 76   | 288  | 564  | 528  | 155  | 133  | 20   | 40   | 102  | 72   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 74   | 332  | 76   | 288  | 564  | 528  | 155  | 133  | 20   | 40   | 102  | 72   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Lanes:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.87 | 0.13 | 0.37 | 0.96 | 0.67 |
| Final Sat.: | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1710 | 1486 | 224  | 640  | 1634 | 1146 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.04 | 0.18 | 0.04 | 0.16 | 0.31 | 0.29 | 0.09 | 0.09 | 0.09 | 0.06 | 0.06 | 0.06 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      |      |      |      |
| Green/Cycle: | 0.09 | 0.40 | 0.40 | 0.35 | 0.66 | 0.66 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 |
| Volume/Cap:  | 0.47 | 0.46 | 0.10 | 0.46 | 0.47 | 0.44 | 0.48 | 0.47 | 0.47 | 0.33 | 0.33 | 0.33 |
| Delay/Veh:   | 45.7 | 22.4 | 18.8 | 25.7 | 8.5  | 8.2  | 36.7 | 36.6 | 36.6 | 35.4 | 35.4 | 35.4 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 45.7 | 22.4 | 18.8 | 25.7 | 8.5  | 8.2  | 36.7 | 36.6 | 36.6 | 35.4 | 35.4 | 35.4 |
| LOS by Move: | D    | C    | B    | C    | A    | A    | D    | D    | D    | D    | D    | D    |
| HCM2kAvgQ:   | 3    | 8    | 1    | 7    | 9    | 8    | 5    | 5    | 5    | 3    | 3    | 3    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #33 Beech Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 1.047  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 53.6  
Optimal Cycle: 180 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 0           | 1 | 0 | 1          | 0 | 2 | 0          | 1 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 316  | 38   | 13   | 2    | 5    | 73   | 117  | 412  | 137  | 1    | 303  | 11   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 316  | 38   | 13   | 2    | 5    | 73   | 117  | 412  | 137  | 1    | 303  | 11   |
| Added Vol:   | 95   | 221  | 126  | 0    | 54   | 199  | 28   | 710  | 17   | 18   | 1252 | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 411  | 259  | 139  | 2    | 59   | 272  | 145  | 1122 | 154  | 19   | 1555 | 11   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 433  | 273  | 146  | 2    | 62   | 286  | 153  | 1181 | 162  | 20   | 1637 | 12   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 433  | 273  | 146  | 2    | 62   | 286  | 153  | 1181 | 162  | 20   | 1637 | 12   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 433  | 273  | 146  | 2    | 62   | 286  | 153  | 1181 | 162  | 20   | 1637 | 12   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 |
| Lanes:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |       |       |      |      |      |      |      |
|--------------|------|------|------|------|------|-------|-------|------|------|------|------|------|
| Vol/Sat:     | 0.24 | 0.15 | 0.08 | 0.00 | 0.03 | 0.16  | 0.08  | 0.35 | 0.09 | 0.01 | 0.48 | 0.01 |
| Crit Moves:  | **** |      |      | **** |      |       | ****  |      |      | **** |      |      |
| Green/Cycle: | 0.23 | 0.38 | 0.38 | 0.00 | 0.15 | 0.15  | 0.08  | 0.52 | 0.52 | 0.02 | 0.46 | 0.46 |
| Volume/Cap:  | 1.05 | 0.40 | 0.21 | 0.40 | 0.23 | 1.05  | 1.05  | 0.66 | 0.17 | 0.66 | 1.05 | 0.01 |
| Delay/Veh:   | 95.5 | 23.1 | 21.2 | 93.0 | 37.7 | 109.5 | 133.4 | 18.4 | 12.7 | 92.4 | 63.1 | 14.8 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 95.5 | 23.1 | 21.2 | 93.0 | 37.7 | 109.5 | 133.4 | 18.4 | 12.7 | 92.4 | 63.1 | 14.8 |
| LOS by Move: | F    | C    | C    | F    | D    | F     | F     | B    | B    | F    | E    | B    |
| HCM2kAvgQ:   | 21   | 6    | 3    | 0    | 2    | 15    | 9     | 14   | 3    | 2    | 37   | 0    |

Note: Queue reported is the number of cars per lane.



FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

## Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #34 Citrus Ave/Valley Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.971  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 45.0  
Optimal Cycle: 161 Level Of Service: D

| Approach:   | North Bound | South Bound | East Bound | West Bound |
|-------------|-------------|-------------|------------|------------|
| Movement:   | L - T - R   | L - T - R   | L - T - R  | L - T - R  |
| Control:    | Protected   | Protected   | Protected  | Protected  |
| Rights:     | Include     | Include     | Include    | Include    |
| Min. Green: | 0 0 0       | 0 0 0       | 0 0 0      | 0 0 0      |
| Lanes:      | 2 0 1 1 0   | 1 0 2 0 1   | 2 0 2 0 2  | 2 0 1 1 0  |

## Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 352  | 695  | 122  | 104  | 727  | 35   | 28   | 206  | 491  | 397  | 425  | 83   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 352  | 695  | 122  | 104  | 727  | 35   | 28   | 206  | 491  | 397  | 425  | 83   |
| Added Vol:   | 113  | 115  | 0    | 0    | 668  | 142  | 20   | 26   | 122  | 0    | 124  | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 465  | 810  | 122  | 104  | 1395 | 177  | 48   | 232  | 613  | 397  | 549  | 83   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 489  | 853  | 128  | 109  | 1468 | 186  | 51   | 244  | 645  | 418  | 578  | 87   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 489  | 853  | 128  | 109  | 1468 | 186  | 51   | 244  | 645  | 418  | 578  | 87   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 489  | 853  | 128  | 109  | 1468 | 186  | 51   | 244  | 645  | 418  | 578  | 87   |

## Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.95 | 0.95 | 1.00 | 0.95 | 1.00 | 0.97 | 0.95 | 0.88 | 0.97 | 0.95 | 0.95 |
| Lanes:      | 2.00 | 1.74 | 0.26 | 1.00 | 2.00 | 1.00 | 2.00 | 2.00 | 2.00 | 2.00 | 1.74 | 0.26 |
| Final Sat.: | 3492 | 2972 | 448  | 1800 | 3420 | 1800 | 3492 | 3420 | 3168 | 3492 | 2971 | 449  |

## Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.14 | 0.29 | 0.29 | 0.06 | 0.43 | 0.10 | 0.01 | 0.07 | 0.20 | 0.12 | 0.19 | 0.19 |
| Crit Moves:  | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Green/Cycle: | 0.14 | 0.48 | 0.48 | 0.10 | 0.44 | 0.44 | 0.02 | 0.21 | 0.21 | 0.12 | 0.31 | 0.31 |
| Volume/Cap:  | 0.97 | 0.59 | 0.59 | 0.59 | 0.97 | 0.23 | 0.63 | 0.34 | 0.97 | 0.97 | 0.63 | 0.63 |
| Delay/Veh:   | 75.0 | 19.2 | 19.2 | 47.9 | 43.8 | 17.5 | 63.1 | 33.9 | 66.8 | 79.3 | 30.7 | 30.7 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 75.0 | 19.2 | 19.2 | 47.9 | 43.8 | 17.5 | 63.1 | 33.9 | 66.8 | 79.3 | 30.7 | 30.7 |
| LOS by Move: | E    | B    | B    | D    | D    | B    | E    | C    | E    | E    | C    | C    |
| HCM2kAvgQ:   | 12   | 12   | 12   | 4    | 29   | 4    | 2    | 4    | 16   | 11   | 10   | 10   |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

## Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #37 Citrus Ave/Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.916  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 40.2  
Optimal Cycle: 109 Level Of Service: D

| Approach:   | North Bound | South Bound | East Bound | West Bound |
|-------------|-------------|-------------|------------|------------|
| Movement:   | L - T - R   | L - T - R   | L - T - R  | L - T - R  |
| Control:    | Protected   | Protected   | Protected  | Protected  |
| Rights:     | Include     | Include     | Include    | Include    |
| Min. Green: | 0 0 0       | 0 0 0       | 0 0 0      | 0 0 0      |
| Lanes:      | 1 0 2 0 1   | 1 0 2 0 2   | 2 0 3 0 1  | 1 0 3 0 1  |

## Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 17   | 376  | 62   | 245  | 179  | 505  | 237  | 235  | 7    | 48   | 422  | 224  |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 17   | 376  | 62   | 245  | 179  | 505  | 237  | 235  | 7    | 48   | 422  | 224  |
| Added Vol:   | 86   | 127  | 25   | 0    | 796  | 460  | 122  | 273  | 25   | 174  | 1228 | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 103  | 503  | 87   | 245  | 975  | 965  | 359  | 508  | 32   | 222  | 1650 | 224  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 108  | 529  | 92   | 258  | 1026 | 1016 | 378  | 535  | 34   | 234  | 1737 | 236  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 108  | 529  | 92   | 258  | 1026 | 1016 | 378  | 535  | 34   | 234  | 1737 | 236  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 108  | 529  | 92   | 258  | 1026 | 1016 | 378  | 535  | 34   | 234  | 1737 | 236  |

## Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.88 | 0.97 | 0.91 | 1.00 | 1.00 | 0.91 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 3.00 | 1.00 | 1.00 | 3.00 | 1.00 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 3420 | 3168 | 3492 | 4914 | 1800 | 1800 | 4914 | 1800 |

## Capacity Analysis Module:

|              |       |      |      |      |      |      |      |      |      |      |      |      |
|--------------|-------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.06  | 0.15 | 0.05 | 0.14 | 0.30 | 0.32 | 0.11 | 0.11 | 0.02 | 0.13 | 0.35 | 0.13 |
| Crit Moves:  | ****  | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Green/Cycle: | 0.07  | 0.22 | 0.22 | 0.20 | 0.35 | 0.35 | 0.12 | 0.23 | 0.23 | 0.27 | 0.39 | 0.39 |
| Volume/Cap:  | 0.92  | 0.72 | 0.24 | 0.72 | 0.86 | 0.92 | 0.92 | 0.47 | 0.08 | 0.47 | 0.92 | 0.34 |
| Delay/Veh:   | 103.5 | 39.7 | 32.7 | 44.1 | 36.5 | 42.8 | 68.4 | 33.6 | 30.3 | 31.0 | 36.6 | 22.0 |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 103.5 | 39.7 | 32.7 | 44.1 | 36.5 | 42.8 | 68.4 | 33.6 | 30.3 | 31.0 | 36.6 | 22.0 |
| LOS by Move: | F     | D    | C    | D    | D    | D    | E    | C    | C    | C    | D    | C    |
| HCM2kAvgQ:   | 6     | 9    | 2    | 9    | 18   | 21   | 9    | 6    | 1    | 6    | 23   | 5    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #38 Citrus Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.950  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 42.2  
Optimal Cycle: 137 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 0 | 1           | 0 | 0 | 1          | 0 | 0 | 1          | 0 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 11   | 280  | 37   | 18   | 155  | 33   | 49   | 103  | 0    | 20   | 178  | 21   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 11   | 280  | 37   | 18   | 155  | 33   | 49   | 103  | 0    | 20   | 178  | 21   |
| Added Vol:   | 87   | 217  | 0    | 0    | 464  | 327  | 44   | 18   | 11   | 0    | 126  | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 98   | 497  | 37   | 18   | 619  | 360  | 93   | 121  | 11   | 20   | 304  | 21   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 103  | 523  | 39   | 19   | 652  | 379  | 98   | 127  | 12   | 21   | 320  | 22   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 103  | 523  | 39   | 19   | 652  | 379  | 98   | 127  | 12   | 21   | 320  | 22   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 103  | 523  | 39   | 19   | 652  | 379  | 98   | 127  | 12   | 21   | 320  | 22   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 0.93 | 0.07 | 1.00 | 0.63 | 0.37 | 1.00 | 0.92 | 0.08 | 1.00 | 0.94 | 0.06 |
| Final Sat.: | 1800 | 1675 | 125  | 1800 | 1138 | 662  | 1800 | 1650 | 150  | 1800 | 1684 | 116  |

Capacity Analysis Module:

|              |       |      |      |      |      |      |       |      |      |      |      |      |
|--------------|-------|------|------|------|------|------|-------|------|------|------|------|------|
| Vol/Sat:     | 0.06  | 0.31 | 0.31 | 0.01 | 0.57 | 0.57 | 0.05  | 0.08 | 0.08 | 0.01 | 0.19 | 0.19 |
| Crit Moves:  | ****  |      |      | **** |      |      | ****  |      |      | **** |      |      |
| Green/Cycle: | 0.06  | 0.64 | 0.64 | 0.02 | 0.60 | 0.60 | 0.06  | 0.22 | 0.22 | 0.03 | 0.20 | 0.20 |
| Volume/Cap:  | 0.95  | 0.49 | 0.49 | 0.49 | 0.95 | 0.95 | 0.95  | 0.35 | 0.35 | 0.35 | 0.95 | 0.95 |
| Delay/Veh:   | 117.2 | 9.7  | 9.7  | 57.7 | 35.2 | 35.2 | 119.5 | 33.2 | 33.2 | 50.6 | 74.1 | 74.1 |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 117.2 | 9.7  | 9.7  | 57.7 | 35.2 | 35.2 | 119.5 | 33.2 | 33.2 | 50.6 | 74.1 | 74.1 |
| LOS by Move: | F     | A    | A    | E    | D    | D    | F     | C    | C    | D    | E    | E    |
| HCM2kAvgQ:   | 6     | 9    | 9    | 1    | 35   | 35   | 6     | 4    | 4    | 1    | 15   | 15   |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #39 Citrus Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.997  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 45.8  
Optimal Cycle: 180 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 0           | 1 | 1 | 0          | 1 | 3 | 0          | 1 | 1 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 71   | 174  | 240  | 40   | 63   | 51   | 119  | 422  | 23   | 99   | 347  | 35   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 71   | 174  | 240  | 40   | 63   | 51   | 119  | 422  | 23   | 99   | 347  | 35   |
| Added Vol:   | 95   | 265  | 0    | 45   | 52   | 230  | 81   | 282  | 13   | 0    | 1958 | 278  |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 166  | 439  | 240  | 85   | 115  | 281  | 200  | 704  | 36   | 99   | 2305 | 313  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 175  | 462  | 253  | 89   | 121  | 296  | 211  | 741  | 38   | 104  | 2426 | 329  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 175  | 462  | 253  | 89   | 121  | 296  | 211  | 741  | 38   | 104  | 2426 | 329  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 175  | 462  | 253  | 89   | 121  | 296  | 211  | 741  | 38   | 104  | 2426 | 329  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | 1.00 |
| Lanes:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 3.00 | 1.00 | 1.00 | 3.00 | 1.00 |
| Final Sat.: | 1800 | 1800 | 1800 | 1800 | 1710 | 1710 | 1800 | 4914 | 1800 | 1800 | 4914 | 1800 |

Capacity Analysis Module:

|              |      |      |      |       |      |      |       |      |      |      |      |      |
|--------------|------|------|------|-------|------|------|-------|------|------|------|------|------|
| Vol/Sat:     | 0.10 | 0.26 | 0.14 | 0.05  | 0.07 | 0.17 | 0.12  | 0.15 | 0.02 | 0.06 | 0.49 | 0.18 |
| Crit Moves:  | **** |      |      | ****  |      |      | ****  |      |      | **** |      |      |
| Green/Cycle: | 0.11 | 0.26 | 0.26 | 0.05  | 0.20 | 0.20 | 0.12  | 0.44 | 0.44 | 0.17 | 0.50 | 0.50 |
| Volume/Cap:  | 0.88 | 1.00 | 0.55 | 1.00  | 0.36 | 0.88 | 1.00  | 0.34 | 0.05 | 0.34 | 1.00 | 0.37 |
| Delay/Veh:   | 76.7 | 78.0 | 33.4 | 141.4 | 34.9 | 55.9 | 105.1 | 18.4 | 15.9 | 37.2 | 42.6 | 15.9 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 76.7 | 78.0 | 33.4 | 141.4 | 34.9 | 55.9 | 105.1 | 18.4 | 15.9 | 37.2 | 42.6 | 15.9 |
| LOS by Move: | E    | E    | C    | F     | C    | E    | F     | B    | B    | D    | D    | B    |
| HCM2kAvgQ:   | 8    | 20   | 7    | 6     | 4    | 13   | 11    | 5    | 1    | 3    | 35   | 6    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #40 Sierra Ave/Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.976  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 45.4  
Optimal Cycle: 169 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Ovl        |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 3 | 0           | 2 | 1 | 2          | 0 | 3 | 2          | 0 | 2 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 102  | 1006 | 50   | 409  | 555  | 277  | 200  | 103  | 45   | 25   | 182  | 366  |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 102  | 1006 | 50   | 409  | 555  | 277  | 200  | 103  | 45   | 25   | 182  | 366  |
| Added Vol:   | 0    | 53   | 0    | 0    | 379  | 0    | 0    | 298  | 0    | 0    | 1403 | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 102  | 1059 | 50   | 409  | 934  | 277  | 200  | 401  | 45   | 25   | 1585 | 366  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 107  | 1115 | 53   | 431  | 983  | 292  | 211  | 422  | 47   | 26   | 1668 | 385  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 107  | 1115 | 53   | 431  | 983  | 292  | 211  | 422  | 47   | 26   | 1668 | 385  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 107  | 1115 | 53   | 431  | 983  | 292  | 211  | 422  | 47   | 26   | 1668 | 385  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.91 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.91 | 1.00 | 0.97 | 0.95 |
| Lanes:      | 2.00 | 3.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 3.00 | 1.00 | 2.00 | 2.00 |
| Final Sat.: | 3492 | 4914 | 1800 | 3492 | 3420 | 1800 | 3492 | 4914 | 1800 | 3492 | 3168 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |       |      |      |      |      |      |
|--------------|------|------|------|------|------|------|-------|------|------|------|------|------|
| Vol/Sat:     | 0.03 | 0.23 | 0.03 | 0.12 | 0.29 | 0.16 | 0.06  | 0.09 | 0.03 | 0.01 | 0.49 | 0.12 |
| Crit Moves:  | **** | **** | **** | **** | **** | **** | ****  | **** | **** | **** | **** |      |
| Green/Cycle: | 0.03 | 0.23 | 0.23 | 0.13 | 0.32 | 0.32 | 0.06  | 0.52 | 0.52 | 0.05 | 0.50 | 0.63 |
| Volume/Cap:  | 0.89 | 0.98 | 0.13 | 0.98 | 0.89 | 0.50 | 0.98  | 0.17 | 0.05 | 0.17 | 0.98 | 0.19 |
| Delay/Veh:   | 97.0 | 59.2 | 30.5 | 80.1 | 41.0 | 27.9 | 101.2 | 12.8 | 12.0 | 46.4 | 40.9 | 8.0  |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 97.0 | 59.2 | 30.5 | 80.1 | 41.0 | 27.9 | 101.2 | 12.8 | 12.0 | 46.4 | 40.9 | 8.0  |
| LOS by Move: | F    | E    | C    | F    | D    | C    | F     | B    | B    | D    | D    | A    |
| HCM2kAvgQ:   | 4    | 18   | 1    | 11   | 19   | 8    | 7     | 2    | 1    | 1    | 33   | 3    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST EXISTING WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #42 Sierra Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.976  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 44.0  
Optimal Cycle: 168 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 2 | 2 | 2          | 0 | 2 | 1          | 0 | 3 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 138  | 554  | 79   | 38   | 352  | 158  | 338  | 297  | 106  | 115  | 252  | 111  |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 138  | 554  | 79   | 38   | 352  | 158  | 338  | 297  | 106  | 115  | 252  | 111  |
| Added Vol:   | 112  | 0    | 0    | 0    | 0    | 379  | 53   | 273  | 18   | 0    | 1872 | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 250  | 554  | 79   | 38   | 352  | 537  | 391  | 570  | 124  | 115  | 2124 | 111  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 263  | 583  | 83   | 40   | 371  | 565  | 412  | 600  | 131  | 121  | 2236 | 117  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 263  | 583  | 83   | 40   | 371  | 565  | 412  | 600  | 131  | 121  | 2236 | 117  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 263  | 583  | 83   | 40   | 371  | 565  | 412  | 600  | 131  | 121  | 2236 | 117  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 0.97 | 0.95 | 0.88 | 0.97 | 0.95 | 1.00 | 1.00 | 0.91 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 3.00 |
| Final Sat.: | 1800 | 3420 | 1800 | 3492 | 3420 | 3168 | 3492 | 3420 | 1800 | 1800 | 4914 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.15 | 0.17 | 0.05 | 0.01 | 0.11 | 0.18 | 0.12 | 0.18 | 0.07 | 0.07 | 0.45 | 0.06 |
| Crit Moves:  | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |      |
| Green/Cycle: | 0.15 | 0.31 | 0.31 | 0.02 | 0.18 | 0.18 | 0.12 | 0.42 | 0.42 | 0.16 | 0.47 | 0.47 |
| Volume/Cap:  | 0.98 | 0.55 | 0.15 | 0.55 | 0.59 | 0.98 | 0.98 | 0.41 | 0.17 | 0.41 | 0.98 | 0.14 |
| Delay/Veh:   | 90.2 | 29.1 | 24.9 | 56.9 | 39.0 | 71.7 | 81.1 | 20.3 | 18.0 | 38.5 | 39.6 | 15.3 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 90.2 | 29.1 | 24.9 | 56.9 | 39.0 | 71.7 | 81.1 | 20.3 | 18.0 | 38.5 | 39.6 | 15.3 |
| LOS by Move: | F    | C    | C    | E    | D    | E    | F    | C    | B    | D    | D    | B    |
| HCM2kAvgQ:   | 13   | 8    | 2    | 1    | 6    | 15   | 11   | 7    | 2    | 4    | 31   | 2    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Etiwanda Ave/San Bernardino Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.976  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 47.7  
Optimal Cycle: 169 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Ovl        |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 3 | 0           | 1 | 1 | 0          | 2 | 0 | 2          | 0 | 1 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 242  | 694  | 52   | 42   | 603  | 113  | 274  | 407  | 348  | 55   | 178  | 21   |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 242  | 694  | 52   | 42   | 603  | 113  | 274  | 407  | 348  | 55   | 178  | 21   |
| Added Vol:    | 0    | 650  | 0    | 224  | 154  | 0    | 0    | 9    | 0    | 0    | 54   | 881  |
| PasserByVol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:  | 242  | 1344 | 52   | 266  | 757  | 113  | 274  | 416  | 348  | 55   | 232  | 902  |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 255  | 1415 | 55   | 280  | 797  | 119  | 288  | 438  | 366  | 58   | 244  | 949  |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 255  | 1415 | 55   | 280  | 797  | 119  | 288  | 438  | 366  | 58   | 244  | 949  |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 255  | 1415 | 55   | 280  | 797  | 119  | 288  | 438  | 366  | 58   | 244  | 949  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.91 | 1.00 | 0.97 | 0.95 | 0.95 | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 |
| Lanes:      | 2.00 | 3.00 | 1.00 | 2.00 | 1.74 | 0.26 | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 |
| Final Sat.: | 3492 | 4914 | 1800 | 3492 | 2976 | 444  | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.07 | 0.29 | 0.03 | 0.08 | 0.27 | 0.27 | 0.08 | 0.13 | 0.20 | 0.02 | 0.07 | 0.53 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.08 | 0.29 | 0.29 | 0.08 | 0.30 | 0.30 | 0.08 | 0.50 | 0.50 | 0.04 | 0.46 | 0.54 |
| Volume/Cap:  | 0.90 | 0.98 | 0.10 | 0.98 | 0.90 | 0.90 | 0.98 | 0.26 | 0.41 | 0.41 | 0.16 | 0.98 |
| Delay/Veh:   | 75.5 | 53.0 | 25.7 | 92.2 | 45.0 | 45.0 | 91.3 | 14.3 | 15.9 | 48.6 | 15.8 | 45.4 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 75.5 | 53.0 | 25.7 | 92.2 | 45.0 | 45.0 | 91.3 | 14.3 | 15.9 | 48.6 | 15.8 | 45.4 |
| LOS by Move: | E    | D    | C    | F    | D    | D    | F    | B    | B    | D    | B    | D    |
| HCM2kAvgQ:   | 7    | 22   | 1    | 8    | 18   | 18   | 8    | 4    | 7    | 1    | 2    | 35   |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #6 Etiwanda Ave/ East Airport Dr-Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 1.006  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 54.3  
Optimal Cycle: 180 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound  |   |   | West Bound  |   |   |
|-------------|-------------|---|---|-------------|---|---|-------------|---|---|-------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L           | T | R | L           | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Prot+Permit |   |   | Prot+Permit |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include     |   |   | Include     |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 |
| Lanes:      | 2           | 0 | 1 | 1           | 0 | 0 | 2           | 0 | 1 | 1           | 0 | 2 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 26   | 839  | 30   | 188  | 713  | 74   | 316  | 97   | 72   | 69   | 93   | 582  |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 26   | 839  | 30   | 188  | 713  | 74   | 316  | 97   | 72   | 69   | 93   | 582  |
| Added Vol:    | 288  | 85   | 0    | 95   | 26   | 0    | 0    | 326  | 173  | 0    | 1087 | 285  |
| PasserByVol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:  | 314  | 924  | 30   | 283  | 739  | 74   | 316  | 423  | 245  | 69   | 1180 | 867  |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 331  | 973  | 32   | 298  | 778  | 78   | 333  | 445  | 258  | 73   | 1242 | 913  |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 331  | 973  | 32   | 298  | 778  | 78   | 333  | 445  | 258  | 73   | 1242 | 913  |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 331  | 973  | 32   | 298  | 778  | 78   | 333  | 445  | 258  | 73   | 1242 | 913  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.95 | 0.95 | 0.97 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.88 |
| Lanes:      | 2.00 | 1.94 | 0.06 | 2.00 | 1.82 | 0.18 | 1.00 | 1.27 | 0.73 | 1.00 | 2.00 | 2.00 |
| Final Sat.: | 3492 | 3312 | 108  | 3492 | 3109 | 311  | 1800 | 2166 | 1254 | 1800 | 3420 | 3168 |

Capacity Analysis Module:

|              |      |      |      |       |      |      |      |      |      |      |      |      |
|--------------|------|------|------|-------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.09 | 0.29 | 0.29 | 0.09  | 0.25 | 0.25 | 0.00 | 0.21 | 0.21 | 0.00 | 0.36 | 0.29 |
| Crit Moves:  | **** |      |      | ****  |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.10 | 0.29 | 0.29 | 0.08  | 0.27 | 0.27 | 0.18 | 0.45 | 0.45 | 0.09 | 0.36 | 0.36 |
| Volume/Cap:  | 0.92 | 1.01 | 1.01 | 1.01  | 0.92 | 0.92 | 1.01 | 0.45 | 0.45 | 0.45 | 1.01 | 0.80 |
| Delay/Veh:   | 72.0 | 65.8 | 65.8 | 100.0 | 48.8 | 48.8 | 92.3 | 18.9 | 18.9 | 45.2 | 59.5 | 32.8 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 72.0 | 65.8 | 65.8 | 100.0 | 48.8 | 48.8 | 92.3 | 18.9 | 18.9 | 45.2 | 59.5 | 32.8 |
| LOS by Move: | E    | E    | E    | F     | D    | D    | F    | B    | B    | D    | E    | C    |
| HCM2kAvgQ:   | 8    | 23   | 23   | 9     | 18   | 18   | 16   | 8    | 8    | 3    | 28   | 16   |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 Etiwanda Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.975  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 41.9  
Optimal Cycle: 167 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 2 | 0           | 2 | 0 | 1          | 2 | 0 | 3          | 0 | 1 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 323  | 595  | 140  | 390  | 771  | 231  | 169  | 964  | 355  | 71   | 561  | 100  |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 323  | 595  | 140  | 390  | 771  | 231  | 169  | 964  | 355  | 71   | 561  | 100  |
| Added Vol:   | 24   | 43   | 38   | 186  | 13   | 0    | 0    | 266  | 8    | 53   | 1660 | 331  |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 347  | 638  | 178  | 576  | 784  | 231  | 169  | 1230 | 363  | 124  | 2221 | 431  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 365  | 672  | 187  | 606  | 825  | 243  | 178  | 1295 | 382  | 131  | 2338 | 454  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 365  | 672  | 187  | 606  | 825  | 243  | 178  | 1295 | 382  | 131  | 2338 | 454  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 365  | 672  | 187  | 606  | 825  | 243  | 178  | 1295 | 382  | 131  | 2338 | 454  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.91 | 1.00 | 0.97 | 0.91 | 1.00 |
| Lanes:      | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 3.00 | 1.00 | 2.00 | 3.00 | 1.00 |
| Final Sat.: | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 | 3492 | 4914 | 1800 | 3492 | 4914 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |       |      |      |      |      |      |
|--------------|------|------|------|------|------|------|-------|------|------|------|------|------|
| Vol/Sat:     | 0.10 | 0.20 | 0.10 | 0.17 | 0.24 | 0.14 | 0.05  | 0.26 | 0.21 | 0.04 | 0.48 | 0.25 |
| Crit Moves:  | **** |      |      | **** |      |      | ****  |      |      | **** |      |      |
| Green/Cycle: | 0.11 | 0.20 | 0.20 | 0.18 | 0.26 | 0.26 | 0.05  | 0.47 | 0.47 | 0.07 | 0.49 | 0.49 |
| Volume/Cap:  | 0.91 | 0.97 | 0.52 | 0.97 | 0.91 | 0.51 | 0.97  | 0.56 | 0.45 | 0.56 | 0.97 | 0.52 |
| Delay/Veh:   | 68.3 | 67.6 | 36.9 | 70.5 | 48.8 | 32.2 | 106.3 | 19.1 | 18.0 | 48.2 | 38.0 | 18.1 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 68.3 | 67.6 | 36.9 | 70.5 | 48.8 | 32.2 | 106.3 | 19.1 | 18.0 | 48.2 | 38.0 | 18.1 |
| LOS by Move: | E    | E    | D    | E    | D    | C    | F     | B    | B    | D    | D    | B    |
| HCM2kAvgQ:   | 9    | 16   | 6    | 14   | 17   | 7    | 6     | 11   | 8    | 3    | 32   | 10   |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #13 Mulberry Ave/Slover Avenue

Cycle (sec): 100 Critical Vol./Cap.(X): 1.041  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 52.2  
Optimal Cycle: 180 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 1 | 1 | 0          | 1 | 0 | 2          | 0 | 1 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 145  | 0    | 107  | 0    | 0    | 0    | 0    | 258  | 81   | 136  | 404  | 0    |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 145  | 0    | 107  | 0    | 0    | 0    | 0    | 258  | 81   | 136  | 404  | 0    |
| Added Vol:   | 130  | 1187 | 67   | 182  | 202  | 0    | 0    | 391  | 31   | 165  | 1242 | 467  |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 275  | 1187 | 174  | 182  | 202  | 0    | 0    | 649  | 112  | 301  | 1646 | 467  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 289  | 1249 | 183  | 192  | 213  | 0    | 0    | 683  | 118  | 317  | 1733 | 492  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 289  | 1249 | 183  | 192  | 213  | 0    | 0    | 683  | 118  | 317  | 1733 | 492  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 289  | 1249 | 183  | 192  | 213  | 0    | 0    | 683  | 118  | 317  | 1733 | 492  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.91 | 0.91 | 1.00 | 0.95 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 0.00 | 1.00 | 2.56 | 0.44 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 3420 | 0    | 1800 | 4191 | 723  | 1800 | 3420 | 1800 |

Capacity Analysis Module:

|              |      |      |      |       |      |      |      |      |      |      |      |      |
|--------------|------|------|------|-------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.16 | 0.37 | 0.10 | 0.11  | 0.06 | 0.00 | 0.00 | 0.16 | 0.16 | 0.18 | 0.51 | 0.27 |
| Crit Moves:  | **** |      |      | ****  |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.33 | 0.35 | 0.35 | 0.10  | 0.13 | 0.00 | 0.00 | 0.23 | 0.23 | 0.25 | 0.49 | 0.49 |
| Volume/Cap:  | 0.49 | 1.04 | 0.29 | 1.04  | 0.49 | 0.00 | 0.00 | 0.70 | 0.70 | 0.70 | 1.04 | 0.56 |
| Delay/Veh:   | 27.6 | 69.7 | 23.7 | 122.4 | 41.6 | 0.0  | 0.0  | 36.9 | 36.9 | 38.6 | 59.2 | 19.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 27.6 | 69.7 | 23.7 | 122.4 | 41.6 | 0.0  | 0.0  | 36.9 | 36.9 | 38.6 | 59.2 | 19.0 |
| LOS by Move: | C    | E    | C    | F     | D    | A    | A    | D    | D    | D    | E    | B    |
| HCM2kAvgQ:   | 7    | 29   | 4    | 11    | 4    | 0    | 0    | 9    | 9    | 10   | 38   | 11   |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #14 Mulberry Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.814  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 30.7  
Optimal Cycle: 69 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 1 | 0 | 1          | 0 | 0 | 1          | 0 | 1 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 8    | 180  | 44   | 29   | 226  | 7    | 8    | 13   | 66   | 62   | 13   | 84   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 8    | 180  | 44   | 29   | 226  | 7    | 8    | 13   | 66   | 62   | 13   | 84   |
| Added Vol:   | 0    | 922  | 174  | 88   | 310  | 0    | 0    | 0    | 0    | 289  | 0    | 463  |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 8    | 1102 | 218  | 117  | 536  | 7    | 8    | 13   | 66   | 351  | 13   | 547  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 8    | 1160 | 229  | 123  | 564  | 7    | 8    | 14   | 69   | 369  | 14   | 576  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 8    | 1160 | 229  | 123  | 564  | 7    | 8    | 14   | 69   | 369  | 14   | 576  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 8    | 1160 | 229  | 123  | 564  | 7    | 8    | 14   | 69   | 369  | 14   | 576  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 0.99 | 0.01 | 1.00 | 0.16 | 0.84 | 1.00 | 1.00 | 1.00 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 1777 | 23   | 1800 | 296  | 1504 | 1800 | 1710 | 1710 |

Capacity Analysis Module:

|              |       |      |      |      |      |      |       |      |      |      |      |      |
|--------------|-------|------|------|------|------|------|-------|------|------|------|------|------|
| Vol/Sat:     | 0.00  | 0.34 | 0.13 | 0.07 | 0.32 | 0.32 | 0.00  | 0.05 | 0.05 | 0.21 | 0.01 | 0.34 |
| Crit Moves:  | ****  | **** | **** | **** | **** | **** | ****  | **** | **** | **** | **** | **** |
| Green/Cycle: | 0.01  | 0.42 | 0.42 | 0.08 | 0.49 | 0.49 | 0.01  | 0.08 | 0.08 | 0.34 | 0.41 | 0.41 |
| Volume/Cap:  | 0.64  | 0.81 | 0.31 | 0.81 | 0.64 | 0.64 | 0.81  | 0.60 | 0.60 | 0.60 | 0.02 | 0.81 |
| Delay/Veh:   | 125.4 | 29.5 | 19.7 | 72.6 | 20.4 | 20.4 | 223.6 | 51.8 | 51.8 | 28.9 | 17.3 | 33.0 |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 125.4 | 29.5 | 19.7 | 72.6 | 20.4 | 20.4 | 223.6 | 51.8 | 51.8 | 28.9 | 17.3 | 33.0 |
| LOS by Move: | F     | C    | B    | E    | C    | C    | F     | D    | D    | C    | B    | C    |
| HCM2kAvgQ:   | 1     | 19   | 5    | 6    | 14   | 14   | 1     | 4    | 4    | 10   | 0    | 19   |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #15 Mulberry Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.932  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 35.0  
Optimal Cycle: 121 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Ovl         |   |   | Ovl         |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 2 | 0           | 2 | 0 | 2          | 0 | 3 | 0          | 3 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 129  | 278  | 338  | 55   | 427  | 188  | 149  | 1232 | 417  | 387  | 758  | 49   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 129  | 278  | 338  | 55   | 427  | 188  | 149  | 1232 | 417  | 387  | 758  | 49   |
| Added Vol:   | 22   | 113  | 92   | 67   | 178  | 301  | 216  | 307  | 34   | 265  | 1651 | 469  |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 151  | 391  | 430  | 122  | 605  | 489  | 365  | 1539 | 451  | 652  | 2409 | 518  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 159  | 412  | 453  | 128  | 637  | 515  | 384  | 1620 | 475  | 686  | 2536 | 545  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 159  | 412  | 453  | 128  | 637  | 515  | 384  | 1620 | 475  | 686  | 2536 | 545  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 159  | 412  | 453  | 128  | 637  | 515  | 384  | 1620 | 475  | 686  | 2536 | 545  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.91 | 1.00 | 0.97 | 0.91 | 1.00 |
| Lanes:      | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 3.00 | 1.00 | 2.00 | 3.00 | 1.00 |
| Final Sat.: | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 | 3492 | 4914 | 1800 | 3492 | 4914 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.05 | 0.12 | 0.25 | 0.04 | 0.19 | 0.29 | 0.11 | 0.33 | 0.26 | 0.20 | 0.52 | 0.30 |
| Crit Moves:  | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Green/Cycle: | 0.05 | 0.19 | 0.44 | 0.06 | 0.20 | 0.32 | 0.12 | 0.42 | 0.42 | 0.25 | 0.55 | 0.55 |
| Volume/Cap:  | 0.93 | 0.63 | 0.57 | 0.63 | 0.93 | 0.90 | 0.93 | 0.78 | 0.63 | 0.78 | 0.93 | 0.55 |
| Delay/Veh:   | 96.9 | 39.3 | 21.9 | 52.4 | 59.0 | 49.8 | 71.7 | 27.1 | 24.5 | 39.6 | 27.3 | 14.9 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 96.9 | 39.3 | 21.9 | 52.4 | 59.0 | 49.8 | 71.7 | 27.1 | 24.5 | 39.6 | 27.3 | 14.9 |
| LOS by Move: | F    | D    | C    | D    | E    | D    | E    | C    | C    | D    | C    | B    |
| HCM2kAvgQ:   | 5    | 7    | 11   | 3    | 14   | 19   | 10   | 17   | 12   | 12   | 31   | 11   |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #21 Banana Ave/Valley Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.412  
Loss Time (sec): 6 Average Delay (sec/veh): 3.5  
Optimal Cycle: 24 Level Of Service: A

| Approach:   | North Bound |     |     | South Bound |     |     | East Bound |     |     | West Bound |     |     |
|-------------|-------------|-----|-----|-------------|-----|-----|------------|-----|-----|------------|-----|-----|
| Movement:   | L           | T   | R   | L           | T   | R   | L          | T   | R   | L          | T   | R   |
| Control:    | Permitted   |     |     | Permitted   |     |     | Permitted  |     |     | Permitted  |     |     |
| Rights:     | Include     |     |     | Include     |     |     | Include    |     |     | Include    |     |     |
| Min. Green: | 0           | 0   | 0   | 0           | 0   | 0   | 0          | 0   | 0   | 0          | 0   | 0   |
| Y+R:        | 4.0         | 4.0 | 4.0 | 4.0         | 4.0 | 4.0 | 4.0        | 4.0 | 4.0 | 4.0        | 4.0 | 4.0 |
| Lanes:      | 0           | 0   | 0   | 0           | 0   | 0   | 1          | 0   | 2   | 0          | 1   | 1   |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 0    | 0    | 30   | 0    | 0    | 61   | 50   | 1023 | 12   | 8    | 577  | 36   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 0    | 0    | 30   | 0    | 0    | 61   | 50   | 1023 | 12   | 8    | 577  | 36   |
| Added Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 120  | 0    | 0    | 130  | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 0    | 0    | 30   | 0    | 0    | 61   | 50   | 1143 | 12   | 8    | 707  | 36   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 0    | 0    | 32   | 0    | 0    | 64   | 53   | 1203 | 13   | 8    | 744  | 38   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 0    | 0    | 32   | 0    | 0    | 64   | 53   | 1203 | 13   | 8    | 744  | 38   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 0    | 0    | 32   | 0    | 0    | 64   | 53   | 1203 | 13   | 8    | 744  | 38   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 |
| Lanes:      | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 1.90 | 0.10 |
| Final Sat.: | 0    | 0    | 1800 | 0    | 0    | 1800 | 1800 | 3420 | 1800 | 1800 | 3254 | 166  |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.04 | 0.03 | 0.35 | 0.01 | 0.00 | 0.23 | 0.23 |
| Crit Moves:  | **** |      |      |      |      |      |      |      |      |      |      |      |
| Green/Cycle: | 0.00 | 0.00 | 0.09 | 0.00 | 0.00 | 0.09 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 |
| Volume/Cap:  | 0.00 | 0.00 | 0.20 | 0.00 | 0.00 | 0.41 | 0.03 | 0.41 | 0.01 | 0.01 | 0.27 | 0.27 |
| Delay/Veh:   | 0.0  | 0.0  | 43.1 | 0.0  | 0.0  | 45.0 | 1.1  | 1.8  | 1.1  | 1.1  | 1.4  | 1.4  |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 0.0  | 0.0  | 43.1 | 0.0  | 0.0  | 45.0 | 1.1  | 1.8  | 1.1  | 1.1  | 1.4  | 1.4  |
| LOS by Move: | A    | A    | D    | A    | A    | D    | A    | A    | A    | A    | A    | A    |
| HCM2kAvgQ:   | 0    | 0    | 1    | 0    | 0    | 2    | 0    | 4    | 0    | 0    | 3    | 3    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #23 Cherry Ave/Valley Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.915  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 36.9  
Optimal Cycle: 109 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 3 | 0           | 1 | 1 | 1          | 0 | 2 | 0          | 2 | 1 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 118  | 531  | 306  | 139  | 632  | 127  | 124  | 699  | 197  | 275  | 408  | 63   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 118  | 531  | 306  | 139  | 632  | 127  | 124  | 699  | 197  | 275  | 408  | 63   |
| Added Vol:   | 9    | 1323 | 54   | 18   | 722  | 15   | 74   | 91   | 59   | 89   | 70   | 3    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 127  | 1854 | 360  | 157  | 1354 | 142  | 198  | 790  | 256  | 364  | 478  | 66   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 134  | 1952 | 379  | 165  | 1425 | 149  | 208  | 832  | 269  | 383  | 503  | 69   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 134  | 1952 | 379  | 165  | 1425 | 149  | 208  | 832  | 269  | 383  | 503  | 69   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 134  | 1952 | 379  | 165  | 1425 | 149  | 208  | 832  | 269  | 383  | 503  | 69   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 |
| Lanes:      | 1.00 | 3.00 | 1.00 | 1.00 | 3.00 | 1.00 | 1.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 |
| Final Sat.: | 1800 | 4914 | 1800 | 1800 | 4914 | 1800 | 1800 | 3420 | 1800 | 3492 | 3420 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.07 | 0.40 | 0.21 | 0.09 | 0.29 | 0.08 | 0.12 | 0.24 | 0.15 | 0.11 | 0.15 | 0.04 |
| Crit Moves:  | **** |      |      |      |      |      |      |      |      |      |      |      |
| Green/Cycle: | 0.11 | 0.43 | 0.43 | 0.10 | 0.43 | 0.43 | 0.17 | 0.27 | 0.27 | 0.12 | 0.22 | 0.22 |
| Volume/Cap:  | 0.68 | 0.92 | 0.49 | 0.92 | 0.68 | 0.20 | 0.68 | 0.92 | 0.56 | 0.92 | 0.68 | 0.18 |
| Delay/Veh:   | 52.3 | 33.3 | 20.8 | 88.0 | 24.2 | 18.1 | 45.1 | 49.2 | 33.3 | 67.9 | 38.7 | 32.2 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 52.3 | 33.3 | 20.8 | 88.0 | 24.2 | 18.1 | 45.1 | 49.2 | 33.3 | 67.9 | 38.7 | 32.2 |
| LOS by Move: | D    | C    | C    | F    | C    | B    | D    | D    | C    | E    | D    | C    |
| HCM2kAvgQ:   | 5    | 25   | 8    | 8    | 14   | 3    | 7    | 17   | 8    | 9    | 9    | 2    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #26 Cherry Ave/Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 1.007  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 49.6  
Optimal Cycle: 180 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Ovl        |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 4 | 0           | 1 | 2 | 0          | 4 | 0 | 2          | 0 | 3 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 34   | 405  | 23   | 245  | 392  | 304  | 307  | 724  | 52   | 44   | 280  | 294  |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 34   | 405  | 23   | 245  | 392  | 304  | 307  | 724  | 52   | 44   | 280  | 294  |
| Added Vol:   | 382  | 1647 | 275  | 324  | 576  | 164  | 366  | 610  | 267  | 142  | 759  | 620  |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 416  | 2052 | 298  | 569  | 968  | 468  | 673  | 1334 | 319  | 186  | 1039 | 914  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 438  | 2160 | 314  | 599  | 1019 | 493  | 708  | 1404 | 336  | 196  | 1094 | 962  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 438  | 2160 | 314  | 599  | 1019 | 493  | 708  | 1404 | 336  | 196  | 1094 | 962  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 438  | 2160 | 314  | 599  | 1019 | 493  | 708  | 1404 | 336  | 196  | 1094 | 962  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.91 | 1.00 | 0.97 | 0.91 | 0.88 | 0.97 | 0.91 | 1.00 | 0.97 | 0.91 | 0.88 |
| Lanes:      | 1.00 | 4.00 | 1.00 | 2.00 | 4.00 | 2.00 | 2.00 | 3.00 | 1.00 | 2.00 | 3.00 | 2.00 |
| Final Sat.: | 1800 | 6552 | 1800 | 3492 | 6552 | 3168 | 3492 | 4914 | 1800 | 3492 | 4914 | 3168 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.24 | 0.33 | 0.17 | 0.17 | 0.16 | 0.16 | 0.20 | 0.29 | 0.19 | 0.06 | 0.22 | 0.30 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.30 | 0.33 | 0.33 | 0.17 | 0.19 | 0.19 | 0.20 | 0.35 | 0.35 | 0.07 | 0.22 | 0.39 |
| Volume/Cap:  | 0.80 | 1.01 | 0.53 | 1.01 | 0.80 | 0.80 | 1.01 | 0.81 | 0.53 | 0.81 | 1.01 | 0.78 |
| Delay/Veh:   | 40.3 | 54.8 | 28.3 | 80.2 | 42.2 | 45.9 | 75.6 | 32.3 | 26.6 | 64.0 | 68.0 | 29.8 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 40.3 | 54.8 | 28.3 | 80.2 | 42.2 | 45.9 | 75.6 | 32.3 | 26.6 | 64.0 | 68.0 | 29.8 |
| LOS by Move: | D    | D    | C    | F    | D    | D    | E    | C    | C    | E    | E    | C    |
| HCM2kAvgQ:   | 14   | 25   | 8    | 15   | 10   | 10   | 17   | 16   | 9    | 5    | 18   | 16   |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #28 Cherry Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.858  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 34.3  
Optimal Cycle: 82 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 3 | 0           | 1 | 2 | 0          | 3 | 0 | 2          | 0 | 3 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 183  | 260  | 40   | 123  | 423  | 105  | 138  | 813  | 213  | 87   | 734  | 69   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 183  | 260  | 40   | 123  | 423  | 105  | 138  | 813  | 213  | 87   | 734  | 69   |
| Added Vol:   | 14   | 202  | 25   | 385  | 641  | 506  | 287  | 418  | 77   | 135  | 1011 | 304  |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 197  | 462  | 65   | 508  | 1064 | 611  | 425  | 1231 | 290  | 222  | 1745 | 373  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 207  | 486  | 68   | 535  | 1120 | 643  | 447  | 1296 | 305  | 234  | 1837 | 393  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 207  | 486  | 68   | 535  | 1120 | 643  | 447  | 1296 | 305  | 234  | 1837 | 393  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 207  | 486  | 68   | 535  | 1120 | 643  | 447  | 1296 | 305  | 234  | 1837 | 393  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.91 | 1.00 | 0.97 | 0.91 | 0.88 | 0.97 | 0.91 | 1.00 | 0.97 | 0.91 | 1.00 |
| Lanes:      | 2.00 | 3.00 | 1.00 | 2.00 | 3.00 | 2.00 | 2.00 | 3.00 | 1.00 | 2.00 | 3.00 | 1.00 |
| Final Sat.: | 3492 | 4914 | 1800 | 3492 | 4914 | 3168 | 3492 | 4914 | 1800 | 3492 | 4914 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.06 | 0.10 | 0.04 | 0.15 | 0.23 | 0.20 | 0.13 | 0.26 | 0.17 | 0.07 | 0.37 | 0.22 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.07 | 0.13 | 0.13 | 0.20 | 0.27 | 0.27 | 0.15 | 0.47 | 0.47 | 0.12 | 0.44 | 0.44 |
| Volume/Cap:  | 0.86 | 0.75 | 0.29 | 0.75 | 0.86 | 0.76 | 0.86 | 0.57 | 0.36 | 0.57 | 0.86 | 0.50 |
| Delay/Veh:   | 71.0 | 46.8 | 39.9 | 42.0 | 40.8 | 38.0 | 54.8 | 19.6 | 17.4 | 43.5 | 29.1 | 20.9 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 71.0 | 46.8 | 39.9 | 42.0 | 40.8 | 38.0 | 54.8 | 19.6 | 17.4 | 43.5 | 29.1 | 20.9 |
| LOS by Move: | E    | D    | D    | D    | D    | D    | D    | B    | B    | D    | C    | C    |
| HCM2kAvgQ:   | 6    | 7    | 2    | 10   | 15   | 12   | 10   | 11   | 6    | 4    | 21   | 9    |

Note: Queue reported is the number of cars per lane.



FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #30 Beech Ave/Valley Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.968  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 36.7  
Optimal Cycle: 160 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Permitted   |   |   | Permitted   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 1           | 0 | 2 | 1          | 0 | 1 | 1          | 0 | 2 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 12   | 9    | 25   | 53   | 5    | 19   | 47   | 748  | 9    | 10   | 504  | 76   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 12   | 9    | 25   | 53   | 5    | 19   | 47   | 748  | 9    | 10   | 504  | 76   |
| Added Vol:   | 0    | 1645 | 166  | 74   | 503  | 42   | 70   | 215  | 0    | 63   | 76   | 124  |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 12   | 1654 | 191  | 127  | 508  | 61   | 117  | 963  | 9    | 73   | 580  | 200  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 13   | 1741 | 201  | 134  | 535  | 64   | 123  | 1014 | 9    | 77   | 611  | 211  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 13   | 1741 | 201  | 134  | 535  | 64   | 123  | 1014 | 9    | 77   | 611  | 211  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 13   | 1741 | 201  | 134  | 535  | 64   | 123  | 1014 | 9    | 77   | 611  | 211  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 1.00 |
| Lanes:      | 1.00 | 1.79 | 0.21 | 1.00 | 2.00 | 1.00 | 1.00 | 1.98 | 0.02 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 1800 | 3066 | 354  | 1800 | 3420 | 1800 | 1800 | 3388 | 32   | 1800 | 3420 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |       |      |      |
|--------------|------|------|------|------|------|------|------|------|------|-------|------|------|
| Vol/Sat:     | 0.01 | 0.57 | 0.57 | 0.07 | 0.16 | 0.04 | 0.07 | 0.30 | 0.30 | 0.04  | 0.18 | 0.12 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | ****  |      |      |
| Green/Cycle: | 0.59 | 0.59 | 0.59 | 0.59 | 0.59 | 0.59 | 0.10 | 0.31 | 0.31 | 0.04  | 0.26 | 0.26 |
| Volume/Cap:  | 0.01 | 0.97 | 0.97 | 0.13 | 0.27 | 0.06 | 0.70 | 0.97 | 0.97 | 0.97  | 0.70 | 0.46 |
| Delay/Veh:   | 8.6  | 33.1 | 33.1 | 9.3  | 10.2 | 8.9  | 55.4 | 54.3 | 54.3 | 137.5 | 36.3 | 32.1 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 |
| AdjDel/Veh:  | 8.6  | 33.1 | 33.1 | 9.3  | 10.2 | 8.9  | 55.4 | 54.3 | 54.3 | 137.5 | 36.3 | 32.1 |
| LOS by Move: | A    | C    | C    | A    | B    | A    | E    | D    | D    | F     | D    | C    |
| HCM2kAvgQ:   | 0    | 37   | 37   | 2    | 4    | 1    | 5    | 22   | 22   | 5     | 10   | 6    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #31 Beech Ave/Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.985  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 54.1  
Optimal Cycle: 180 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 1           | 0 | 2 | 2          | 0 | 3 | 1          | 0 | 3 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 84   | 0    | 123  | 48   | 20   | 2    | 8    | 462  | 83   | 104  | 400  | 19   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 84   | 0    | 123  | 48   | 20   | 2    | 8    | 462  | 83   | 104  | 400  | 19   |
| Added Vol:   | 74   | 1029 | 164  | 151  | 185  | 249  | 602  | 1091 | 74   | 136  | 957  | 290  |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 158  | 1029 | 287  | 199  | 205  | 251  | 610  | 1553 | 157  | 240  | 1357 | 309  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 166  | 1083 | 302  | 209  | 216  | 264  | 642  | 1635 | 165  | 253  | 1428 | 325  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 166  | 1083 | 302  | 209  | 216  | 264  | 642  | 1635 | 165  | 253  | 1428 | 325  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 166  | 1083 | 302  | 209  | 216  | 264  | 642  | 1635 | 165  | 253  | 1428 | 325  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 0.97 | 0.91 | 1.00 | 1.00 | 0.91 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 2.00 | 3.00 | 1.00 | 1.00 | 3.00 | 1.00 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 | 3492 | 4914 | 1800 | 1800 | 4914 | 1800 |

Capacity Analysis Module:

|              |      |      |      |       |      |      |      |      |      |      |      |      |
|--------------|------|------|------|-------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.09 | 0.32 | 0.17 | 0.12  | 0.06 | 0.15 | 0.18 | 0.33 | 0.09 | 0.14 | 0.29 | 0.18 |
| Crit Moves:  | **** |      |      | ****  |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.17 | 0.32 | 0.32 | 0.12  | 0.27 | 0.27 | 0.19 | 0.34 | 0.34 | 0.14 | 0.29 | 0.29 |
| Volume/Cap:  | 0.54 | 0.98 | 0.52 | 0.98  | 0.23 | 0.54 | 0.99 | 0.98 | 0.27 | 0.98 | 0.99 | 0.61 |
| Delay/Veh:   | 40.0 | 57.1 | 28.5 | 101.2 | 28.6 | 32.5 | 72.8 | 51.4 | 24.4 | 94.6 | 55.9 | 32.6 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 40.0 | 57.1 | 28.5 | 101.2 | 28.6 | 32.5 | 72.8 | 51.4 | 24.4 | 94.6 | 55.9 | 32.6 |
| LOS by Move: | D    | E    | C    | F     | C    | C    | E    | D    | C    | F    | E    | C    |
| HCM2kAvgQ:   | 5    | 24   | 8    | 11    | 3    | 7    | 15   | 25   | 4    | 12   | 22   | 9    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #32 Beech Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.747  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 24.2  
Optimal Cycle: 48 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Permitted  |   |   | Permitted  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 0           | 1 | 0 | 0          | 1 | 0 | 0          | 1 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 9    | 79   | 59   | 52   | 115  | 50   | 36   | 195  | 24   | 50   | 99   | 38   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 9    | 79   | 59   | 52   | 115  | 50   | 36   | 195  | 24   | 50   | 99   | 38   |
| Added Vol:   | 16   | 535  | 0    | 36   | 225  | 133  | 438  | 0    | 56   | 0    | 0    | 234  |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 25   | 614  | 59   | 88   | 340  | 183  | 474  | 195  | 80   | 50   | 99   | 272  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 26   | 646  | 62   | 93   | 358  | 193  | 499  | 205  | 84   | 53   | 104  | 286  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 26   | 646  | 62   | 93   | 358  | 193  | 499  | 205  | 84   | 53   | 104  | 286  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 26   | 646  | 62   | 93   | 358  | 193  | 499  | 205  | 84   | 53   | 104  | 286  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Lanes:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.71 | 0.29 | 0.34 | 0.66 | 1.00 |
| Final Sat.: | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1710 | 1213 | 497  | 574  | 1136 | 1710 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.01 | 0.36 | 0.03 | 0.05 | 0.20 | 0.11 | 0.29 | 0.17 | 0.17 | 0.09 | 0.09 | 0.17 |
| Crit Moves:  | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Green/Cycle: | 0.04 | 0.48 | 0.48 | 0.07 | 0.51 | 0.51 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 | 0.39 |
| Volume/Cap:  | 0.39 | 0.75 | 0.07 | 0.75 | 0.39 | 0.21 | 0.75 | 0.43 | 0.43 | 0.23 | 0.23 | 0.43 |
| Delay/Veh:   | 50.7 | 24.7 | 14.0 | 67.5 | 15.1 | 13.5 | 29.2 | 22.5 | 22.5 | 20.5 | 20.5 | 22.6 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 50.7 | 24.7 | 14.0 | 67.5 | 15.1 | 13.5 | 29.2 | 22.5 | 22.5 | 20.5 | 20.5 | 22.6 |
| LOS by Move: | D    | C    | B    | E    | B    | B    | C    | C    | C    | C    | C    | C    |
| HCM2kAvgQ:   | 1    | 17   | 1    | 4    | 7    | 3    | 15   | 7    | 7    | 3    | 3    | 7    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #33 Beech Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.977  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 41.2  
Optimal Cycle: 170 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 0           | 1 | 0 | 1          | 0 | 2 | 0          | 1 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 180  | 21   | 11   | 10   | 39   | 125  | 78   | 584  | 266  | 8    | 332  | 7    |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 180  | 21   | 11   | 10   | 39   | 125  | 78   | 584  | 266  | 8    | 332  | 7    |
| Added Vol:   | 21   | 118  | 18   | 0    | 247  | 29   | 183  | 1175 | 87   | 116  | 654  | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 201  | 139  | 29   | 10   | 286  | 154  | 261  | 1759 | 353  | 124  | 986  | 7    |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 212  | 146  | 31   | 11   | 301  | 162  | 275  | 1852 | 372  | 131  | 1038 | 7    |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 212  | 146  | 31   | 11   | 301  | 162  | 275  | 1852 | 372  | 131  | 1038 | 7    |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 212  | 146  | 31   | 11   | 301  | 162  | 275  | 1852 | 372  | 131  | 1038 | 7    |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 |
| Lanes:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |       |      |      |
|--------------|------|------|------|------|------|------|------|------|------|-------|------|------|
| Vol/Sat:     | 0.12 | 0.08 | 0.02 | 0.01 | 0.17 | 0.09 | 0.15 | 0.54 | 0.21 | 0.07  | 0.30 | 0.00 |
| Crit Moves:  | **** | **** | **** | **** | **** | **** | **** | **** | **** | ****  | **** | **** |
| Green/Cycle: | 0.12 | 0.27 | 0.27 | 0.02 | 0.17 | 0.17 | 0.21 | 0.55 | 0.55 | 0.07  | 0.42 | 0.42 |
| Volume/Cap:  | 0.98 | 0.30 | 0.06 | 0.30 | 0.98 | 0.53 | 0.73 | 0.98 | 0.37 | 0.98  | 0.73 | 0.01 |
| Delay/Veh:   | 98.2 | 29.2 | 27.0 | 53.1 | 86.0 | 39.4 | 43.7 | 37.2 | 12.8 | 116.7 | 26.2 | 17.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 |
| AdjDel/Veh:  | 98.2 | 29.2 | 27.0 | 53.1 | 86.0 | 39.4 | 43.7 | 37.2 | 12.8 | 116.7 | 26.2 | 17.0 |
| LOS by Move: | F    | C    | C    | D    | F    | D    | D    | D    | B    | F     | C    | B    |
| HCM2kAvgQ:   | 11   | 4    | 1    | 1    | 14   | 5    | 9    | 36   | 6    | 7     | 15   | 0    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

## Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

## Intersection #34 Citrus Ave/Valley Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 1.002  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 50.1  
Optimal Cycle: 180 Level Of Service: D

| Approach:   | North Bound | South Bound | East Bound | West Bound |
|-------------|-------------|-------------|------------|------------|
| Movement:   | L - T - R   | L - T - R   | L - T - R  | L - T - R  |
| Control:    | Protected   | Protected   | Protected  | Protected  |
| Rights:     | Include     | Include     | Include    | Include    |
| Min. Green: | 0 0 0       | 0 0 0       | 0 0 0      | 0 0 0      |
| Lanes:      | 2 0 1 1 0   | 1 0 2 0 1   | 2 0 2 0 2  | 2 0 1 1 0  |

## Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 290  | 836  | 216  | 122  | 763  | 43   | 108  | 578  | 358  | 346  | 452  | 133  |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 290  | 836  | 216  | 122  | 763  | 43   | 108  | 578  | 358  | 346  | 452  | 133  |
| Added Vol:   | 188  | 653  | 0    | 0    | 166  | 21   | 131  | 142  | 182  | 0    | 54   | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 478  | 1489 | 216  | 122  | 929  | 64   | 239  | 720  | 540  | 346  | 506  | 133  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 503  | 1567 | 227  | 128  | 978  | 67   | 252  | 758  | 568  | 364  | 533  | 140  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 503  | 1567 | 227  | 128  | 978  | 67   | 252  | 758  | 568  | 364  | 533  | 140  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 503  | 1567 | 227  | 128  | 978  | 67   | 252  | 758  | 568  | 364  | 533  | 140  |

## Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.95 | 0.95 | 1.00 | 0.95 | 1.00 | 0.97 | 0.95 | 0.88 | 0.97 | 0.95 | 0.95 |
| Lanes:      | 2.00 | 1.75 | 0.25 | 1.00 | 2.00 | 1.00 | 2.00 | 2.00 | 2.00 | 2.00 | 1.58 | 0.42 |
| Final Sat.: | 3492 | 2987 | 433  | 1800 | 3420 | 1800 | 3492 | 3420 | 3168 | 3492 | 2708 | 712  |

## Capacity Analysis Module:

|              |      |      |      |       |      |      |      |      |      |      |      |      |
|--------------|------|------|------|-------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.14 | 0.52 | 0.52 | 0.07  | 0.29 | 0.04 | 0.07 | 0.22 | 0.18 | 0.10 | 0.20 | 0.20 |
| Crit Moves:  | **** | **** | **** | ****  | **** | **** | **** | **** | **** | **** | **** | **** |
| Green/Cycle: | 0.20 | 0.52 | 0.52 | 0.07  | 0.40 | 0.40 | 0.09 | 0.22 | 0.22 | 0.10 | 0.24 | 0.24 |
| Volume/Cap:  | 0.72 | 1.00 | 1.00 | 1.00  | 0.72 | 0.09 | 0.83 | 1.00 | 0.81 | 1.00 | 0.83 | 0.83 |
| Delay/Veh:   | 41.2 | 45.6 | 45.6 | 126.5 | 27.5 | 19.0 | 61.6 | 72.2 | 44.1 | 92.6 | 43.1 | 43.1 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 41.2 | 45.6 | 45.6 | 126.5 | 27.5 | 19.0 | 61.6 | 72.2 | 44.1 | 92.6 | 43.1 | 43.1 |
| LOS by Move: | D    | D    | D    | F     | C    | B    | E    | E    | D    | F    | D    | D    |
| HCM2kAvgQ:   | 9    | 37   | 37   | 8     | 14   | 1    | 6    | 18   | 12   | 10   | 13   | 13   |

Note: Queue reported is the number of cars per lane.

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FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

## Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

## Intersection #37 Citrus Ave/Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.965  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 41.3  
Optimal Cycle: 153 Level Of Service: D

| Approach:   | North Bound | South Bound | East Bound | West Bound |
|-------------|-------------|-------------|------------|------------|
| Movement:   | L - T - R   | L - T - R   | L - T - R  | L - T - R  |
| Control:    | Protected   | Protected   | Protected  | Protected  |
| Rights:     | Include     | Include     | Include    | Include    |
| Min. Green: | 0 0 0       | 0 0 0       | 0 0 0      | 0 0 0      |
| Lanes:      | 1 0 2 0 1   | 1 0 2 0 2   | 2 0 3 0 1  | 1 0 3 0 1  |

## Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 25   | 249  | 72   | 155  | 302  | 296  | 302  | 862  | 50   | 75   | 267  | 95   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 25   | 249  | 72   | 155  | 302  | 296  | 302  | 862  | 50   | 75   | 267  | 95   |
| Added Vol:   | 65   | 636  | 163  | 0    | 161  | 232  | 635  | 1304 | 108  | 29   | 507  | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 90   | 885  | 235  | 155  | 463  | 528  | 937  | 2166 | 158  | 104  | 774  | 95   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 95   | 932  | 247  | 163  | 487  | 556  | 986  | 2280 | 166  | 109  | 815  | 100  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 95   | 932  | 247  | 163  | 487  | 556  | 986  | 2280 | 166  | 109  | 815  | 100  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 95   | 932  | 247  | 163  | 487  | 556  | 986  | 2280 | 166  | 109  | 815  | 100  |

## Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.88 | 0.97 | 0.91 | 1.00 | 1.00 | 0.91 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 3.00 | 1.00 | 1.00 | 3.00 | 1.00 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 3420 | 3168 | 3492 | 4914 | 1800 | 1800 | 4914 | 1800 |

## Capacity Analysis Module:

|              |      |      |      |       |      |      |      |      |      |       |      |      |
|--------------|------|------|------|-------|------|------|------|------|------|-------|------|------|
| Vol/Sat:     | 0.05 | 0.27 | 0.14 | 0.09  | 0.14 | 0.18 | 0.28 | 0.46 | 0.09 | 0.06  | 0.17 | 0.06 |
| Crit Moves:  | **** | **** | **** | ****  | **** | **** | **** | **** | **** | ****  | **** | **** |
| Green/Cycle: | 0.09 | 0.28 | 0.28 | 0.09  | 0.29 | 0.29 | 0.34 | 0.48 | 0.48 | 0.06  | 0.20 | 0.20 |
| Volume/Cap:  | 0.61 | 0.97 | 0.49 | 0.97  | 0.49 | 0.61 | 0.82 | 0.97 | 0.19 | 0.97  | 0.82 | 0.28 |
| Delay/Veh:   | 50.7 | 56.3 | 30.6 | 103.8 | 29.8 | 31.8 | 34.9 | 36.6 | 15.0 | 119.9 | 44.0 | 34.2 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 |
| AdjDel/Veh:  | 50.7 | 56.3 | 30.6 | 103.8 | 29.8 | 31.8 | 34.9 | 36.6 | 15.0 | 119.9 | 44.0 | 34.2 |
| LOS by Move: | D    | E    | C    | F     | C    | C    | C    | D    | B    | F     | D    | C    |
| HCM2kAvgQ:   | 4    | 20   | 7    | 9     | 7    | 9    | 17   | 31   | 3    | 6     | 11   | 3    |

Note: Queue reported is the number of cars per lane.

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FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #38 Citrus Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.751  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 33.1  
Optimal Cycle: 56 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 0 | 1           | 0 | 0 | 1          | 0 | 0 | 1          | 0 | 0 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 4    | 169  | 37   | 41   | 284  | 18   | 64   | 267  | 5    | 50   | 117  | 35   |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 4    | 169  | 37   | 41   | 284  | 18   | 64   | 267  | 5    | 50   | 117  | 35   |
| Added Vol:    | 13   | 398  | 0    | 0    | 260  | 47   | 303  | 116  | 81   | 0    | 18   | 0    |
| PasserByVol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:  | 17   | 567  | 37   | 41   | 544  | 65   | 367  | 383  | 86   | 50   | 135  | 35   |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 18   | 597  | 39   | 43   | 573  | 68   | 386  | 403  | 91   | 53   | 142  | 37   |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 18   | 597  | 39   | 43   | 573  | 68   | 386  | 403  | 91   | 53   | 142  | 37   |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 18   | 597  | 39   | 43   | 573  | 68   | 386  | 403  | 91   | 53   | 142  | 37   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 0.94 | 0.06 | 1.00 | 0.89 | 0.11 | 1.00 | 0.82 | 0.18 | 1.00 | 0.79 | 0.21 |
| Final Sat.: | 1800 | 1690 | 110  | 1800 | 1608 | 192  | 1800 | 1470 | 330  | 1800 | 1429 | 371  |

Capacity Analysis Module:

|              |       |      |      |      |      |      |      |      |      |      |      |      |
|--------------|-------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.01  | 0.35 | 0.35 | 0.02 | 0.36 | 0.36 | 0.21 | 0.27 | 0.27 | 0.03 | 0.10 | 0.10 |
| Crit Moves:  | ****  | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |      |
| Green/Cycle: | 0.01  | 0.47 | 0.47 | 0.03 | 0.49 | 0.49 | 0.29 | 0.38 | 0.38 | 0.04 | 0.13 | 0.13 |
| Volume/Cap:  | 0.73  | 0.75 | 0.75 | 0.75 | 0.73 | 0.73 | 0.75 | 0.73 | 0.73 | 0.73 | 0.75 | 0.75 |
| Delay/Veh:   | 121.2 | 25.5 | 25.5 | 90.1 | 23.4 | 23.4 | 38.6 | 30.6 | 30.6 | 77.9 | 54.4 | 54.4 |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 121.2 | 25.5 | 25.5 | 90.1 | 23.4 | 23.4 | 38.6 | 30.6 | 30.6 | 77.9 | 54.4 | 54.4 |
| LOS by Move: | F     | C    | C    | F    | C    | C    | D    | C    | C    | E    | D    | D    |
| HCM2kAvgQ:   | 2     | 17   | 17   | 3    | 17   | 17   | 12   | 14   | 14   | 3    | 7    | 7    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #39 Citrus Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 1.029  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 50.6  
Optimal Cycle: 180 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 1           | 0 | 1 | 1          | 0 | 3 | 1          | 0 | 3 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 37   | 109  | 123  | 90   | 139  | 141  | 91   | 684  | 83   | 140  | 366  | 35   |
| Growth Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse:  | 37   | 109  | 123  | 90   | 139  | 141  | 91   | 684  | 83   | 140  | 366  | 35   |
| Added Vol:    | 14   | 105  | 0    | 260  | 282  | 90   | 126  | 1814 | 87   | 0    | 301  | 48   |
| PasserByVol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:  | 51   | 214  | 123  | 350  | 421  | 231  | 217  | 2498 | 170  | 140  | 667  | 83   |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 54   | 225  | 129  | 368  | 443  | 243  | 228  | 2629 | 179  | 147  | 702  | 87   |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 54   | 225  | 129  | 368  | 443  | 243  | 228  | 2629 | 179  | 147  | 702  | 87   |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 54   | 225  | 129  | 368  | 443  | 243  | 228  | 2629 | 179  | 147  | 702  | 87   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | 1.00 |
| Lanes:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.29 | 0.71 | 1.00 | 3.00 | 1.00 | 1.00 | 3.00 | 1.00 |
| Final Sat.: | 1800 | 1800 | 1800 | 1800 | 2208 | 1212 | 1800 | 4914 | 1800 | 1800 | 4914 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |       |      |      |
|--------------|------|------|------|------|------|------|------|------|------|-------|------|------|
| Vol/Sat:     | 0.03 | 0.13 | 0.07 | 0.20 | 0.20 | 0.20 | 0.13 | 0.54 | 0.10 | 0.08  | 0.14 | 0.05 |
| Crit Moves:  | **** | **** | **** | **** | **** | **** | **** | **** | **** | ****  | **** |      |
| Green/Cycle: | 0.04 | 0.12 | 0.12 | 0.20 | 0.28 | 0.28 | 0.28 | 0.52 | 0.52 | 0.08  | 0.32 | 0.32 |
| Volume/Cap:  | 0.72 | 1.03 | 0.59 | 1.03 | 0.72 | 0.72 | 0.45 | 1.03 | 0.19 | 1.03  | 0.45 | 0.15 |
| Delay/Veh:   | 75.9 | 113  | 45.8 | 95.3 | 35.2 | 35.2 | 30.2 | 49.8 | 12.9 | 129.2 | 27.4 | 24.6 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 |
| AdjDel/Veh:  | 75.9 | 113  | 45.8 | 95.3 | 35.2 | 35.2 | 30.2 | 49.8 | 12.9 | 129.2 | 27.4 | 24.6 |
| LOS by Move: | E    | F    | D    | F    | D    | D    | C    | D    | B    | F     | C    | C    |
| HCM2kAvgQ:   | 3    | 12   | 5    | 18   | 11   | 11   | 6    | 40   | 3    | 9     | 6    | 2    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #40 Sierra Ave/Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.960  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 41.7  
Optimal Cycle: 147 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Ovl        |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 3 | 0           | 2 | 0 | 2          | 0 | 3 | 2          | 0 | 2 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 51   | 945  | 97   | 500  | 770  | 173  | 586  | 471  | 71   | 132  | 213  | 637  |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 51   | 945  | 97   | 500  | 770  | 173  | 586  | 471  | 71   | 132  | 213  | 637  |
| Added Vol:   | 0    | 349  | 0    | 0    | 55   | 0    | 0    | 1468 | 0    | 0    | 536  | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 51   | 1294 | 97   | 500  | 825  | 173  | 586  | 1939 | 71   | 132  | 749  | 637  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 54   | 1362 | 102  | 526  | 868  | 182  | 617  | 2041 | 75   | 139  | 788  | 671  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 54   | 1362 | 102  | 526  | 868  | 182  | 617  | 2041 | 75   | 139  | 788  | 671  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 54   | 1362 | 102  | 526  | 868  | 182  | 617  | 2041 | 75   | 139  | 788  | 671  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.91 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.91 | 1.00 | 0.97 | 0.95 |
| Lanes:      | 2.00 | 3.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 3.00 | 1.00 | 2.00 | 2.00 |
| Final Sat.: | 3492 | 4914 | 1800 | 3492 | 3420 | 1800 | 3492 | 4914 | 1800 | 3492 | 3420 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |       |      |      |
|--------------|------|------|------|------|------|------|------|------|------|-------|------|------|
| Vol/Sat:     | 0.02 | 0.28 | 0.06 | 0.15 | 0.25 | 0.10 | 0.18 | 0.42 | 0.04 | 0.04  | 0.23 | 0.21 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | ****  |      |      |
| Green/Cycle: | 0.03 | 0.29 | 0.29 | 0.16 | 0.42 | 0.42 | 0.21 | 0.43 | 0.43 | 0.04  | 0.27 | 0.43 |
| Volume/Cap:  | 0.60 | 0.96 | 0.20 | 0.96 | 0.60 | 0.24 | 0.86 | 0.96 | 0.10 | 0.96  | 0.86 | 0.50 |
| Delay/Veh:   | 59.5 | 50.3 | 27.0 | 70.3 | 23.3 | 18.9 | 48.5 | 39.1 | 16.8 | 110.3 | 42.9 | 21.2 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 |
| AdjDel/Veh:  | 59.5 | 50.3 | 27.0 | 70.3 | 23.3 | 18.9 | 48.5 | 39.1 | 16.8 | 110.3 | 42.9 | 21.2 |
| LOS by Move: | E    | D    | C    | E    | C    | B    | D    | D    | B    | F     | D    | C    |
| HCM2kAvgQ:   | 2    | 20   | 2    | 13   | 11   | 4    | 12   | 28   | 1    | 5     | 15   | 9    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST EXISTING WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #42 Sierra Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.951  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 36.2  
Optimal Cycle: 138 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 2 | 0 | 2          | 0 | 2 | 1          | 0 | 3 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 99   | 469  | 107  | 109  | 488  | 273  | 424  | 235  | 184  | 83   | 196  | 60   |
| Growth Adj:  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Initial Bse: | 99   | 469  | 107  | 109  | 488  | 273  | 424  | 235  | 184  | 83   | 196  | 60   |
| Added Vol:   | 21   | 0    | 0    | 0    | 0    | 55   | 349  | 1735 | 105  | 0    | 292  | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 120  | 469  | 107  | 109  | 488  | 328  | 773  | 1970 | 289  | 83   | 488  | 60   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 126  | 494  | 113  | 115  | 514  | 345  | 814  | 2074 | 304  | 87   | 514  | 63   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 126  | 494  | 113  | 115  | 514  | 345  | 814  | 2074 | 304  | 87   | 514  | 63   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 126  | 494  | 113  | 115  | 514  | 345  | 814  | 2074 | 304  | 87   | 514  | 63   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 0.97 | 0.95 | 0.88 | 0.97 | 0.95 | 1.00 | 1.00 | 0.91 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 3.00 |
| Final Sat.: | 1800 | 3420 | 1800 | 3492 | 3420 | 3168 | 3492 | 3420 | 1800 | 1800 | 4914 |

Capacity Analysis Module:

|              |       |      |      |      |      |      |      |      |      |       |      |      |
|--------------|-------|------|------|------|------|------|------|------|------|-------|------|------|
| Vol/Sat:     | 0.07  | 0.14 | 0.06 | 0.03 | 0.15 | 0.11 | 0.23 | 0.61 | 0.17 | 0.05  | 0.10 | 0.04 |
| Crit Moves:  | ****  |      |      | **** |      |      | **** |      |      | ****  |      |      |
| Green/Cycle: | 0.07  | 0.19 | 0.19 | 0.04 | 0.16 | 0.16 | 0.48 | 0.64 | 0.64 | 0.05  | 0.21 | 0.21 |
| Volume/Cap:  | 0.95  | 0.77 | 0.33 | 0.77 | 0.95 | 0.69 | 0.49 | 0.95 | 0.27 | 0.95  | 0.49 | 0.16 |
| Delay/Veh:   | 109.2 | 43.9 | 35.7 | 68.0 | 68.7 | 43.9 | 18.2 | 26.9 | 8.0  | 125.0 | 34.9 | 32.3 |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 |
| AdjDel/Veh:  | 109.2 | 43.9 | 35.7 | 68.0 | 68.7 | 43.9 | 18.2 | 26.9 | 8.0  | 125.0 | 34.9 | 32.3 |
| LOS by Move: | F     | D    | D    | E    | E    | D    | B    | C    | A    | F     | C    | C    |
| HCM2kAvgQ:   | 7     | 9    | 3    | 3    | 12   | 7    | 9    | 37   | 4    | 5     | 6    | 2    |

Note: Queue reported is the number of cars per lane.

## **Forecast Year 2030 Without Project Conditions**

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FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 I-15 SB Ramps/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.754  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 23.9  
Optimal Cycle: 50 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |   |
| Control:    | Split Phase |   |   | Split Phase |   |   | Protected  |   |   | Protected  |   |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |   |
| Lanes:      | 0           | 0 | 0 | 1           | 0 | 1 | 0          | 0 | 3 | 0          | 1 | 2 | 0 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 0    | 0    | 0    | 790  | 1    | 647  | 0    | 302  | 139  | 244  | 639  | 0    |
| Growth Adj:   | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse:  | 0    | 0    | 0    | 973  | 1    | 797  | 0    | 372  | 171  | 301  | 787  | 0    |
| Added Vol:    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:  | 0    | 0    | 0    | 973  | 1    | 797  | 0    | 372  | 171  | 301  | 787  | 0    |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 0    | 0    | 0    | 1025 | 1    | 839  | 0    | 392  | 180  | 316  | 829  | 0    |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 0    | 0    | 0    | 1025 | 1    | 839  | 0    | 392  | 180  | 316  | 829  | 0    |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 0    | 0    | 0    | 1025 | 1    | 839  | 0    | 392  | 180  | 316  | 829  | 0    |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 1.00 | 0.97 | 0.91 | 1.00 |
| Lanes:      | 0.00 | 0.00 | 0.00 | 1.54 | 0.01 | 1.45 | 0.00 | 3.00 | 1.00 | 2.00 | 3.00 | 0.00 |
| Final Sat.: | 0    | 0    | 0    | 2788 | 3    | 2609 | 0    | 4914 | 1800 | 3492 | 4914 | 0    |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.00 | 0.00 | 0.00 | 0.37 | 0.52 | 0.32 | 0.00 | 0.08 | 0.10 | 0.09 | 0.17 | 0.00 |
| Crit Moves:  | **** |      |      |      |      |      |      |      |      |      |      |      |
| Green/Cycle: | 0.00 | 0.00 | 0.00 | 0.69 | 0.69 | 0.69 | 0.00 | 0.13 | 0.13 | 0.12 | 0.25 | 0.00 |
| Volume/Cap:  | 0.00 | 0.00 | 0.00 | 0.53 | 0.75 | 0.47 | 0.00 | 0.60 | 0.75 | 0.75 | 0.67 | 0.00 |
| Delay/Veh:   | 0.0  | 0.0  | 0.0  | 7.9  | 11.5 | 7.3  | 0.0  | 42.4 | 54.6 | 50.2 | 35.0 | 0.0  |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 0.0  | 0.0  | 0.0  | 7.9  | 11.5 | 7.3  | 0.0  | 42.4 | 54.6 | 50.2 | 35.0 | 0.0  |
| LOS by Move: | A    | A    | A    | A    | B    | A    | A    | D    | D    | D    | C    | A    |
| HCM2kAvgQ:   | 0    | 0    | 0    | 10   | 20   | 8    | 0    | 5    | 7    | 7    | 9    | 0    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 I-15 NB Ramps/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.747  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 22.1  
Optimal Cycle: 48 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Split Phase |   |   | Split Phase |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 0           | 1 | 0 | 2          | 0 | 3 | 0          | 0 | 0 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 340  | 1    | 536  | 0    | 0    | 0    | 175  | 899  | 0    | 0    | 530  | 446  |
| Growth Adj:   | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse:  | 419  | 1    | 660  | 0    | 0    | 0    | 216  | 1108 | 0    | 0    | 653  | 549  |
| Added Vol:    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:  | 419  | 1    | 660  | 0    | 0    | 0    | 216  | 1108 | 0    | 0    | 653  | 549  |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 441  | 1    | 695  | 0    | 0    | 0    | 227  | 1166 | 0    | 0    | 687  | 578  |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 441  | 1    | 695  | 0    | 0    | 0    | 227  | 1166 | 0    | 0    | 687  | 578  |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 441  | 1    | 695  | 0    | 0    | 0    | 227  | 1166 | 0    | 0    | 687  | 578  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.97 | 0.91 | 1.00 | 1.00 | 0.91 | 1.00 |
| Lanes:      | 1.38 | 0.01 | 1.61 | 0.00 | 0.00 | 0.00 | 2.00 | 3.00 | 0.00 | 0.00 | 3.00 | 1.00 |
| Final Sat.: | 2497 | 4    | 2899 | 0    | 0    | 0    | 3492 | 4914 | 0    | 0    | 4914 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.18 | 0.32 | 0.24 | 0.00 | 0.00 | 0.00 | 0.06 | 0.24 | 0.00 | 0.00 | 0.14 | 0.32 |
| Crit Moves:  | **** |      |      |      |      |      |      |      |      |      |      |      |
| Green/Cycle: | 0.42 | 0.42 | 0.42 | 0.00 | 0.00 | 0.00 | 0.09 | 0.52 | 0.00 | 0.00 | 0.43 | 0.43 |
| Volume/Cap:  | 0.42 | 0.75 | 0.57 | 0.00 | 0.00 | 0.00 | 0.75 | 0.46 | 0.00 | 0.00 | 0.33 | 0.75 |
| Delay/Veh:   | 20.3 | 26.4 | 22.3 | 0.0  | 0.0  | 0.0  | 54.4 | 15.4 | 0.0  | 0.0  | 19.0 | 28.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 20.3 | 26.4 | 22.3 | 0.0  | 0.0  | 0.0  | 54.4 | 15.4 | 0.0  | 0.0  | 19.0 | 28.0 |
| LOS by Move: | C    | C    | C    | A    | A    | A    | D    | B    | A    | A    | B    | C    |
| HCM2kAvgQ:   | 7    | 16   | 10   | 0    | 0    | 0    | 5    | 8    | 0    | 0    | 5    | 16   |

Note: Queue reported is the number of cars per lane.



FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Etiwanda Ave/San Bernardino Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.496  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 24.7  
Optimal Cycle: 32 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 2 | 0           | 1 | 1 | 0          | 2 | 0 | 1          | 2 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 270  | 466  | 81   | 27   | 536  | 102  | 88   | 189  | 118  | 67   | 188  | 27   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 333  | 574  | 100  | 33   | 660  | 126  | 108  | 233  | 145  | 83   | 232  | 33   |
| Added Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 333  | 574  | 100  | 33   | 660  | 126  | 108  | 233  | 145  | 83   | 232  | 33   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 350  | 604  | 105  | 35   | 695  | 132  | 114  | 245  | 153  | 87   | 244  | 35   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 350  | 604  | 105  | 35   | 695  | 132  | 114  | 245  | 153  | 87   | 244  | 35   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 350  | 604  | 105  | 35   | 695  | 132  | 114  | 245  | 153  | 87   | 244  | 35   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 0.95 | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 0.95 |
| Lanes:      | 2.00 | 2.00 | 1.00 | 2.00 | 1.68 | 0.32 | 2.00 | 2.00 | 1.00 | 2.00 | 1.75 | 0.25 |
| Final Sat.: | 3492 | 3420 | 1800 | 3492 | 2873 | 547  | 3492 | 3420 | 1800 | 3492 | 2991 | 429  |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.10 | 0.18 | 0.06 | 0.01 | 0.24 | 0.24 | 0.03 | 0.07 | 0.09 | 0.02 | 0.08 | 0.08 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.20 | 0.65 | 0.65 | 0.04 | 0.49 | 0.49 | 0.07 | 0.18 | 0.18 | 0.05 | 0.16 | 0.16 |
| Volume/Cap:  | 0.50 | 0.27 | 0.09 | 0.27 | 0.50 | 0.50 | 0.50 | 0.40 | 0.48 | 0.48 | 0.50 | 0.50 |
| Delay/Veh:   | 35.9 | 7.4  | 6.4  | 48.0 | 17.5 | 17.5 | 46.8 | 36.8 | 38.0 | 48.0 | 38.7 | 38.7 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 35.9 | 7.4  | 6.4  | 48.0 | 17.5 | 17.5 | 46.8 | 36.8 | 38.0 | 48.0 | 38.7 | 38.7 |
| LOS by Move: | D    | A    | A    | D    | B    | B    | D    | D    | D    | D    | D    | D    |
| HCM2kAvgQ:   | 5    | 4    | 1    | 1    | 9    | 9    | 2    | 4    | 5    | 2    | 5    | 5    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Etiwanda Ave/I-10 WB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.497  
Loss Time (sec): 4 (Y+R=4.0 sec) Average Delay (sec/veh): 19.8  
Optimal Cycle: 22 Level Of Service: B

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound  |   |   | West Bound  |   |   |
|-------------|-------------|---|---|-------------|---|---|-------------|---|---|-------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L           | T | R | L           | T | R |
| Control:    | Permitted   |   |   | Permitted   |   |   | Split Phase |   |   | Split Phase |   |   |
| Rights:     | Ignore      |   |   | Ignore      |   |   | Include     |   |   | Include     |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 |
| Lanes:      | 0           | 0 | 2 | 0           | 0 | 3 | 0           | 0 | 0 | 0           | 0 | 2 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 0    | 493  | 466  | 0    | 684  | 246  | 0    | 0    | 0    | 403  | 0    | 214  |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 0    | 607  | 574  | 0    | 843  | 303  | 0    | 0    | 0    | 496  | 0    | 264  |
| Added Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 0    | 607  | 574  | 0    | 843  | 303  | 0    | 0    | 0    | 496  | 0    | 264  |
| User Adj:    | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.00 | 0.95 | 0.95 | 0.00 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 0    | 639  | 0    | 0    | 887  | 0    | 0    | 0    | 0    | 523  | 0    | 278  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 0    | 639  | 0    | 0    | 887  | 0    | 0    | 0    | 0    | 523  | 0    | 278  |
| PCE Adj:     | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 0    | 639  | 0    | 0    | 887  | 0    | 0    | 0    | 0    | 523  | 0    | 278  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.88 |
| Lanes:      | 0.00 | 2.00 | 1.00 | 0.00 | 3.00 | 1.00 | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 2.00 |
| Final Sat.: | 0    | 3420 | 1800 | 0    | 4914 | 1800 | 0    | 0    | 0    | 1800 | 0    | 3168 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.00 | 0.19 | 0.00 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 | 0.29 | 0.00 | 0.09 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.00 | 0.38 | 0.00 | 0.00 | 0.38 | 0.00 | 0.00 | 0.00 | 0.00 | 0.58 | 0.00 | 0.58 |
| Volume/Cap:  | 0.00 | 0.50 | 0.00 | 0.00 | 0.48 | 0.00 | 0.00 | 0.00 | 0.00 | 0.50 | 0.00 | 0.15 |
| Delay/Veh:   | 0.0  | 24.2 | 0.0  | 0.0  | 24.0 | 0.0  | 0.0  | 0.0  | 0.0  | 12.6 | 0.0  | 9.5  |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 0.0  | 24.2 | 0.0  | 0.0  | 24.0 | 0.0  | 0.0  | 0.0  | 0.0  | 12.6 | 0.0  | 9.5  |
| LOS by Move: | A    | C    | A    | A    | C    | A    | A    | A    | A    | B    | A    | A    |
| HCM2kAvgQ:   | 0    | 8    | 0    | 0    | 8    | 0    | 0    | 0    | 0    | 9    | 0    | 2    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 Etiwanda Ave/I-10 EB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.837  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 25.2  
Optimal Cycle: 68 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound  |   |   | West Bound  |   |   |
|-------------|-------------|---|---|-------------|---|---|-------------|---|---|-------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L           | T | R | L           | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Split Phase |   |   | Split Phase |   |   |
| Rights:     | Ignore      |   |   | Ignore      |   |   | Include     |   |   | Include     |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 |
| Lanes:      | 0           | 0 | 3 | 0           | 0 | 2 | 0           | 0 | 0 | 0           | 0 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 0    | 720  | 323  | 0    | 968  | 164  | 144  | 0    | 583  | 0    | 0    | 0    |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 0    | 887  | 398  | 0    | 1193 | 202  | 177  | 0    | 718  | 0    | 0    | 0    |
| Added Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 0    | 887  | 398  | 0    | 1193 | 202  | 177  | 0    | 718  | 0    | 0    | 0    |
| User Adj:    | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.00 | 0.95 | 0.95 | 0.00 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 0    | 934  | 0    | 0    | 1255 | 0    | 187  | 0    | 756  | 0    | 0    | 0    |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 0    | 934  | 0    | 0    | 1255 | 0    | 187  | 0    | 756  | 0    | 0    | 0    |
| PCE Adj:     | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 0    | 934  | 0    | 0    | 1255 | 0    | 187  | 0    | 756  | 0    | 0    | 0    |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.91 | 1.00 | 1.00 | 0.95 | 1.00 | 0.97 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 0.00 | 3.00 | 1.00 | 0.00 | 2.00 | 1.00 | 2.00 | 0.00 | 1.00 | 0.00 | 0.00 | 0.00 |
| Final Sat.: | 0    | 4914 | 1800 | 0    | 3420 | 1800 | 3492 | 0    | 1800 | 0    | 0    | 0    |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.00 | 0.19 | 0.00 | 0.00 | 0.37 | 0.00 | 0.05 | 0.00 | 0.42 | 0.00 | 0.00 | 0.00 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      |      |      |      |
| Green/Cycle: | 0.00 | 0.44 | 0.00 | 0.00 | 0.44 | 0.00 | 0.50 | 0.00 | 0.50 | 0.00 | 0.00 | 0.00 |
| Volume/Cap:  | 0.00 | 0.43 | 0.00 | 0.00 | 0.84 | 0.00 | 0.11 | 0.00 | 0.84 | 0.00 | 0.00 | 0.00 |
| Delay/Veh:   | 0.0  | 19.6 | 0.0  | 0.0  | 29.2 | 0.0  | 13.1 | 0.0  | 28.3 | 0.0  | 0.0  | 0.0  |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 0.0  | 19.6 | 0.0  | 0.0  | 29.2 | 0.0  | 13.1 | 0.0  | 28.3 | 0.0  | 0.0  | 0.0  |
| LOS by Move: | A    | B    | A    | A    | C    | A    | B    | A    | C    | A    | A    | A    |
| HCM2kAvgQ:   | 0    | 7    | 0    | 0    | 20   | 0    | 2    | 0    | 22   | 0    | 0    | 0    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #6 Etiwanda Ave/ East Airport Dr-Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.943  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 42.6  
Optimal Cycle: 130 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound  |   |   | West Bound  |   |   |
|-------------|-------------|---|---|-------------|---|---|-------------|---|---|-------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L           | T | R | L           | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Prot+Permit |   |   | Prot+Permit |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include     |   |   | Include     |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 1           | 0 | 1 | 1           | 0 | 1 | 1           | 0 | 1 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 44   | 599  | 183  | 338  | 846  | 256  | 91   | 63   | 36   | 46   | 91   | 345  |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 54   | 738  | 225  | 416  | 1042 | 315  | 112  | 78   | 44   | 57   | 112  | 425  |
| Added Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 54   | 738  | 225  | 416  | 1042 | 315  | 112  | 78   | 44   | 57   | 112  | 425  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 57   | 777  | 237  | 438  | 1097 | 332  | 118  | 82   | 47   | 60   | 118  | 447  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 57   | 777  | 237  | 438  | 1097 | 332  | 118  | 82   | 47   | 60   | 118  | 447  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 57   | 777  | 237  | 438  | 1097 | 332  | 118  | 82   | 47   | 60   | 118  | 447  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Lanes:      | 1.00 | 1.53 | 0.47 | 1.00 | 1.54 | 0.46 | 1.00 | 1.27 | 0.73 | 1.00 | 1.00 | 1.00 |
| Final Sat.: | 1800 | 2620 | 800  | 1800 | 2626 | 794  | 1800 | 2176 | 1244 | 1800 | 1710 | 1710 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |       |      |      |      |      |      |
|--------------|------|------|------|------|------|------|-------|------|------|------|------|------|
| Vol/Sat:     | 0.03 | 0.30 | 0.30 | 0.24 | 0.42 | 0.42 | 0.00  | 0.04 | 0.04 | 0.00 | 0.07 | 0.26 |
| Crit Moves:  | **** |      |      | **** |      |      | ****  |      |      | **** |      |      |
| Green/Cycle: | 0.04 | 0.31 | 0.31 | 0.26 | 0.53 | 0.53 | 0.07  | 0.18 | 0.18 | 0.16 | 0.28 | 0.28 |
| Volume/Cap:  | 0.78 | 0.94 | 0.94 | 0.94 | 0.78 | 0.78 | 0.94  | 0.20 | 0.20 | 0.20 | 0.25 | 0.94 |
| Delay/Veh:   | 89.1 | 49.0 | 49.0 | 64.2 | 21.1 | 21.1 | 109.0 | 34.7 | 34.7 | 36.6 | 28.1 | 58.8 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 89.1 | 49.0 | 49.0 | 64.2 | 21.1 | 21.1 | 109.0 | 34.7 | 34.7 | 36.6 | 28.1 | 58.8 |
| LOS by Move: | F    | D    | D    | E    | C    | C    | F     | C    | C    | D    | C    | E    |
| HCM2kAvgQ:   | 3    | 21   | 21   | 18   | 20   | 20   | 7     | 2    | 2    | 2    | 3    | 19   |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 Etiwanda Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.685  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 29.3  
Optimal Cycle: 47 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 2 | 0           | 2 | 0 | 1          | 2 | 0 | 0          | 2 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 208  | 559  | 52   | 115  | 640  | 159  | 145  | 358  | 218  | 75   | 677  | 126  |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 256  | 689  | 64   | 142  | 788  | 196  | 179  | 441  | 269  | 92   | 834  | 155  |
| Added Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 256  | 689  | 64   | 142  | 788  | 196  | 179  | 441  | 269  | 92   | 834  | 155  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 270  | 725  | 67   | 149  | 830  | 206  | 188  | 464  | 283  | 97   | 878  | 163  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 270  | 725  | 67   | 149  | 830  | 206  | 188  | 464  | 283  | 97   | 878  | 163  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 270  | 725  | 67   | 149  | 830  | 206  | 188  | 464  | 283  | 97   | 878  | 163  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 |
| Lanes:      | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 |
| Final Sat.: | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.08 | 0.21 | 0.04 | 0.04 | 0.24 | 0.11 | 0.05 | 0.14 | 0.16 | 0.03 | 0.26 | 0.09 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.11 | 0.39 | 0.39 | 0.08 | 0.35 | 0.35 | 0.08 | 0.38 | 0.38 | 0.07 | 0.37 | 0.37 |
| Volume/Cap:  | 0.69 | 0.55 | 0.10 | 0.55 | 0.69 | 0.32 | 0.69 | 0.35 | 0.41 | 0.41 | 0.69 | 0.24 |
| Delay/Veh:   | 47.6 | 24.2 | 19.5 | 46.7 | 29.2 | 23.9 | 51.9 | 22.1 | 22.8 | 45.8 | 27.9 | 21.7 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 47.6 | 24.2 | 19.5 | 46.7 | 29.2 | 23.9 | 51.9 | 22.1 | 22.8 | 45.8 | 27.9 | 21.7 |
| LOS by Move: | D    | C    | B    | D    | C    | C    | D    | C    | C    | D    | C    | C    |
| HCM2kAvgQ:   | 5    | 9    | 1    | 3    | 12   | 5    | 4    | 5    | 6    | 2    | 13   | 3    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Etiwanda Ave/Marlay Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.412  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 16.2  
Optimal Cycle: 23 Level Of Service: B

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Permitted  |   |   | Permitted  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 1           | 0 | 2 | 1          | 0 | 1 | 1          | 0 | 1 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 40   | 562  | 117  | 79   | 508  | 41   | 11   | 31   | 32   | 81   | 64   | 96   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 49   | 692  | 144  | 97   | 626  | 51   | 14   | 38   | 39   | 100  | 79   | 118  |
| Added Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 49   | 692  | 144  | 97   | 626  | 51   | 14   | 38   | 39   | 100  | 79   | 118  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 52   | 729  | 152  | 102  | 659  | 53   | 14   | 40   | 41   | 105  | 83   | 124  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 52   | 729  | 152  | 102  | 659  | 53   | 14   | 40   | 41   | 105  | 83   | 124  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 52   | 729  | 152  | 102  | 659  | 53   | 14   | 40   | 41   | 105  | 83   | 124  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 0.95 | 1.00 | 0.91 | 0.91 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Lanes:      | 1.00 | 1.66 | 0.34 | 1.00 | 2.78 | 0.22 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Sat.: | 1800 | 2831 | 589  | 1800 | 4547 | 367  | 1800 | 1710 | 1710 | 1800 | 1710 | 1710 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.03 | 0.26 | 0.26 | 0.06 | 0.14 | 0.14 | 0.01 | 0.02 | 0.02 | 0.06 | 0.05 | 0.07 |
| Crit Moves:  | **** |      |      | **** |      |      |      |      |      |      |      | **** |
| Green/Cycle: | 0.13 | 0.63 | 0.63 | 0.14 | 0.64 | 0.64 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 |
| Volume/Cap:  | 0.23 | 0.41 | 0.41 | 0.41 | 0.23 | 0.23 | 0.04 | 0.13 | 0.14 | 0.33 | 0.27 | 0.41 |
| Delay/Veh:   | 39.8 | 9.6  | 9.6  | 40.5 | 7.8  | 7.8  | 34.2 | 34.8 | 34.8 | 36.6 | 35.8 | 37.1 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 39.8 | 9.6  | 9.6  | 40.5 | 7.8  | 7.8  | 34.2 | 34.8 | 34.8 | 36.6 | 35.8 | 37.1 |
| LOS by Move: | D    | A    | A    | D    | A    | A    | C    | C    | C    | D    | D    | D    |
| HCM2kAvgQ:   | 2    | 7    | 7    | 3    | 3    | 3    | 0    | 1    | 1    | 3    | 2    | 4    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

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Intersection #9 Etiwanda Ave/Philadelphia Ave  
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Cycle (sec): 100 Critical Vol./Cap.(X): 0.359  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 12.4  
Optimal Cycle: 22 Level Of Service: B  
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| Approach:   | North Bound |   |   |   | South Bound |   |   |   | East Bound |   |   |   | West Bound |   |   |  |
|-------------|-------------|---|---|---|-------------|---|---|---|------------|---|---|---|------------|---|---|--|
| Movement:   | L           | T | R |   | L           | T | R |   | L          | T | R |   | L          | T | R |  |
| Control:    | Protected   |   |   |   | Protected   |   |   |   | Permitted  |   |   |   | Permitted  |   |   |  |
| Rights:     | Include     |   |   |   | Include     |   |   |   | Include    |   |   |   | Include    |   |   |  |
| Min. Green: | 0           | 0 | 0 |   | 0           | 0 | 0 |   | 0          | 0 | 0 |   | 0          | 0 | 0 |  |
| Lanes:      | 1           | 0 | 2 | 0 | 1           | 0 | 2 | 1 | 1          | 0 | 1 | 0 | 1          | 0 | 1 |  |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 81   | 702  | 18   | 46   | 472  | 78   | 53   | 13   | 42   | 11   | 7    | 16   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 100  | 865  | 22   | 57   | 582  | 96   | 65   | 16   | 52   | 14   | 9    | 20   |
| Added Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 100  | 865  | 22   | 57   | 582  | 96   | 65   | 16   | 52   | 14   | 9    | 20   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 105  | 910  | 23   | 60   | 612  | 101  | 69   | 17   | 54   | 14   | 9    | 21   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 105  | 910  | 23   | 60   | 612  | 101  | 69   | 17   | 54   | 14   | 9    | 21   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 105  | 910  | 23   | 60   | 612  | 101  | 69   | 17   | 54   | 14   | 9    | 21   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.91 | 0.91 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 2.57 | 0.43 | 1.00 | 1.00 | 1.00 | 1.00 | 0.30 | 0.70 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 4217 | 697  | 1800 | 1800 | 1800 | 1800 | 548  | 1252 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.06 | 0.27 | 0.01 | 0.03 | 0.15 | 0.15 | 0.04 | 0.01 | 0.03 | 0.01 | 0.02 | 0.02 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      |      |      |      |
| Green/Cycle: | 0.24 | 0.74 | 0.74 | 0.09 | 0.59 | 0.59 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 |
| Volume/Cap:  | 0.24 | 0.36 | 0.02 | 0.36 | 0.24 | 0.24 | 0.36 | 0.09 | 0.28 | 0.07 | 0.16 | 0.16 |
| Delay/Veh:   | 31.0 | 4.6  | 3.4  | 43.9 | 9.7  | 9.7  | 42.7 | 40.5 | 42.0 | 40.4 | 41.0 | 41.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 31.0 | 4.6  | 3.4  | 43.9 | 9.7  | 9.7  | 42.7 | 40.5 | 42.0 | 40.4 | 41.0 | 41.0 |
| LOS by Move: | C    | A    | A    | D    | A    | A    | D    | D    | D    | D    | D    | D    |
| HCM2kAvgQ:   | 3    | 5    | 0    | 2    | 4    | 4    | 2    | 1    | 2    | 0    | 1    | 1    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #10 Etiwanda Ave/SR-60 WB Ramp  
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.571  
Loss Time (sec): 4 (Y+R=4.0 sec) Average Delay (sec/veh): 16.1  
Optimal Cycle: 26 Level Of Service: B  
\*\*\*\*\*

| Approach:   | North Bound |   |   |   | South Bound |   |   |   | East Bound  |   |   |   | West Bound  |   |   |  |
|-------------|-------------|---|---|---|-------------|---|---|---|-------------|---|---|---|-------------|---|---|--|
| Movement:   | L           | T | R |   | L           | T | R |   | L           | T | R |   | L           | T | R |  |
| Control:    | Permitted   |   |   |   | Permitted   |   |   |   | Split Phase |   |   |   | Split Phase |   |   |  |
| Rights:     | Include     |   |   |   | Include     |   |   |   | Include     |   |   |   | Include     |   |   |  |
| Min. Green: | 0           | 0 | 0 |   | 0           | 0 | 0 |   | 0           | 0 | 0 |   | 0           | 0 | 0 |  |
| Lanes:      | 0           | 0 | 2 | 0 | 0           | 0 | 2 | 0 | 0           | 0 | 0 | 0 | 1           | 0 | 0 |  |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 0    | 873  | 0    | 0    | 500  | 0    | 0    | 0    | 0    | 245  | 0    | 302  |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 0    | 1076 | 0    | 0    | 616  | 0    | 0    | 0    | 0    | 302  | 0    | 372  |
| Added Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 0    | 1076 | 0    | 0    | 616  | 0    | 0    | 0    | 0    | 302  | 0    | 372  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 0    | 1132 | 0    | 0    | 648  | 0    | 0    | 0    | 0    | 318  | 0    | 392  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 0    | 1132 | 0    | 0    | 648  | 0    | 0    | 0    | 0    | 318  | 0    | 392  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 0    | 1132 | 0    | 0    | 648  | 0    | 0    | 0    | 0    | 318  | 0    | 392  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 0.00 | 2.00 | 0.00 | 0.00 | 2.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 |
| Final Sat.: | 0    | 3420 | 0    | 0    | 3420 | 0    | 0    | 0    | 0    | 1800 | 0    | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.00 | 0.33 | 0.00 | 0.00 | 0.19 | 0.00 | 0.00 | 0.00 | 0.00 | 0.18 | 0.00 | 0.22 |
| Crit Moves:  | **** |      |      | **** |      |      |      |      |      |      |      |      |
| Green/Cycle: | 0.00 | 0.58 | 0.00 | 0.00 | 0.58 | 0.00 | 0.00 | 0.00 | 0.00 | 0.38 | 0.00 | 0.38 |
| Volume/Cap:  | 0.00 | 0.57 | 0.00 | 0.00 | 0.33 | 0.00 | 0.00 | 0.00 | 0.00 | 0.46 | 0.00 | 0.57 |
| Delay/Veh:   | 0.0  | 13.6 | 0.0  | 0.0  | 11.0 | 0.0  | 0.0  | 0.0  | 0.0  | 23.8 | 0.0  | 25.7 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 0.0  | 13.6 | 0.0  | 0.0  | 11.0 | 0.0  | 0.0  | 0.0  | 0.0  | 23.8 | 0.0  | 25.7 |
| LOS by Move: | A    | B    | A    | A    | B    | A    | A    | A    | A    | C    | A    | C    |
| HCM2kAvgQ:   | 0    | 12   | 0    | 0    | 5    | 0    | 0    | 0    | 0    | 7    | 0    | 10   |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
AM PEAK HOUR

## Level Of Service Computation Report

## 2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #11 Etiwanda Ave/SR-60 EB Ramp

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: C [ 15.4]

| Approach: | North Bound  |   |   |   | South Bound  |   |   |   | East Bound |   |   |   | West Bound |   |   |   |
|-----------|--------------|---|---|---|--------------|---|---|---|------------|---|---|---|------------|---|---|---|
| Movement: | L            | T | R |   | L            | T | R |   | L          | T | R |   | L          | T | R |   |
| Control:  | Uncontrolled |   |   |   | Uncontrolled |   |   |   | Stop Sign  |   |   |   | Stop Sign  |   |   |   |
| Rights:   | Include      |   |   |   | Include      |   |   |   | Include    |   |   |   | Include    |   |   |   |
| Lanes:    | 0            | 0 | 1 | 1 | 0            | 1 | 0 | 2 | 0          | 0 | 0 | 0 | 0          | 0 | 0 | 0 |

## Volume Module:

|              |      |      |      |  |      |      |      |  |      |      |      |  |      |      |      |  |
|--------------|------|------|------|--|------|------|------|--|------|------|------|--|------|------|------|--|
| Base Vol:    | 0    | 896  | 225  |  | 97   | 620  | 0    |  | 0    | 0    | 0    |  | 0    | 0    | 0    |  |
| Growth Adj:  | 1.23 | 1.23 | 1.23 |  | 1.23 | 1.23 | 1.23 |  | 1.23 | 1.23 | 1.23 |  | 1.23 | 1.23 | 1.23 |  |
| Initial Bse: | 0    | 1104 | 277  |  | 120  | 764  | 0    |  | 0    | 0    | 0    |  | 0    | 0    | 0    |  |
| Added Vol:   | 0    | 0    | 0    |  | 0    | 0    | 0    |  | 0    | 0    | 0    |  | 0    | 0    | 0    |  |
| PasserByVol: | 0    | 0    | 0    |  | 0    | 0    | 0    |  | 0    | 0    | 0    |  | 0    | 0    | 0    |  |
| Initial Fut: | 0    | 1104 | 277  |  | 120  | 764  | 0    |  | 0    | 0    | 0    |  | 0    | 0    | 0    |  |
| User Adj:    | 1.00 | 1.00 | 1.00 |  | 1.00 | 1.00 | 1.00 |  | 1.00 | 1.00 | 1.00 |  | 1.00 | 1.00 | 1.00 |  |
| PHF Adj:     | 0.95 | 0.95 | 0.95 |  | 0.95 | 0.95 | 0.95 |  | 0.95 | 0.95 | 0.95 |  | 0.95 | 0.95 | 0.95 |  |
| PHF Volume:  | 0    | 1162 | 292  |  | 126  | 804  | 0    |  | 0    | 0    | 0    |  | 0    | 0    | 0    |  |
| Reduct Vol:  | 0    | 0    | 0    |  | 0    | 0    | 0    |  | 0    | 0    | 0    |  | 0    | 0    | 0    |  |
| FinalVolume: | 0    | 1162 | 292  |  | 126  | 804  | 0    |  | 0    | 0    | 0    |  | 0    | 0    | 0    |  |

## Critical Gap Module:

|                   |       |       |       |     |       |       |       |       |       |       |       |       |       |       |       |       |
|-------------------|-------|-------|-------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Critical Gp:xxxxx | xxxxx | xxxxx | xxxxx | 4.1 | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx |
| FollowUpTim:xxxxx | xxxxx | xxxxx | xxxxx | 2.2 | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx |

## Capacity Module:

|              |       |       |       |      |       |       |       |       |       |       |       |       |       |       |       |       |
|--------------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Cnflct Vol:  | xxxxx | xxxxx | xxxxx | 1454 | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx |
| Potent Cap.: | xxxxx | xxxxx | xxxxx | 472  | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx |
| Move Cap.:   | xxxxx | xxxxx | xxxxx | 472  | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx |
| Volume/Cap:  | xxxxx | xxxxx | xxxxx | 0.27 | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx | xxxxx |

## Level Of Service Module:

|                   |        |       |       |        |       |       |       |        |       |       |       |        |       |       |       |        |
|-------------------|--------|-------|-------|--------|-------|-------|-------|--------|-------|-------|-------|--------|-------|-------|-------|--------|
| 2Way95thQ:        | xxxxx  | xxxxx | xxxxx | 1.1    | xxxxx | xxxxx | xxxxx | xxxxx  | xxxxx | xxxxx | xxxxx | xxxxx  | xxxxx | xxxxx | xxxxx | xxxxx  |
| Control Del:xxxxx | xxxxx  | xxxxx | xxxxx | 15.4   | xxxxx | xxxxx | xxxxx | xxxxx  | xxxxx | xxxxx | xxxxx | xxxxx  | xxxxx | xxxxx | xxxxx | xxxxx  |
| LOS by Move:      | *      | *     | *     | C      | *     | *     | *     | *      | *     | *     | *     | *      | *     | *     | *     | *      |
| Movement:         | LT     | -     | LTR   | -      | RT    | LT    | -     | LTR    | -     | RT    | LT    | -      | LTR   | -     | RT    | LT     |
| Shared Cap.:      | xxxxx  | xxxxx | xxxxx | xxxxx  | xxxxx | xxxxx | xxxxx | xxxxx  | xxxxx | xxxxx | xxxxx | xxxxx  | xxxxx | xxxxx | xxxxx | xxxxx  |
| SharedQueue:xxxxx | xxxxx  | xxxxx | xxxxx | xxxxx  | xxxxx | xxxxx | xxxxx | xxxxx  | xxxxx | xxxxx | xxxxx | xxxxx  | xxxxx | xxxxx | xxxxx | xxxxx  |
| Shrd ConDel:xxxxx | xxxxx  | xxxxx | xxxxx | xxxxx  | xxxxx | xxxxx | xxxxx | xxxxx  | xxxxx | xxxxx | xxxxx | xxxxx  | xxxxx | xxxxx | xxxxx | xxxxx  |
| Shared LOS:       | *      | *     | *     | *      | *     | *     | *     | *      | *     | *     | *     | *      | *     | *     | *     | *      |
| ApproachDel:      | xxxxxx |       |       | xxxxxx |       |       |       | xxxxxx |       |       |       | xxxxxx |       |       |       | xxxxxx |
| ApproachLOS:      | *      |       |       | *      |       |       |       | *      |       |       |       | *      |       |       |       | *      |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
AM PEAK HOUR

## Level Of Service Computation Report

## 2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 Commerce Way/Ontario Mills Pkwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.575

Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 25.0

Optimal Cycle: 37 Level Of Service: C

| Approach:   | North Bound |   |   |   | South Bound |   |   |   | East Bound |   |   |   | West Bound |   |   |   |
|-------------|-------------|---|---|---|-------------|---|---|---|------------|---|---|---|------------|---|---|---|
| Movement:   | L           | T | R |   | L           | T | R |   | L          | T | R |   | L          | T | R |   |
| Control:    | Protected   |   |   |   | Protected   |   |   |   | Protected  |   |   |   | Protected  |   |   |   |
| Rights:     | Include     |   |   |   | Include     |   |   |   | Include    |   |   |   | Include    |   |   |   |
| Min. Green: | 0           | 0 | 0 |   | 0           | 0 | 0 |   | 0          | 0 | 0 |   | 0          | 0 | 0 |   |
| Lanes:      | 2           | 0 | 1 | 0 | 1           | 1 | 0 | 1 | 0          | 2 | 0 | 1 | 2          | 0 | 2 | 0 |

## Volume Module:

|              |      |      |      |  |      |      |      |  |      |      |      |  |      |      |      |  |
|--------------|------|------|------|--|------|------|------|--|------|------|------|--|------|------|------|--|
| Base Vol:    | 32   | 102  | 490  |  | 15   | 65   | 10   |  | 5    | 114  | 5    |  | 329  | 251  | 10   |  |
| Growth Adj:  | 1.23 | 1.23 | 1.23 |  | 1.23 | 1.23 | 1.23 |  | 1.23 | 1.23 | 1.23 |  | 1.23 | 1.23 | 1.23 |  |
| Initial Bse: | 39   | 126  | 604  |  | 18   | 80   | 12   |  | 6    | 140  | 6    |  | 405  | 309  | 12   |  |
| Added Vol:   | 0    | 0    | 0    |  | 0    | 0    | 0    |  | 0    | 0    | 0    |  | 0    | 0    | 0    |  |
| PasserByVol: | 0    | 0    | 0    |  | 0    | 0    | 0    |  | 0    | 0    | 0    |  | 0    | 0    | 0    |  |
| Initial Fut: | 39   | 126  | 604  |  | 18   | 80   | 12   |  | 6    | 140  | 6    |  | 405  | 309  | 12   |  |
| User Adj:    | 1.00 | 1.00 | 1.00 |  | 1.00 | 1.00 | 1.00 |  | 1.00 | 1.00 | 1.00 |  | 1.00 | 1.00 | 1.00 |  |
| PHF Adj:     | 0.95 | 0.95 | 0.95 |  | 0.95 | 0.95 | 0.95 |  | 0.95 | 0.95 | 0.95 |  | 0.95 | 0.95 | 0.95 |  |
| PHF Volume:  | 41   | 132  | 635  |  | 19   | 84   | 13   |  | 6    | 148  | 6    |  | 427  | 326  | 13   |  |
| Reduct Vol:  | 0    | 0    | 0    |  | 0    | 0    | 0    |  | 0    | 0    | 0    |  | 0    | 0    | 0    |  |
| Reduced Vol: | 41   | 132  | 635  |  | 19   | 84   | 13   |  | 6    | 148  | 6    |  | 427  | 326  | 13   |  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 |  | 1.00 | 1.00 | 1.00 |  | 1.00 | 1.00 | 1.00 |  | 1.00 | 1.00 | 1.00 |  |
| MLF Adj:     | 1.00 | 1.00 | 1.00 |  | 1.00 | 1.00 | 1.00 |  | 1.00 | 1.00 | 1.00 |  | 1.00 | 1.00 | 1.00 |  |
| FinalVolume: | 41   | 132  | 635  |  | 19   | 84   | 13   |  | 6    | 148  | 6    |  | 427  | 326  | 13   |  |

## Saturation Flow Module:

|             |      |      |      |  |      |      |      |  |      |      |      |  |      |      |      |  |
|-------------|------|------|------|--|------|------|------|--|------|------|------|--|------|------|------|--|
| Sat/Lane:   | 1800 | 1800 | 1800 |  | 1800 | 1800 | 1800 |  | 1800 | 1800 | 1800 |  | 1800 | 1800 | 1800 |  |
| Adjustment: | 0.97 | 1.00 | 1.00 |  | 1.00 | 0.95 | 0.95 |  | 1.00 | 0.95 | 1.00 |  | 0.97 | 0.95 | 1.00 |  |
| Lanes:      | 2.00 | 1.00 | 1.00 |  | 1.00 | 1.73 | 0.27 |  | 1.00 | 2.00 | 1.00 |  | 2.00 | 2.00 | 1.00 |  |
| Final Sat.: | 3492 | 1800 | 1800 |  | 1800 | 2964 | 456  |  | 1800 | 3420 | 1800 |  | 3492 | 3420 | 1800 |  |

## Capacity Analysis Module:

|              |      |      |      |  |      |      |      |  |      |      |      |  |      |      |      |  |
|--------------|------|------|------|--|------|------|------|--|------|------|------|--|------|------|------|--|
| Vol/Sat:     | 0.01 | 0.07 | 0.35 |  | 0.01 | 0.03 | 0.03 |  | 0.00 | 0.04 | 0.00 |  | 0.12 | 0.10 | 0.01 |  |
| Crit Moves:  |      |      | **** |  | **** |      |      |  |      | **** |      |  | **** |      |      |  |
| Green/Cycle: | 0.19 | 0.61 | 0.61 |  | 0.02 | 0.45 | 0.45 |  | 0.01 | 0.08 | 0.08 |  | 0.21 | 0.28 | 0.28 |  |
| Volume/Cap:  | 0.06 | 0.12 | 0.58 |  | 0.58 | 0.06 | 0.06 |  | 0.34 | 0.58 | 0.05 |  | 0.58 | 0.34 | 0.03 |  |
| Delay/Veh:   | 33.5 | 8.1  | 12.3 |  | 70.7 | 15.8 | 15.8 |  | 59.7 | 47.9 | 43.1 |  | 36.4 | 29.1 | 26.3 |  |
| User DelAdj: | 1.00 | 1.00 | 1.00 |  | 1.00 | 1.00 | 1.00 |  | 1.00 | 1.00 | 1.00 |  | 1.00 | 1.00 | 1.00 |  |
| AdjDel/Veh:  | 33.5 | 8.1  | 12.3 |  | 70.7 | 15.8 | 15.8 |  | 59.7 | 47.9 | 43.1 |  | 36.4 | 29.1 | 26.3 |  |
| LOS by Move: | C    | A    | B    |  | E    | B    | B    |  | E    | D    | D    |  | D    | C    | C    |  |
| HCM2kAvgQ:   | 1    | 2    | 12   |  | 1    | 1    | 1    |  | 1    | 3    | 0    |  | 7    | 4    | 0    |  |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #13 Mulberry Ave/Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.324  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 21.3  
Optimal Cycle: 21 Level Of Service: C

| Approach:   | North Bound | South Bound | East Bound | West Bound |
|-------------|-------------|-------------|------------|------------|
| Movement:   | L - T - R   | L - T - R   | L - T - R  | L - T - R  |
| Control:    | Split Phase | Split Phase | Protected  | Protected  |
| Rights:     | Include     | Include     | Include    | Include    |
| Min. Green: | 0 0 0       | 0 0 0       | 0 0 0      | 0 0 0      |
| Lanes:      | 1 0 0 0 1   | 0 0 0 0 0   | 0 0 2 1 0  | 1 0 2 0 0  |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 158  | 0    | 131  | 0    | 0    | 0    | 203  | 81   | 161  | 367  | 0    |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 195  | 0    | 161  | 0    | 0    | 0    | 250  | 100  | 198  | 452  | 0    |
| Added Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 195  | 0    | 161  | 0    | 0    | 0    | 250  | 100  | 198  | 452  | 0    |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 205  | 0    | 170  | 0    | 0    | 0    | 263  | 105  | 209  | 476  | 0    |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 205  | 0    | 170  | 0    | 0    | 0    | 263  | 105  | 209  | 476  | 0    |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 205  | 0    | 170  | 0    | 0    | 0    | 263  | 105  | 209  | 476  | 0    |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 0.91 | 1.00 | 0.95 | 1.00 |
| Lanes:      | 1.00 | 0.00 | 1.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.14 | 0.86 | 1.00 | 2.00 |
| Final Sat.: | 1800 | 0    | 1800 | 0    | 0    | 0    | 0    | 3512 | 1402 | 1800 | 3420 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.11 | 0.00 | 0.09 | 0.00 | 0.00 | 0.00 | 0.07 | 0.07 | 0.12 | 0.14 | 0.00 |
| Crit Moves:  | **** |      |      |      |      |      | **** |      | **** |      |      |
| Green/Cycle: | 0.35 | 0.00 | 0.35 | 0.00 | 0.00 | 0.00 | 0.23 | 0.23 | 0.36 | 0.59 | 0.00 |
| Volume/Cap:  | 0.32 | 0.00 | 0.27 | 0.00 | 0.00 | 0.00 | 0.32 | 0.32 | 0.32 | 0.24 | 0.00 |
| Delay/Veh:   | 24.1 | 0.0  | 23.5 | 0.0  | 0.0  | 0.0  | 32.1 | 32.1 | 23.6 | 9.9  | 0.0  |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 24.1 | 0.0  | 23.5 | 0.0  | 0.0  | 0.0  | 32.1 | 32.1 | 23.6 | 9.9  | 0.0  |
| LOS by Move: | C    | A    | C    | A    | A    | A    | C    | C    | C    | A    | A    |
| HCM2kAvgQ:   | 5    | 0    | 4    | 0    | 0    | 0    | 4    | 4    | 5    | 4    | 0    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #14 Mulberry Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.289  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 19.0  
Optimal Cycle: 20 Level Of Service: B

| Approach:   | North Bound | South Bound | East Bound | West Bound |
|-------------|-------------|-------------|------------|------------|
| Movement:   | L - T - R   | L - T - R   | L - T - R  | L - T - R  |
| Control:    | Protected   | Protected   | Permitted  | Permitted  |
| Rights:     | Include     | Include     | Include    | Include    |
| Min. Green: | 0 0 0       | 0 0 0       | 0 0 0      | 0 0 0      |
| Lanes:      | 1 0 1 0 1   | 1 0 0 1 0   | 0 1 0 0 1  | 0 0 1! 0 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 80   | 240  | 51   | 25   | 171  | 17   | 2    | 10   | 24   | 52   | 14   | 43   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 99   | 296  | 63   | 31   | 211  | 21   | 2    | 12   | 30   | 64   | 17   | 53   |
| Added Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 99   | 296  | 63   | 31   | 211  | 21   | 2    | 12   | 30   | 64   | 17   | 53   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 104  | 311  | 66   | 32   | 222  | 22   | 3    | 13   | 31   | 67   | 18   | 56   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 104  | 311  | 66   | 32   | 222  | 22   | 3    | 13   | 31   | 67   | 18   | 56   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 104  | 311  | 66   | 32   | 222  | 22   | 3    | 13   | 31   | 67   | 18   | 56   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 0.09 | 0.17 | 0.83 | 1.00 | 0.48 | 0.13 | 0.39 |
| Final Sat.: | 1800 | 1800 | 1800 | 1800 | 1637 | 163  | 300  | 1500 | 1800 | 859  | 231  | 710  |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.06 | 0.17 | 0.04 | 0.02 | 0.14 | 0.14 | 0.01 | 0.01 | 0.02 | 0.08 | 0.08 | 0.08 |
| Crit Moves:  | **** |      |      |      | **** |      |      |      |      | **** |      |      |
| Green/Cycle: | 0.20 | 0.61 | 0.61 | 0.06 | 0.47 | 0.47 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 | 0.27 |
| Volume/Cap:  | 0.29 | 0.29 | 0.06 | 0.29 | 0.29 | 0.29 | 0.03 | 0.03 | 0.06 | 0.29 | 0.29 | 0.29 |
| Delay/Veh:   | 34.4 | 9.6  | 8.1  | 46.1 | 16.5 | 16.5 | 26.8 | 26.8 | 27.0 | 29.1 | 29.1 | 29.1 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 34.4 | 9.6  | 8.1  | 46.1 | 16.5 | 16.5 | 26.8 | 26.8 | 27.0 | 29.1 | 29.1 | 29.1 |
| LOS by Move: | C    | A    | A    | D    | B    | B    | C    | C    | C    | C    | C    | C    |
| HCM2kAvgQ:   | 3    | 5    | 1    | 1    | 5    | 5    | 0    | 0    | 1    | 4    | 4    | 4    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #15 Mulberry Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.622  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 29.4  
Optimal Cycle: 40 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 2 | 0           | 1 | 0 | 2          | 0 | 1 | 1          | 0 | 2 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 417  | 378  | 222  | 8    | 217  | 61   | 84   | 227  | 72   | 205  | 723  | 35   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 514  | 466  | 274  | 10   | 267  | 75   | 103  | 280  | 89   | 253  | 891  | 43   |
| Added Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 514  | 466  | 274  | 10   | 267  | 75   | 103  | 280  | 89   | 253  | 891  | 43   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 541  | 490  | 288  | 10   | 281  | 79   | 109  | 294  | 93   | 266  | 938  | 45   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 541  | 490  | 288  | 10   | 281  | 79   | 109  | 294  | 93   | 266  | 938  | 45   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 541  | 490  | 288  | 10   | 281  | 79   | 109  | 294  | 93   | 266  | 938  | 45   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 |
| Lanes:      | 2.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 3492 | 3420 | 1800 | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.15 | 0.14 | 0.16 | 0.01 | 0.08 | 0.04 | 0.06 | 0.09 | 0.05 | 0.15 | 0.27 | 0.03 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.25 | 0.37 | 0.37 | 0.01 | 0.13 | 0.13 | 0.10 | 0.20 | 0.20 | 0.34 | 0.44 | 0.44 |
| Volume/Cap:  | 0.62 | 0.39 | 0.43 | 0.43 | 0.62 | 0.33 | 0.62 | 0.43 | 0.26 | 0.43 | 0.62 | 0.06 |
| Delay/Veh:   | 34.8 | 23.5 | 24.2 | 61.1 | 43.7 | 40.2 | 50.1 | 35.6 | 34.3 | 26.0 | 22.3 | 16.1 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 34.8 | 23.5 | 24.2 | 61.1 | 43.7 | 40.2 | 50.1 | 35.6 | 34.3 | 26.0 | 22.3 | 16.1 |
| LOS by Move: | C    | C    | C    | E    | D    | D    | D    | D    | C    | C    | C    | B    |
| HCM2kAvgQ:   | 8    | 6    | 7    | 1    | 5    | 2    | 4    | 5    | 3    | 6    | 12   | 1    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #16 Mulberry Ave/Marlay Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.271  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 18.3  
Optimal Cycle: 23 Level Of Service: B

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 1 | 0 | 1          | 0 | 1 | 1          | 0 | 1 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 62   | 468  | 34   | 7    | 277  | 53   | 41   | 14   | 42   | 41   | 52   | 52   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 76   | 577  | 42   | 9    | 341  | 65   | 51   | 17   | 52   | 51   | 64   | 64   |
| Added Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 76   | 577  | 42   | 9    | 341  | 65   | 51   | 17   | 52   | 51   | 64   | 64   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 80   | 607  | 44   | 9    | 359  | 69   | 53   | 18   | 54   | 53   | 67   | 67   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 80   | 607  | 44   | 9    | 359  | 69   | 53   | 18   | 54   | 53   | 67   | 67   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 80   | 607  | 44   | 9    | 359  | 69   | 53   | 18   | 54   | 53   | 67   | 67   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.04 | 0.18 | 0.02 | 0.01 | 0.11 | 0.04 | 0.03 | 0.01 | 0.03 | 0.03 | 0.04 | 0.04 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.20 | 0.65 | 0.65 | 0.02 | 0.47 | 0.47 | 0.11 | 0.13 | 0.13 | 0.12 | 0.14 | 0.14 |
| Volume/Cap:  | 0.22 | 0.27 | 0.04 | 0.27 | 0.22 | 0.08 | 0.27 | 0.08 | 0.24 | 0.24 | 0.27 | 0.27 |
| Delay/Veh:   | 33.7 | 7.3  | 6.1  | 52.7 | 15.6 | 14.5 | 41.7 | 38.8 | 40.0 | 40.3 | 39.2 | 39.2 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 33.7 | 7.3  | 6.1  | 52.7 | 15.6 | 14.5 | 41.7 | 38.8 | 40.0 | 40.3 | 39.2 | 39.2 |
| LOS by Move: | C    | A    | A    | D    | B    | B    | D    | D    | D    | D    | D    | D    |
| HCM2kAvgQ:   | 2    | 4    | 0    | 1    | 3    | 1    | 2    | 1    | 2    | 2    | 2    | 2    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #17 Mulberry Ave/Philadelphia Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.518  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 9.6  
Optimal Cycle: 28 Level Of Service: A

| Approach:   | North Bound |   |   |   | South Bound |   |   |   | East Bound |   |   |   | West Bound |   |   |  |
|-------------|-------------|---|---|---|-------------|---|---|---|------------|---|---|---|------------|---|---|--|
| Movement:   | L           | T | R |   | L           | T | R |   | L          | T | R |   | L          | T | R |  |
| Control:    | Protected   |   |   |   | Protected   |   |   |   | Permitted  |   |   |   | Permitted  |   |   |  |
| Rights:     | Include     |   |   |   | Include     |   |   |   | Include    |   |   |   | Include    |   |   |  |
| Min. Green: | 0           | 0 | 0 |   | 0           | 0 | 0 |   | 0          | 0 | 0 |   | 0          | 0 | 0 |  |
| Lanes:      | 1           | 0 | 2 | 0 | 1           | 0 | 2 | 0 | 1          | 0 | 1 | 0 | 1          | 0 | 1 |  |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 96   | 857  | 19   | 10   | 977  | 33   | 28   | 1    | 52   | 66   | 5    | 19   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 118  | 1056 | 23   | 12   | 1204 | 41   | 34   | 1    | 64   | 81   | 6    | 23   |
| Added Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 118  | 1056 | 23   | 12   | 1204 | 41   | 34   | 1    | 64   | 81   | 6    | 23   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 124  | 1111 | 25   | 13   | 1267 | 43   | 36   | 1    | 67   | 86   | 6    | 25   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 124  | 1111 | 25   | 13   | 1267 | 43   | 36   | 1    | 67   | 86   | 6    | 25   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 124  | 1111 | 25   | 13   | 1267 | 43   | 36   | 1    | 67   | 86   | 6    | 25   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.21 | 0.79 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 | 1800 | 1800 | 1800 | 1800 | 375  | 1425 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.07 | 0.32 | 0.01 | 0.01 | 0.37 | 0.02 | 0.02 | 0.00 | 0.04 | 0.05 | 0.02 | 0.02 |
| Crit Moves:  | **** |      |      | **** |      |      |      |      |      | **** |      |      |
| Green/Cycle: | 0.13 | 0.83 | 0.83 | 0.02 | 0.71 | 0.71 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 |
| Volume/Cap:  | 0.52 | 0.39 | 0.02 | 0.39 | 0.52 | 0.03 | 0.22 | 0.01 | 0.41 | 0.52 | 0.19 | 0.19 |
| Delay/Veh:   | 42.3 | 2.2  | 1.5  | 56.0 | 6.7  | 4.2  | 42.8 | 41.3 | 44.5 | 46.2 | 42.5 | 42.5 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 42.3 | 2.2  | 1.5  | 56.0 | 6.7  | 4.2  | 42.8 | 41.3 | 44.5 | 46.2 | 42.5 | 42.5 |
| LOS by Move: | D    | A    | A    | E    | A    | A    | D    | D    | D    | D    | D    | D    |
| HCM2kAvgQ:   | 4    | 5    | 0    | 1    | 9    | 0    | 1    | 0    | 2    | 3    | 1    | 1    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #18 Mulberry Ave/SR-60 WB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.988  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 33.9  
Optimal Cycle: 180 Level Of Service: C

| Approach:   | North Bound |   |   |   | South Bound |   |   |   | East Bound  |   |   |   | West Bound  |   |   |  |
|-------------|-------------|---|---|---|-------------|---|---|---|-------------|---|---|---|-------------|---|---|--|
| Movement:   | L           | T | R |   | L           | T | R |   | L           | T | R |   | L           | T | R |  |
| Control:    | Protected   |   |   |   | Protected   |   |   |   | Split Phase |   |   |   | Split Phase |   |   |  |
| Rights:     | Include     |   |   |   | Include     |   |   |   | Include     |   |   |   | Include     |   |   |  |
| Min. Green: | 0           | 0 | 0 |   | 0           | 0 | 0 |   | 0           | 0 | 0 |   | 0           | 0 | 0 |  |
| Lanes:      | 1           | 0 | 2 | 0 | 0           | 0 | 1 | 1 | 0           | 0 | 0 | 0 | 0           | 1 | 0 |  |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 235  | 708  | 0    | 0    | 491  | 770  | 0    | 0    | 123  | 1    | 244  |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 290  | 872  | 0    | 0    | 605  | 949  | 0    | 0    | 152  | 1    | 301  |
| Added Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 290  | 872  | 0    | 0    | 605  | 949  | 0    | 0    | 152  | 1    | 301  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 305  | 918  | 0    | 0    | 637  | 999  | 0    | 0    | 160  | 1    | 316  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 305  | 918  | 0    | 0    | 637  | 999  | 0    | 0    | 160  | 1    | 316  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 305  | 918  | 0    | 0    | 637  | 999  | 0    | 0    | 160  | 1    | 316  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 0.00 | 0.00 | 1.00 | 1.00 | 0.00 | 0.00 | 0.00 | 0.99 | 0.01 |
| Final Sat.: | 1800 | 3420 | 0    | 0    | 1710 | 1710 | 0    | 0    | 0    | 1785 | 15   |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.17 | 0.27 | 0.00 | 0.00 | 0.37 | 0.58 | 0.00 | 0.00 | 0.00 | 0.09 | 0.09 |
| Crit Moves:  | **** |      |      |      |      | **** |      |      |      | **** |      |
| Green/Cycle: | 0.17 | 0.76 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.00 | 0.00 | 0.18 | 0.18 |
| Volume/Cap:  | 0.99 | 0.35 | 0.00 | 0.00 | 0.63 | 0.99 | 0.00 | 0.00 | 0.00 | 0.50 | 0.50 |
| Delay/Veh:   | 89.3 | 3.9  | 0.0  | 0.0  | 13.8 | 39.4 | 0.0  | 0.0  | 0.0  | 38.4 | 88.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 89.3 | 3.9  | 0.0  | 0.0  | 13.8 | 39.4 | 0.0  | 0.0  | 0.0  | 38.4 | 88.0 |
| LOS by Move: | F    | A    | A    | A    | B    | D    | A    | A    | A    | D    | F    |
| HCM2kAvgQ:   | 14   | 5    | 0    | 0    | 14   | 39   | 0    | 0    | 0    | 5    | 15   |

Note: Queue reported is the number of cars per lane.



FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #19 Mulberry Ave/SR-60 EB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.754  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 26.8  
Optimal Cycle: 49 Level Of Service: C

| Approach:      | North Bound |      |      | South Bound |      |      | East Bound  |      |      | West Bound  |      |      |
|----------------|-------------|------|------|-------------|------|------|-------------|------|------|-------------|------|------|
| Movement:      | L           | T    | R    | L           | T    | R    | L           | T    | R    | L           | T    | R    |
| Control:       | Protected   |      |      | Protected   |      |      | Split Phase |      |      | Split Phase |      |      |
| Rights:        | Include     |      |      | Include     |      |      | Include     |      |      | Include     |      |      |
| Min. Green:    | 0           | 0    | 0    | 0           | 0    | 0    | 0           | 0    | 0    | 0           | 0    | 0    |
| Lanes:         | 0           | 0    | 1    | 1           | 0    | 0    | 1           | 0    | 1    | 0           | 0    | 0    |
| Volume Module: |             |      |      |             |      |      |             |      |      |             |      |      |
| Base Vol:      | 0           | 548  | 93   | 164         | 425  | 0    | 378         | 3    | 290  | 0           | 0    | 0    |
| Growth Adj:    | 1.23        | 1.23 | 1.23 | 1.23        | 1.23 | 1.23 | 1.23        | 1.23 | 1.23 | 1.23        | 1.23 | 1.23 |
| Initial Bse:   | 0           | 675  | 115  | 202         | 524  | 0    | 466         | 4    | 357  | 0           | 0    | 0    |
| Added Vol:     | 0           | 0    | 0    | 0           | 0    | 0    | 0           | 0    | 0    | 0           | 0    | 0    |
| PasserByVol:   | 0           | 0    | 0    | 0           | 0    | 0    | 0           | 0    | 0    | 0           | 0    | 0    |
| Initial Fut:   | 0           | 675  | 115  | 202         | 524  | 0    | 466         | 4    | 357  | 0           | 0    | 0    |
| User Adj:      | 1.00        | 1.00 | 1.00 | 1.00        | 1.00 | 1.00 | 1.00        | 1.00 | 1.00 | 1.00        | 1.00 | 1.00 |
| PHF Adj:       | 0.95        | 0.95 | 0.95 | 0.95        | 0.95 | 0.95 | 0.95        | 0.95 | 0.95 | 0.95        | 0.95 | 0.95 |
| PHF Volume:    | 0           | 711  | 121  | 213         | 551  | 0    | 490         | 4    | 376  | 0           | 0    | 0    |
| Reduct Vol:    | 0           | 0    | 0    | 0           | 0    | 0    | 0           | 0    | 0    | 0           | 0    | 0    |
| Reduced Vol:   | 0           | 711  | 121  | 213         | 551  | 0    | 490         | 4    | 376  | 0           | 0    | 0    |
| PCE Adj:       | 1.00        | 1.00 | 1.00 | 1.00        | 1.00 | 1.00 | 1.00        | 1.00 | 1.00 | 1.00        | 1.00 | 1.00 |
| MLF Adj:       | 1.00        | 1.00 | 1.00 | 1.00        | 1.00 | 1.00 | 1.00        | 1.00 | 1.00 | 1.00        | 1.00 | 1.00 |
| FinalVolume:   | 0           | 711  | 121  | 213         | 551  | 0    | 490         | 4    | 376  | 0           | 0    | 0    |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 0.00 | 1.71 | 0.29 | 1.00 | 2.00 | 0.00 | 1.39 | 0.01 | 0.60 | 0.00 | 0.00 | 0.00 |
| Final Sat.: | 0    | 2924 | 496  | 1800 | 3420 | 0    | 2506 | 11   | 1083 | 0    | 0    | 0    |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.00 | 0.24 | 0.24 | 0.12 | 0.16 | 0.00 | 0.20 | 0.35 | 0.35 | 0.00 | 0.00 | 0.00 |
| Crit Moves:  | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Green/Cycle: | 0.00 | 0.32 | 0.32 | 0.16 | 0.48 | 0.00 | 0.46 | 0.46 | 0.46 | 0.00 | 0.00 | 0.00 |
| Volume/Cap:  | 0.00 | 0.75 | 0.75 | 0.75 | 0.34 | 0.00 | 0.42 | 0.75 | 0.75 | 0.00 | 0.00 | 0.00 |
| Delay/Veh:   | 0.0  | 33.3 | 33.3 | 51.2 | 16.3 | 0.0  | 18.2 | 25.1 | 25.1 | 0.0  | 0.0  | 0.0  |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 0.0  | 33.3 | 33.3 | 51.2 | 16.3 | 0.0  | 18.2 | 25.1 | 25.1 | 0.0  | 0.0  | 0.0  |
| LOS by Move: | A    | C    | C    | D    | B    | A    | B    | C    | C    | A    | A    | A    |
| HCM2kAvgQ:   | 0    | 14   | 14   | 8    | 6    | 0    | 7    | 17   | 17   | 0    | 0    | 0    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #20 Banana Ave/San Bernardino Ave

Average Delay (sec/veh): 1.0 Worst Case Level Of Service: B[ 10.2]

| Approach:      | North Bound |      |      | South Bound |      |      | East Bound   |      |      | West Bound   |      |      |
|----------------|-------------|------|------|-------------|------|------|--------------|------|------|--------------|------|------|
| Movement:      | L           | T    | R    | L           | T    | R    | L            | T    | R    | L            | T    | R    |
| Control:       | Stop Sign   |      |      | Stop Sign   |      |      | Uncontrolled |      |      | Uncontrolled |      |      |
| Rights:        | Include     |      |      | Include     |      |      | Include      |      |      | Include      |      |      |
| Lanes:         | 0           | 0    | 1    | 0           | 0    | 0    | 0            | 0    | 2    | 0            | 1    | 0    |
| Volume Module: |             |      |      |             |      |      |              |      |      |              |      |      |
| Base Vol:      | 7           | 0    | 36   | 0           | 0    | 0    | 0            | 244  | 5    | 25           | 315  | 0    |
| Growth Adj:    | 1.23        | 1.23 | 1.23 | 1.23        | 1.23 | 1.23 | 1.23         | 1.23 | 1.23 | 1.23         | 1.23 | 1.23 |
| Initial Bse:   | 9           | 0    | 44   | 0           | 0    | 0    | 0            | 301  | 6    | 31           | 388  | 0    |
| Added Vol:     | 0           | 0    | 0    | 0           | 0    | 0    | 0            | 0    | 0    | 0            | 0    | 0    |
| PasserByVol:   | 0           | 0    | 0    | 0           | 0    | 0    | 0            | 0    | 0    | 0            | 0    | 0    |
| Initial Fut:   | 9           | 0    | 44   | 0           | 0    | 0    | 0            | 301  | 6    | 31           | 388  | 0    |
| User Adj:      | 1.00        | 1.00 | 1.00 | 1.00        | 1.00 | 1.00 | 1.00         | 1.00 | 1.00 | 1.00         | 1.00 | 1.00 |
| PHF Adj:       | 0.95        | 0.95 | 0.95 | 0.95        | 0.95 | 0.95 | 0.95         | 0.95 | 0.95 | 0.95         | 0.95 | 0.95 |
| PHF Volume:    | 9           | 0    | 47   | 0           | 0    | 0    | 0            | 316  | 6    | 32           | 409  | 0    |
| Reduct Vol:    | 0           | 0    | 0    | 0           | 0    | 0    | 0            | 0    | 0    | 0            | 0    | 0    |
| FinalVolume:   | 9           | 0    | 47   | 0           | 0    | 0    | 0            | 316  | 6    | 32           | 409  | 0    |

Critical Gap Module:

|               |     |     |     |       |      |       |       |      |       |     |      |       |
|---------------|-----|-----|-----|-------|------|-------|-------|------|-------|-----|------|-------|
| Critical Gap: | 6.8 | 6.5 | 6.9 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim:  | 3.5 | 4.0 | 3.3 | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | 2.2 | xxxx | xxxxx |

Capacity Module:

|              |      |      |      |      |      |       |      |      |       |      |      |       |
|--------------|------|------|------|------|------|-------|------|------|-------|------|------|-------|
| Cnflct Vol:  | 586  | 790  | 158  | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 323  | xxxx | xxxxx |
| Potent Cap.: | 446  | 325  | 865  | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1248 | xxxx | xxxxx |
| Move Cap.:   | 438  | 316  | 865  | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | 1248 | xxxx | xxxxx |
| Volume/Cap:  | 0.02 | 0.00 | 0.05 | xxxx | xxxx | xxxx  | xxxx | xxxx | xxxx  | 0.03 | xxxx | xxxx  |

Level Of Service Module:

|              |       |      |       |        |      |       |        |      |       |        |      |       |
|--------------|-------|------|-------|--------|------|-------|--------|------|-------|--------|------|-------|
| 2Way95thQ:   | xxxx  | xxxx | xxxxx | xxxx   | xxxx | xxxxx | xxxx   | xxxx | xxxxx | 0.1    | xxxx | xxxxx |
| Control Del: | xxxxx | xxxx | xxxxx | xxxxx  | xxxx | xxxxx | xxxxx  | xxxx | xxxxx | 8.0    | xxxx | xxxxx |
| LOS by Move: | *     | *    | *     | *      | *    | *     | *      | *    | *     | A      | *    | *     |
| Movement:    | LT    | LTR  | RT    | LT     | LTR  | RT    | LT     | LTR  | RT    | LT     | LTR  | RT    |
| Shared Cap.: | xxxx  | 747  | xxxxx | xxxx   | xxxx | xxxxx | xxxx   | xxxx | xxxxx | xxxx   | xxxx | xxxxx |
| SharedQueue: | xxxxx | 0.2  | xxxxx | xxxxx  | xxxx | xxxxx | xxxxx  | xxxx | xxxxx | xxxxx  | xxxx | xxxxx |
| Shrd ConDel: | xxxxx | 10.2 | xxxxx | xxxxx  | xxxx | xxxxx | xxxxx  | xxxx | xxxxx | xxxxx  | xxxx | xxxxx |
| Shared LOS:  | *     | B    | *     | *      | *    | *     | *      | *    | *     | *      | *    | *     |
| ApproachDel: | 10.2  |      |       | xxxxxx |      |       | xxxxxx |      |       | xxxxxx |      |       |
| ApproachLOS: | B     |      |       | *      |      |       | *      |      |       | *      |      |       |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
AM PEAK HOUR

| Level Of Service Computation Report                                |             |       |       |             |       |       |              |      |       |              |      |       |
|--------------------------------------------------------------------|-------------|-------|-------|-------------|-------|-------|--------------|------|-------|--------------|------|-------|
| 2000 HCM Unsignalized Method (Future Volume Alternative)           |             |       |       |             |       |       |              |      |       |              |      |       |
| Intersection #21 Banana Ave/Valley Blvd                            |             |       |       |             |       |       |              |      |       |              |      |       |
| Average Delay (sec/veh): 1.3 Worst Case Level Of Service: D[ 26.2] |             |       |       |             |       |       |              |      |       |              |      |       |
| Approach:                                                          | North Bound |       |       | South Bound |       |       | East Bound   |      |       | West Bound   |      |       |
| Movement:                                                          | L           | T     | R     | L           | T     | R     | L            | T    | R     | L            | T    | R     |
| Control:                                                           | Stop Sign   |       |       | Stop Sign   |       |       | Uncontrolled |      |       | Uncontrolled |      |       |
| Rights:                                                            | Include     |       |       | Include     |       |       | Include      |      |       | Include      |      |       |
| Lanes:                                                             | 0           | 0     | 1     | 0           | 0     | 1     | 0            | 0    | 1     | 0            | 1    | 1     |
| Volume Module:                                                     |             |       |       |             |       |       |              |      |       |              |      |       |
| Base Vol:                                                          | 4           | 0     | 1     | 14          | 0     | 22    | 50           | 424  | 18    | 12           | 609  | 40    |
| Growth Adj:                                                        | 1.23        | 1.23  | 1.23  | 1.23        | 1.23  | 1.23  | 1.23         | 1.23 | 1.23  | 1.23         | 1.23 | 1.23  |
| Initial Bse:                                                       | 5           | 0     | 1     | 17          | 0     | 27    | 62           | 522  | 22    | 15           | 750  | 49    |
| Added Vol:                                                         | 0           | 0     | 0     | 0           | 0     | 0     | 0            | 0    | 0     | 0            | 0    | 0     |
| PasserByVol:                                                       | 0           | 0     | 0     | 0           | 0     | 0     | 0            | 0    | 0     | 0            | 0    | 0     |
| Initial Fut:                                                       | 5           | 0     | 1     | 17          | 0     | 27    | 62           | 522  | 22    | 15           | 750  | 49    |
| User Adj:                                                          | 1.00        | 1.00  | 1.00  | 1.00        | 1.00  | 1.00  | 1.00         | 1.00 | 1.00  | 1.00         | 1.00 | 1.00  |
| PHF Adj:                                                           | 0.95        | 0.95  | 0.95  | 0.95        | 0.95  | 0.95  | 0.95         | 0.95 | 0.95  | 0.95         | 0.95 | 0.95  |
| PHF Volume:                                                        | 5           | 0     | 1     | 18          | 0     | 29    | 65           | 550  | 23    | 16           | 790  | 52    |
| Reduct Vol:                                                        | 0           | 0     | 0     | 0           | 0     | 0     | 0            | 0    | 0     | 0            | 0    | 0     |
| FinalVolume:                                                       | 5           | 0     | 1     | 18          | 0     | 29    | 65           | 550  | 23    | 16           | 790  | 52    |
| Critical Gap Module:                                               |             |       |       |             |       |       |              |      |       |              |      |       |
| Critical Gp:                                                       | 7.5         | 6.5   | 6.9   | 7.5         | 6.5   | 6.9   | 4.1          | xxxx | xxxxx | 4.1          | xxxx | xxxxx |
| FollowUpTim:                                                       | 3.5         | 4.0   | 3.3   | 3.5         | 4.0   | 3.3   | 2.2          | xxxx | xxxxx | 2.2          | xxxx | xxxxx |
| Capacity Module:                                                   |             |       |       |             |       |       |              |      |       |              |      |       |
| Cnflct Vol:                                                        | 1106        | 1552  | 275   | 1251        | 1550  | 421   | 842          | xxxx | xxxxx | 573          | xxxx | xxxxx |
| Potent Cap.:                                                       | 168         | 115   | 729   | 131         | 115   | 587   | 803          | xxxx | xxxxx | 1010         | xxxx | xxxxx |
| Move Cap.:                                                         | 148         | 104   | 729   | 121         | 104   | 587   | 803          | xxxx | xxxxx | 1010         | xxxx | xxxxx |
| Volume/Cap:                                                        | 0.04        | 0.00  | 0.00  | 0.15        | 0.00  | 0.05  | 0.08         | xxxx | xxxx  | 0.02         | xxxx | xxxx  |
| Level Of Service Module:                                           |             |       |       |             |       |       |              |      |       |              |      |       |
| 2Way95thQ:                                                         | xxxx        | xxxx  | xxxxx | xxxx        | xxxx  | xxxxx | 0.3          | xxxx | xxxxx | 0.0          | xxxx | xxxxx |
| Control Del:                                                       | xxxxx       | xxxxx | xxxxx | xxxxx       | xxxxx | xxxxx | 9.9          | xxxx | xxxxx | 8.6          | xxxx | xxxxx |
| LOS by Move:                                                       | *           | *     | *     | *           | *     | *     | A            | *    | *     | A            | *    | *     |
| Movement:                                                          | LT          | LTR   | RT    | LT          | LTR   | RT    | LT           | LTR  | RT    | LT           | LTR  | RT    |
| Shared Cap.:                                                       | xxxx        | 176   | xxxxx | xxxx        | 236   | xxxxx | xxxx         | xxxx | xxxxx | xxxx         | xxxx | xxxxx |
| SharedQueue:                                                       | xxxxx       | 0.1   | xxxxx | xxxxx       | 0.7   | xxxxx | xxxxx        | xxxx | xxxxx | xxxxx        | xxxx | xxxxx |
| Shrd ConDel:                                                       | xxxxx       | 26.2  | xxxxx | xxxxx       | 24.0  | xxxxx | xxxxx        | xxxx | xxxxx | xxxxx        | xxxx | xxxxx |
| Shared LOS:                                                        | *           | D     | *     | *           | C     | *     | *            | *    | *     | *            | *    | *     |
| ApproachDel:                                                       | 26.2        |       |       | 24.0        |       |       | xxxxxx       |      |       | xxxxxx       |      |       |
| ApproachLOS:                                                       | D           |       |       | C           |       |       | *            |      |       | *            |      |       |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
AM PEAK HOUR

| Level Of Service Computation Report                            |             |      |      |             |      |      |            |      |      |            |      |      |
|----------------------------------------------------------------|-------------|------|------|-------------|------|------|------------|------|------|------------|------|------|
| 2000 HCM Operations Method (Future Volume Alternative)         |             |      |      |             |      |      |            |      |      |            |      |      |
| Intersection #22 Cherry Ave/San Bernardino Ave                 |             |      |      |             |      |      |            |      |      |            |      |      |
| Cycle (sec): 100 Critical Vol./Cap.(X): 0.438                  |             |      |      |             |      |      |            |      |      |            |      |      |
| Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 24.9 |             |      |      |             |      |      |            |      |      |            |      |      |
| Optimal Cycle: 29 Level Of Service: C                          |             |      |      |             |      |      |            |      |      |            |      |      |
| Approach:                                                      | North Bound |      |      | South Bound |      |      | East Bound |      |      | West Bound |      |      |
| Movement:                                                      | L           | T    | R    | L           | T    | R    | L          | T    | R    | L          | T    | R    |
| Control:                                                       | Protected   |      |      | Protected   |      |      | Protected  |      |      | Protected  |      |      |
| Rights:                                                        | Include     |      |      | Ignore      |      |      | Ignore     |      |      | Include    |      |      |
| Min. Green:                                                    | 0           | 0    | 0    | 0           | 0    | 0    | 0          | 0    | 0    | 0          | 0    | 0    |
| Lanes:                                                         | 1           | 0    | 2    | 1           | 0    | 1    | 1          | 0    | 2    | 0          | 1    | 0    |
| Volume Module:                                                 |             |      |      |             |      |      |            |      |      |            |      |      |
| Base Vol:                                                      | 45          | 595  | 68   | 63          | 753  | 142  | 137        | 60   | 60   | 173        | 129  | 65   |
| Growth Adj:                                                    | 1.23        | 1.23 | 1.23 | 1.23        | 1.23 | 1.23 | 1.23       | 1.23 | 1.23 | 1.23       | 1.23 | 1.23 |
| Initial Bse:                                                   | 55          | 733  | 84   | 78          | 928  | 175  | 169        | 74   | 74   | 213        | 159  | 80   |
| Added Vol:                                                     | 0           | 0    | 0    | 0           | 0    | 0    | 0          | 0    | 0    | 0          | 0    | 0    |
| PasserByVol:                                                   | 0           | 0    | 0    | 0           | 0    | 0    | 0          | 0    | 0    | 0          | 0    | 0    |
| Initial Fut:                                                   | 55          | 733  | 84   | 78          | 928  | 175  | 169        | 74   | 74   | 213        | 159  | 80   |
| User Adj:                                                      | 1.00        | 1.00 | 1.00 | 1.00        | 1.00 | 0.00 | 1.00       | 1.00 | 0.00 | 1.00       | 1.00 | 1.00 |
| PHF Adj:                                                       | 0.95        | 0.95 | 0.95 | 0.95        | 0.95 | 0.00 | 0.95       | 0.95 | 0.00 | 0.95       | 0.95 | 0.95 |
| PHF Volume:                                                    | 58          | 772  | 88   | 82          | 977  | 0    | 178        | 78   | 0    | 224        | 167  | 84   |
| Reduct Vol:                                                    | 0           | 0    | 0    | 0           | 0    | 0    | 0          | 0    | 0    | 0          | 0    | 0    |
| Reduced Vol:                                                   | 58          | 772  | 88   | 82          | 977  | 0    | 178        | 78   | 0    | 224        | 167  | 84   |
| PCE Adj:                                                       | 1.00        | 1.00 | 1.00 | 1.00        | 1.00 | 0.00 | 1.00       | 1.00 | 0.00 | 1.00       | 1.00 | 1.00 |
| MLF Adj:                                                       | 1.00        | 1.00 | 1.00 | 1.00        | 1.00 | 0.00 | 1.00       | 1.00 | 0.00 | 1.00       | 1.00 | 1.00 |
| FinalVolume:                                                   | 58          | 772  | 88   | 82          | 977  | 0    | 178        | 78   | 0    | 224        | 167  | 84   |
| Saturation Flow Module:                                        |             |      |      |             |      |      |            |      |      |            |      |      |
| Sat/Lane:                                                      | 1800        | 1800 | 1800 | 1800        | 1800 | 1800 | 1800       | 1800 | 1800 | 1800       | 1800 | 1800 |
| Adjustment:                                                    | 1.00        | 0.91 | 0.91 | 1.00        | 0.91 | 1.00 | 1.00       | 0.95 | 1.00 | 1.00       | 0.95 | 0.95 |
| Lanes:                                                         | 1.00        | 2.69 | 0.31 | 1.00        | 3.00 | 1.00 | 1.00       | 2.00 | 1.00 | 1.00       | 1.33 | 0.67 |
| Final Sat.:                                                    | 1800        | 4410 | 504  | 1800        | 4914 | 1800 | 1800       | 3420 | 1800 | 1800       | 2274 | 1146 |
| Capacity Analysis Module:                                      |             |      |      |             |      |      |            |      |      |            |      |      |
| Vol/Sat:                                                       | 0.03        | 0.17 | 0.17 | 0.05        | 0.20 | 0.00 | 0.10       | 0.02 | 0.00 | 0.12       | 0.07 | 0.07 |
| Crit Moves:                                                    | ****        |      |      | ****        |      |      | ****       |      |      | ****       |      |      |
| Green/Cycle:                                                   | 0.07        | 0.42 | 0.42 | 0.11        | 0.45 | 0.00 | 0.23       | 0.06 | 0.00 | 0.33       | 0.17 | 0.17 |
| Volume/Cap:                                                    | 0.44        | 0.42 | 0.42 | 0.42        | 0.44 | 0.00 | 0.44       | 0.38 | 0.00 | 0.38       | 0.44 | 0.44 |
| Delay/Veh:                                                     | 46.6        | 20.6 | 20.6 | 43.1        | 18.8 | 0.0  | 34.1       | 46.3 | 0.0  | 25.9       | 37.9 | 37.9 |
| User DelAdj:                                                   | 1.00        | 1.00 | 1.00 | 1.00        | 1.00 | 1.00 | 1.00       | 1.00 | 1.00 | 1.00       | 1.00 | 1.00 |
| AdjDel/Veh:                                                    | 46.6        | 20.6 | 20.6 | 43.1        | 18.8 | 0.0  | 34.1       | 46.3 | 0.0  | 25.9       | 37.9 | 37.9 |
| LOS by Move:                                                   | D           | C    | C    | D           | B    | A    | C          | D    | A    | C          | D    | D    |
| HCM2kAvgQ:                                                     | 2           | 7    | 7    | 3           | 8    | 0    | 5          | 2    | 0    | 5          | 4    | 4    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)  
\*\*\*\*\*  
Intersection #23 Cherry Ave/Valley Blvd  
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.815  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 35.4  
Optimal Cycle: 69 Level Of Service: D  
\*\*\*\*\*

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 1 | 1 | 1          | 0 | 2 | 0          | 1 | 1 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 152  | 614  | 232  | 93   | 702  | 127  | 86   | 195  | 151  | 368  | 715  | 107  |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 187  | 756  | 286  | 115  | 865  | 156  | 106  | 240  | 186  | 453  | 881  | 132  |
| Added Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 187  | 756  | 286  | 115  | 865  | 156  | 106  | 240  | 186  | 453  | 881  | 132  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 197  | 796  | 301  | 121  | 910  | 165  | 112  | 253  | 196  | 477  | 927  | 139  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 197  | 796  | 301  | 121  | 910  | 165  | 112  | 253  | 196  | 477  | 927  | 139  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 197  | 796  | 301  | 121  | 910  | 165  | 112  | 253  | 196  | 477  | 927  | 139  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.11 | 0.23 | 0.17 | 0.07 | 0.27 | 0.09 | 0.06 | 0.07 | 0.11 | 0.27 | 0.27 | 0.08 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      | **** |      |      |      |
| Green/Cycle: | 0.13 | 0.36 | 0.36 | 0.10 | 0.33 | 0.33 | 0.09 | 0.13 | 0.13 | 0.33 | 0.37 | 0.37 |
| Volume/Cap:  | 0.81 | 0.65 | 0.47 | 0.65 | 0.81 | 0.28 | 0.73 | 0.55 | 0.81 | 0.81 | 0.73 | 0.21 |
| Delay/Veh:   | 60.9 | 28.1 | 25.3 | 51.0 | 35.6 | 25.2 | 60.4 | 42.0 | 61.0 | 39.6 | 29.0 | 21.4 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 60.9 | 28.1 | 25.3 | 51.0 | 35.6 | 25.2 | 60.4 | 42.0 | 61.0 | 39.6 | 29.0 | 21.4 |
| LOS by Move: | E    | C    | C    | D    | D    | C    | E    | D    | E    | D    | C    | C    |
| HCM2kAvgQ:   | 8    | 11   | 7    | 5    | 16   | 4    | 5    | 5    | 8    | 16   | 14   | 3    |

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Note: Queue reported is the number of cars per lane.  
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FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)  
\*\*\*\*\*  
Intersection #26 Cherry Ave/Slover Ave  
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.853  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 37.1  
Optimal Cycle: 73 Level Of Service: D  
\*\*\*\*\*

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 1 | 1 | 1          | 0 | 2 | 0          | 1 | 1 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 28   | 474  | 16   | 420  | 347  | 557  | 211  | 148  | 13   | 33   | 321  | 232  |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 34   | 584  | 20   | 517  | 428  | 686  | 260  | 182  | 16   | 41   | 395  | 286  |
| Added Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 34   | 584  | 20   | 517  | 428  | 686  | 260  | 182  | 16   | 41   | 395  | 286  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 36   | 615  | 21   | 545  | 450  | 722  | 274  | 192  | 17   | 43   | 416  | 301  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 36   | 615  | 21   | 545  | 450  | 722  | 274  | 192  | 17   | 43   | 416  | 301  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 36   | 615  | 21   | 545  | 450  | 722  | 274  | 192  | 17   | 43   | 416  | 301  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 1710 | 1710 | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 |

Capacity Analysis Module:

|              |       |      |      |      |      |      |      |      |      |      |      |      |
|--------------|-------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.02  | 0.18 | 0.01 | 0.30 | 0.26 | 0.42 | 0.15 | 0.06 | 0.01 | 0.02 | 0.12 | 0.17 |
| Crit Moves:  | ****  |      |      | **** |      |      | **** |      |      |      |      | **** |
| Green/Cycle: | 0.03  | 0.21 | 0.21 | 0.35 | 0.54 | 0.54 | 0.18 | 0.26 | 0.26 | 0.11 | 0.20 | 0.20 |
| Volume/Cap:  | 0.78  | 0.85 | 0.05 | 0.85 | 0.49 | 0.78 | 0.85 | 0.21 | 0.04 | 0.21 | 0.62 | 0.85 |
| Delay/Veh:   | 106.0 | 47.6 | 31.6 | 40.6 | 14.5 | 21.1 | 59.0 | 28.9 | 27.5 | 41.0 | 38.6 | 56.6 |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 106.0 | 47.6 | 31.6 | 40.6 | 14.5 | 21.1 | 59.0 | 28.9 | 27.5 | 41.0 | 38.6 | 56.6 |
| LOS by Move: | F     | D    | C    | D    | B    | C    | E    | C    | C    | D    | D    | E    |
| HCM2kAvgQ:   | 3     | 12   | 1    | 18   | 9    | 20   | 11   | 2    | 0    | 1    | 7    | 12   |

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Note: Queue reported is the number of cars per lane.  
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FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #27 Cherry Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.338  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 20.7  
Optimal Cycle: 21 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Permitted  |   |   | Permitted  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 1           | 0 | 2 | 0          | 1 | 0 | 0          | 1 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 17   | 454  | 10   | 41   | 358  | 162  | 222  | 43   | 67   | 8    | 91   | 19   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 21   | 559  | 12   | 51   | 441  | 200  | 274  | 53   | 83   | 10   | 112  | 23   |
| Added Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 21   | 559  | 12   | 51   | 441  | 200  | 274  | 53   | 83   | 10   | 112  | 23   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 22   | 589  | 13   | 53   | 464  | 210  | 288  | 56   | 87   | 10   | 118  | 25   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 22   | 589  | 13   | 53   | 464  | 210  | 288  | 56   | 87   | 10   | 118  | 25   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 22   | 589  | 13   | 53   | 464  | 210  | 288  | 56   | 87   | 10   | 118  | 25   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 2.94 | 0.06 | 1.00 | 2.07 | 0.93 | 1.00 | 0.39 | 0.61 | 0.08 | 0.92 | 1.00 |
| Final Sat.: | 1800 | 4808 | 106  | 1800 | 3383 | 1531 | 1710 | 668  | 1042 | 145  | 1655 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.01 | 0.12 | 0.12 | 0.03 | 0.14 | 0.14 | 0.17 | 0.08 | 0.08 | 0.07 | 0.07 | 0.01 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.04 | 0.36 | 0.36 | 0.09 | 0.41 | 0.41 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 |
| Volume/Cap:  | 0.34 | 0.34 | 0.34 | 0.34 | 0.34 | 0.34 | 0.34 | 0.17 | 0.17 | 0.14 | 0.14 | 0.03 |
| Delay/Veh:   | 50.1 | 23.7 | 23.7 | 44.4 | 20.6 | 20.6 | 15.3 | 13.8 | 13.8 | 13.6 | 13.6 | 12.8 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 50.1 | 23.7 | 23.7 | 44.4 | 20.6 | 20.6 | 15.3 | 13.8 | 13.8 | 13.6 | 13.6 | 12.8 |
| LOS by Move: | D    | C    | C    | D    | C    | C    | B    | B    | B    | B    | B    | B    |
| HCM2kAvgQ:   | 1    | 5    | 5    | 2    | 5    | 5    | 6    | 2    | 2    | 2    | 2    | 0    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #28 Cherry Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.766  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 31.6  
Optimal Cycle: 58 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 2 | 0           | 2 | 0 | 2          | 0 | 2 | 2          | 0 | 2 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 387  | 402  | 69   | 151  | 402  | 174  | 161  | 496  | 224  | 85   | 920  | 121  |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 477  | 495  | 85   | 186  | 495  | 214  | 198  | 611  | 276  | 105  | 1133 | 149  |
| Added Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 477  | 495  | 85   | 186  | 495  | 214  | 198  | 611  | 276  | 105  | 1133 | 149  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 502  | 521  | 89   | 196  | 521  | 226  | 209  | 643  | 290  | 110  | 1193 | 157  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 502  | 521  | 89   | 196  | 521  | 226  | 209  | 643  | 290  | 110  | 1193 | 157  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 502  | 521  | 89   | 196  | 521  | 226  | 209  | 643  | 290  | 110  | 1193 | 157  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.91 | 0.91 | 0.97 | 0.95 | 1.00 |
| Lanes:      | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 2.07 | 0.93 | 2.00 | 2.00 | 1.00 |
| Final Sat.: | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 | 3492 | 3385 | 1529 | 3492 | 3420 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.14 | 0.15 | 0.05 | 0.06 | 0.15 | 0.13 | 0.06 | 0.19 | 0.19 | 0.03 | 0.35 | 0.09 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.19 | 0.28 | 0.28 | 0.10 | 0.20 | 0.20 | 0.08 | 0.46 | 0.46 | 0.08 | 0.46 | 0.46 |
| Volume/Cap:  | 0.77 | 0.54 | 0.18 | 0.54 | 0.77 | 0.63 | 0.77 | 0.42 | 0.42 | 0.42 | 0.77 | 0.19 |
| Delay/Veh:   | 44.0 | 31.0 | 27.2 | 44.2 | 43.1 | 40.3 | 57.5 | 18.3 | 18.3 | 45.1 | 25.1 | 16.4 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 44.0 | 31.0 | 27.2 | 44.2 | 43.1 | 40.3 | 57.5 | 18.3 | 18.3 | 45.1 | 25.1 | 16.4 |
| LOS by Move: | D    | C    | C    | D    | D    | D    | E    | B    | B    | D    | C    | B    |
| HCM2kAvgQ:   | 9    | 8    | 2    | 4    | 10   | 7    | 5    | 7    | 7    | 2    | 18   | 3    |

Note: Queue reported is the number of cars per lane.

Lanes, Volumes, Timings  
3: VALLEY BLVD & FONTANA

FY2030 - AM PEAK HOUR

6/25/2009

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL2                                                                              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                                | WBR2                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | NBR2                                                                                |
| Lane Configurations     |                                                                                   |  |  |  |  |  |                                                                                    |  |                                                                                     |  |                                                                                     |  |
| Volume (vph)            | 89                                                                                | 101                                                                               | 408                                                                               | 10                                                                                | 5                                                                                 | 483                                                                               | 76                                                                                 | 20                                                                                  | 31                                                                                  | 16                                                                                  | 6                                                                                   | 12                                                                                  |
| Ideal Flow (vphpl)      | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Lane Util. Factor       | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 0.91                                                                              | 0.91                                                                               | 0.91                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Frt                     |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   | 0.979                                                                             |                                                                                    | 0.850                                                                               |                                                                                     | 0.984                                                                               |                                                                                     | 0.850                                                                               |
| Flt Protected           |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                    |                                                                                     |                                                                                     | 0.971                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)       | 0                                                                                 | 1710                                                                              | 3420                                                                              | 1530                                                                              | 1710                                                                              | 3207                                                                              | 0                                                                                  | 1392                                                                                | 0                                                                                   | 1720                                                                                | 0                                                                                   | 1530                                                                                |
| Flt Permitted           |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                    |                                                                                     |                                                                                     | 0.795                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)       | 0                                                                                 | 1710                                                                              | 3420                                                                              | 1530                                                                              | 1710                                                                              | 3207                                                                              | 0                                                                                  | 1392                                                                                | 0                                                                                   | 1408                                                                                | 0                                                                                   | 1530                                                                                |
| Right Turn on Red       |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                    | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)       |                                                                                   |                                                                                   |                                                                                   | 11                                                                                |                                                                                   |                                                                                   |                                                                                    | 19                                                                                  |                                                                                     |                                                                                     |                                                                                     | 13                                                                                  |
| Link Speed (mph)        |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                    |                                                                                     |                                                                                     | 30                                                                                  |                                                                                     |                                                                                     |
| Link Distance (ft)      |                                                                                   |                                                                                   | 807                                                                               |                                                                                   |                                                                                   | 830                                                                               |                                                                                    |                                                                                     |                                                                                     | 743                                                                                 |                                                                                     |                                                                                     |
| Travel Time (s)         |                                                                                   |                                                                                   | 18.3                                                                              |                                                                                   |                                                                                   | 18.9                                                                              |                                                                                    |                                                                                     |                                                                                     | 16.9                                                                                |                                                                                     |                                                                                     |
| Peak Hour Factor        | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                               | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                |
| Heavy Vehicles (%)      | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                 | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Shared Lane Traffic (%) |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 10%                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)   | 0                                                                                 | 200                                                                               | 429                                                                               | 11                                                                                | 5                                                                                 | 590                                                                               | 0                                                                                  | 19                                                                                  | 0                                                                                   | 56                                                                                  | 0                                                                                   | 13                                                                                  |
| Turn Type               | Prot                                                                              | Prot                                                                              |                                                                                   | Perm                                                                              | Prot                                                                              |                                                                                   |                                                                                    | Perm                                                                                | Perm                                                                                |                                                                                     |                                                                                     | Perm                                                                                |
| Protected Phases        | 7                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 3                                                                                 | 8                                                                                 |                                                                                    |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |                                                                                     |
| Permitted Phases        |                                                                                   |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   |                                                                                    | 8                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |
| Detector Phase          | 7                                                                                 | 7                                                                                 | 4                                                                                 | 4                                                                                 | 3                                                                                 | 8                                                                                 |                                                                                    | 8                                                                                   | 2                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |                                                                                    | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 |                                                                                     | 4.0                                                                                 |
| Minimum Split (s)       | 8.0                                                                               | 8.0                                                                               | 20.0                                                                              | 20.0                                                                              | 8.0                                                                               | 20.0                                                                              |                                                                                    | 20.0                                                                                | 20.0                                                                                | 20.0                                                                                |                                                                                     | 20.0                                                                                |
| Total Split (s)         | 15.0                                                                              | 15.0                                                                              | 28.0                                                                              | 28.0                                                                              | 8.0                                                                               | 21.0                                                                              | 0.0                                                                                | 21.0                                                                                | 22.0                                                                                | 22.0                                                                                | 0.0                                                                                 | 22.0                                                                                |
| Total Split (%)         | 16.7%                                                                             | 16.7%                                                                             | 31.1%                                                                             | 31.1%                                                                             | 8.9%                                                                              | 23.3%                                                                             | 0.0%                                                                               | 23.3%                                                                               | 24.4%                                                                               | 24.4%                                                                               | 0.0%                                                                                | 24.4%                                                                               |
| Maximum Green (s)       | 11.0                                                                              | 11.0                                                                              | 24.0                                                                              | 24.0                                                                              | 4.0                                                                               | 17.0                                                                              |                                                                                    | 17.0                                                                                | 18.0                                                                                | 18.0                                                                                |                                                                                     | 18.0                                                                                |
| Yellow Time (s)         | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               |                                                                                    | 3.5                                                                                 | 3.5                                                                                 | 3.5                                                                                 |                                                                                     | 3.5                                                                                 |
| All-Red Time (s)        | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               |                                                                                    | 0.5                                                                                 | 0.5                                                                                 | 0.5                                                                                 |                                                                                     | 0.5                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               | Lag                                                                               | Lead                                                                              | Lag                                                                               |                                                                                    | Lag                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               |                                                                                    | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                    | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |                                                                                     | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              |                                                                                    | None                                                                                | None                                                                                | None                                                                                |                                                                                     | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               |                                                                                    | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |                                                                                     | 5.0                                                                                 |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 11.0                                                                              | 11.0                                                                              |                                                                                   | 11.0                                                                              |                                                                                    | 11.0                                                                                | 11.0                                                                                | 11.0                                                                                |                                                                                     | 11.0                                                                                |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                    | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |
| Act Effect Green (s)    |                                                                                   | 11.0                                                                              | 30.7                                                                              | 30.7                                                                              | 4.0                                                                               | 17.1                                                                              |                                                                                    | 17.1                                                                                |                                                                                     | 12.0                                                                                |                                                                                     | 12.0                                                                                |
| Actuated g/C Ratio      |                                                                                   | 0.13                                                                              | 0.37                                                                              | 0.37                                                                              | 0.05                                                                              | 0.21                                                                              |                                                                                    | 0.21                                                                                |                                                                                     | 0.14                                                                                |                                                                                     | 0.14                                                                                |
| v/c Ratio               |                                                                                   | 0.88                                                                              | 0.34                                                                              | 0.02                                                                              | 0.06                                                                              | 0.90                                                                              |                                                                                    | 0.06                                                                                |                                                                                     | 0.27                                                                                |                                                                                     | 0.06                                                                                |
| Control Delay           |                                                                                   | 74.5                                                                              | 21.7                                                                              | 12.1                                                                              | 42.0                                                                              | 51.7                                                                              |                                                                                    | 13.8                                                                                |                                                                                     | 35.0                                                                                |                                                                                     | 15.6                                                                                |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                    | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |
| Total Delay             |                                                                                   | 74.5                                                                              | 21.7                                                                              | 12.1                                                                              | 42.0                                                                              | 51.7                                                                              |                                                                                    | 13.8                                                                                |                                                                                     | 35.0                                                                                |                                                                                     | 15.6                                                                                |
| LOS                     |                                                                                   | E                                                                                 | C                                                                                 | B                                                                                 | D                                                                                 | D                                                                                 |                                                                                    | B                                                                                   |                                                                                     | D                                                                                   |                                                                                     | B                                                                                   |
| Approach Delay          |                                                                                   |                                                                                   | 38.0                                                                              |                                                                                   |                                                                                   | 50.5                                                                              |                                                                                    |                                                                                     |                                                                                     | 31.4                                                                                |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                    |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |                                                                                     |
| Queue Length 50th (ft)  |                                                                                   | 105                                                                               | 82                                                                                | 0                                                                                 | 3                                                                                 | 168                                                                               |                                                                                    | 0                                                                                   |                                                                                     | 27                                                                                  |                                                                                     | 0                                                                                   |

Lanes, Volumes, Timings  
3: VALLEY BLVD & FONTANA

FY2030 - AM PEAK HOUR

6/25/2009

|                         |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| Lane Group              | SBL                                                                               | SBT                                                                               | SBR                                                                               | SWL2                                                                              | SWL                                                                               | SWR                                                                               | SWR2                                                                               |
| Lane Configurations     |                                                                                   |  |  |                                                                                   |  |                                                                                   |                                                                                    |
| Volume (vph)            | 93                                                                                | 5                                                                                 | 96                                                                                | 11                                                                                | 27                                                                                | 391                                                                               | 6                                                                                  |
| Ideal Flow (vphpl)      | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               |
| Lane Util. Factor       | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               |
| Frt                     |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   | 0.877                                                                             |                                                                                   |                                                                                    |
| Flt Protected           |                                                                                   | 0.955                                                                             |                                                                                   |                                                                                   | 0.996                                                                             |                                                                                   |                                                                                    |
| Satd. Flow (prot)       | 0                                                                                 | 1719                                                                              | 1530                                                                              | 0                                                                                 | 1572                                                                              | 0                                                                                 | 0                                                                                  |
| Flt Permitted           |                                                                                   | 0.696                                                                             |                                                                                   |                                                                                   | 0.996                                                                             |                                                                                   |                                                                                    |
| Satd. Flow (perm)       | 0                                                                                 | 1253                                                                              | 1530                                                                              | 0                                                                                 | 1572                                                                              | 0                                                                                 | 0                                                                                  |
| Right Turn on Red       |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                   | No                                                                                 |
| Satd. Flow (RTOR)       |                                                                                   |                                                                                   | 101                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                    |
| Link Speed (mph)        |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                    |
| Link Distance (ft)      |                                                                                   | 792                                                                               |                                                                                   |                                                                                   | 998                                                                               |                                                                                   |                                                                                    |
| Travel Time (s)         |                                                                                   | 18.0                                                                              |                                                                                   |                                                                                   | 22.7                                                                              |                                                                                   |                                                                                    |
| Peak Hour Factor        | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                               |
| Heavy Vehicles (%)      | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                 |
| Shared Lane Traffic (%) |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |
| Lane Group Flow (vph)   | 0                                                                                 | 103                                                                               | 101                                                                               | 0                                                                                 | 458                                                                               | 0                                                                                 | 0                                                                                  |
| Turn Type               | Perm                                                                              |                                                                                   | Perm                                                                              | Perm                                                                              |                                                                                   |                                                                                   |                                                                                    |
| Protected Phases        |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                    |
| Permitted Phases        | 2                                                                                 |                                                                                   | 2                                                                                 | 6                                                                                 |                                                                                   |                                                                                   |                                                                                    |
| Detector Phase          | 2                                                                                 | 2                                                                                 | 2                                                                                 | 6                                                                                 | 6                                                                                 |                                                                                   |                                                                                    |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |
| Minimum Initial (s)     | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |                                                                                   |                                                                                    |
| Minimum Split (s)       | 20.0                                                                              | 20.0                                                                              | 20.0                                                                              | 20.0                                                                              | 20.0                                                                              |                                                                                   |                                                                                    |
| Total Split (s)         | 22.0                                                                              | 22.0                                                                              | 22.0                                                                              | 32.0                                                                              | 32.0                                                                              | 0.0                                                                               | 0.0                                                                                |
| Total Split (%)         | 24.4%                                                                             | 24.4%                                                                             | 24.4%                                                                             | 35.6%                                                                             | 35.6%                                                                             | 0.0%                                                                              | 0.0%                                                                               |
| Maximum Green (s)       | 18.0                                                                              | 18.0                                                                              | 18.0                                                                              | 28.0                                                                              | 28.0                                                                              |                                                                                   |                                                                                    |
| Yellow Time (s)         | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               |                                                                                   |                                                                                    |
| All-Red Time (s)        | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               |                                                                                   |                                                                                    |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                |
| Total Lost Time (s)     | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   |                                                                                    |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              |                                                                                   |                                                                                    |
| Walk Time (s)           | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                   |                                                                                    |
| Flash Dont Walk (s)     | 11.0                                                                              | 11.0                                                                              | 11.0                                                                              | 11.0                                                                              | 11.0                                                                              |                                                                                   |                                                                                    |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    |
| Act Effect Green (s)    |                                                                                   | 12.0                                                                              | 12.0                                                                              |                                                                                   | 26.9                                                                              |                                                                                   |                                                                                    |
| Actuated g/C Ratio      |                                                                                   | 0.14                                                                              | 0.14                                                                              |                                                                                   | 0.32                                                                              |                                                                                   |                                                                                    |
| v/c Ratio               |                                                                                   | 0.57                                                                              | 0.33                                                                              |                                                                                   | 0.90                                                                              |                                                                                   |                                                                                    |
| Control Delay           |                                                                                   | 45.8                                                                              | 9.9                                                                               |                                                                                   | 51.0                                                                              |                                                                                   |                                                                                    |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    |
| Total Delay             |                                                                                   | 45.8                                                                              | 9.9                                                                               |                                                                                   | 51.0                                                                              |                                                                                   |                                                                                    |
| LOS                     |                                                                                   | D                                                                                 | A                                                                                 |                                                                                   | D                                                                                 |                                                                                   |                                                                                    |
| Approach Delay          |                                                                                   | 28.1                                                                              |                                                                                   |                                                                                   | 51.0                                                                              |                                                                                   |                                                                                    |
| Approach LOS            |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    |
| Queue Length 50th (ft)  |                                                                                   | 51                                                                                | 0                                                                                 |                                                                                   | 225                                                                               |                                                                                   |                                                                                    |

Lanes, Volumes, Timings  
3: VALLEY BLVD & FONTANA

FY2030 - AM PEAK HOUR

6/25/2009

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL2                                                                              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                                | WBR2                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | NBR2                                                                                |
| Queue Length 95th (ft)  |                                                                                   | #248                                                                              | 153                                                                               | 13                                                                                | 14                                                                                | #299                                                                              |                                                                                    | 20                                                                                  |                                                                                     | 61                                                                                  |                                                                                     | 16                                                                                  |
| Internal Link Dist (ft) |                                                                                   |                                                                                   | 727                                                                               |                                                                                   |                                                                                   | 750                                                                               |                                                                                    |                                                                                     |                                                                                     | 663                                                                                 |                                                                                     |                                                                                     |
| Turn Bay Length (ft)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 227                                                                               | 1262                                                                              | 571                                                                               | 83                                                                                | 659                                                                               |                                                                                    | 301                                                                                 |                                                                                     | 306                                                                                 |                                                                                     | 343                                                                                 |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 0                                                                                   |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.88                                                                              | 0.34                                                                              | 0.02                                                                              | 0.06                                                                              | 0.90                                                                              |                                                                                    | 0.06                                                                                |                                                                                     | 0.18                                                                                |                                                                                     | 0.04                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 83.1

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 43.6

Intersection LOS: D

Intersection Capacity Utilization 81.8%

ICU Level of Service D

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 3: VALLEY BLVD & FONTANA

|                                                                                                                                                                            |                                                                                        |                                                                                        |                                                                                          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
|   ø2 |  ø6 |  ø3 |  ø4   |
| 22 s                                                                                                                                                                       | 32 s                                                                                   | 8 s                                                                                    | 28 s                                                                                     |
|                                                                                                                                                                            |                                                                                        |  ø7 |  ø8 |
|                                                                                                                                                                            |                                                                                        | 15 s                                                                                   | 21 s                                                                                     |

Lanes, Volumes, Timings  
3: VALLEY BLVD & FONTANA

FY2030 - AM PEAK HOUR

6/25/2009

|                         |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| Lane Group              | SBL                                                                               | SBT                                                                               | SBR                                                                               | SWL2                                                                              | SWL                                                                               | SWR                                                                               | SWR2                                                                               |
| Queue Length 95th (ft)  |                                                                                   | 102                                                                               | 41                                                                                |                                                                                   | #440                                                                              |                                                                                   |                                                                                    |
| Internal Link Dist (ft) |                                                                                   | 712                                                                               |                                                                                   |                                                                                   | 918                                                                               |                                                                                   |                                                                                    |
| Turn Bay Length (ft)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |
| Base Capacity (vph)     |                                                                                   | 273                                                                               | 412                                                                               |                                                                                   | 532                                                                               |                                                                                   |                                                                                    |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    |
| Reduced v/c Ratio       |                                                                                   | 0.38                                                                              | 0.25                                                                              |                                                                                   | 0.86                                                                              |                                                                                   |                                                                                    |
| Intersection Summary    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |



FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #30 Beech Ave/Valley Blvd

Average Delay (sec/veh): 2.6 Worst Case Level Of Service: C [ 21.2]

Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Stop Sign Stop Sign Uncontrolled Uncontrolled  
Rights: Include Include Include Include  
Lanes: 0 1 0 0 1 0 1 0 0 1 1 0 1 1 0 1 0 2 0 1

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 4    | 2    | 12   | 68   | 3    | 20   | 8    | 376  | 9    | 20   | 348  | 50   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 5    | 2    | 15   | 84   | 4    | 25   | 10   | 463  | 11   | 25   | 429  | 62   |
| Added Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 5    | 2    | 15   | 84   | 4    | 25   | 10   | 463  | 11   | 25   | 429  | 62   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 5    | 3    | 16   | 88   | 4    | 26   | 10   | 488  | 12   | 26   | 451  | 65   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| FinalVolume: | 5    | 3    | 16   | 88   | 4    | 26   | 10   | 488  | 12   | 26   | 451  | 65   |

Critical Gap Module:

|              |     |     |     |     |     |     |     |      |       |     |      |       |
|--------------|-----|-----|-----|-----|-----|-----|-----|------|-------|-----|------|-------|
| Critical Gp: | 7.5 | 6.5 | 6.9 | 7.5 | 6.5 | 6.9 | 4.1 | xxxx | xxxxx | 4.1 | xxxx | xxxxx |
| FollowUpTim: | 3.5 | 4.0 | 3.3 | 3.5 | 4.0 | 3.3 | 2.2 | xxxx | xxxxx | 2.2 | xxxx | xxxxx |

Capacity Module:

|              |      |      |      |      |      |      |      |      |       |      |      |       |
|--------------|------|------|------|------|------|------|------|------|-------|------|------|-------|
| Cnflct Vol:  | 794  | 1082 | 250  | 769  | 1023 | 226  | 516  | xxxx | xxxxx | 499  | xxxx | xxxxx |
| Potent Cap.: | 282  | 219  | 756  | 294  | 237  | 784  | 1060 | xxxx | xxxxx | 1075 | xxxx | xxxxx |
| Move Cap.:   | 263  | 212  | 756  | 278  | 229  | 784  | 1060 | xxxx | xxxxx | 1075 | xxxx | xxxxx |
| Volume/Cap:  | 0.02 | 0.01 | 0.02 | 0.32 | 0.02 | 0.03 | 0.01 | xxxx | xxxxx | 0.02 | xxxx | xxxxx |

Level Of Service Module:

|              |               |               |               |               |               |               |               |               |               |               |               |               |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| 2Way95thQ:   | xxxx          | xxxx          | 0.1           | xxxx          | xxxx          | 0.1           | 0.0           | xxxx          | xxxxx         | 0.1           | xxxx          | xxxxx         |
| Control Del: | xxxxx         | xxxxx         | 9.9           | xxxxx         | xxxxx         | 9.8           | 8.4           | xxxx          | xxxxx         | 8.4           | xxxx          | xxxxx         |
| LOS by Move: | *             | *             | A             | *             | *             | A             | A             | *             | *             | A             | *             | *             |
| Movement:    | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT |
| Shared Cap.: | 243           | xxxx          | xxxxx         | 276           | xxxx          | xxxxx         | xxxx          | xxxx          | xxxxx         | xxxx          | xxxx          | xxxxx         |
| SharedQueue: | 0.1           | xxxx          | xxxxx         | 1.4           | xxxx          | xxxxx         | xxxxx         | xxxx          | xxxxx         | xxxxx         | xxxx          | xxxxx         |
| Shrd ConDel: | 20.3          | xxxx          | xxxxx         | 24.5          | xxxx          | xxxxx         | xxxxx         | xxxx          | xxxxx         | xxxxx         | xxxx          | xxxxx         |
| Shared LOS:  | C             | *             | C             | *             | *             | *             | *             | *             | *             | *             | *             | *             |
| ApproachDel: | 13.3          |               |               | 21.2          |               |               | xxxxxx        |               |               | xxxxxx        |               |               |
| ApproachLOS: | B             |               |               | C             |               |               | *             |               |               | *             |               |               |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #31 Beech Ave/Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.581

Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): 14.2

Optimal Cycle: 0 Level Of Service: B

Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Stop Sign Stop Sign Stop Sign Stop Sign  
Rights: Include Include Include Include  
Lanes: 0 0 1! 0 0 0 0 1! 0 0 1 0 1 1 0 1 0 1 1 0

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 72   | 8    | 73   | 8    | 0    | 5    | 427  | 111  | 121  | 381  | 16   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 89   | 10   | 90   | 10   | 0    | 6    | 526  | 137  | 149  | 469  | 20   |
| Added Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 89   | 10   | 90   | 10   | 0    | 6    | 526  | 137  | 149  | 469  | 20   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 93   | 10   | 95   | 10   | 0    | 6    | 554  | 144  | 157  | 494  | 21   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 93   | 10   | 95   | 10   | 0    | 6    | 554  | 144  | 157  | 494  | 21   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 93   | 10   | 95   | 10   | 0    | 6    | 554  | 144  | 157  | 494  | 21   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 0.47 | 0.05 | 0.48 | 0.62 | 0.00 | 0.38 | 1.00 | 1.59 | 0.41 | 1.00 | 1.92 |
| Final Sat.: | 261  | 29   | 264  | 292  | 0    | 183  | 541  | 952  | 255  | 539  | 1127 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.36 | 0.36 | 0.36 | 0.04 | xxxx | 0.04 | 0.01 | 0.58 | 0.56 | 0.29 | 0.44 | 0.44 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Delay/Veh:   | 12.4 | 12.4 | 12.4 | 10.1 | 0.0  | 10.1 | 9.3  | 16.3 | 15.4 | 11.8 | 13.2 | 13.1 |
| Delay Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 12.4 | 12.4 | 12.4 | 10.1 | 0.0  | 10.1 | 9.3  | 16.3 | 15.4 | 11.8 | 13.2 | 13.1 |
| LOS by Move: | B    | B    | B    | B    | *    | B    | A    | C    | C    | B    | B    | B    |
| ApproachDel: | 12.4 |      |      | 10.1 |      |      | 16.1 |      |      | 12.9 |      |      |
| Delay Adj:   | 1.00 |      |      | 1.00 |      |      | 1.00 |      |      | 1.00 |      |      |
| ApprAdjDel:  | 12.4 |      |      | 10.1 |      |      | 16.1 |      |      | 12.9 |      |      |
| LOS by Appr: | B    |      |      | B    |      |      | C    |      |      | B    |      |      |
| AllWayAvgQ:  | 0.5  | 0.5  | 0.5  | 0.0  | 0.0  | 0.0  | 0.0  | 1.3  | 1.2  | 0.4  | 0.7  | 0.7  |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #32 Beech Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.286  
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 10.1  
Optimal Cycle: 0 Level Of Service: B

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Stop Sign   |   |   | Stop Sign   |   |   | Stop Sign  |   |   | Stop Sign  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 0           | 1 | 0 | 0          | 1 | 0 | 0          | 1 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 8    | 122  | 72   | 22   | 55   | 19   | 50   | 126  | 7    | 38   | 97   | 36   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 10   | 150  | 89   | 27   | 68   | 23   | 62   | 155  | 9    | 47   | 120  | 44   |
| Added Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 10   | 150  | 89   | 27   | 68   | 23   | 62   | 155  | 9    | 47   | 120  | 44   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 10   | 158  | 93   | 29   | 71   | 25   | 65   | 163  | 9    | 49   | 126  | 47   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 10   | 158  | 93   | 29   | 71   | 25   | 65   | 163  | 9    | 49   | 126  | 47   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 10   | 158  | 93   | 29   | 71   | 25   | 65   | 163  | 9    | 49   | 126  | 47   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.54 | 1.38 | 0.08 | 0.44 | 1.14 | 0.42 |
| Final Sat.: | 511  | 554  | 618  | 484  | 520  | 577  | 307  | 799  | 45   | 250  | 665  | 257  |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.02 | 0.29 | 0.15 | 0.06 | 0.14 | 0.04 | 0.21 | 0.20 | 0.20 | 0.20 | 0.19 | 0.18 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Delay/Veh:   | 9.5  | 11.2 | 9.1  | 10.1 | 10.1 | 8.7  | 10.4 | 10.0 | 9.9  | 10.2 | 9.8  | 9.5  |
| Delay Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 9.5  | 11.2 | 9.1  | 10.1 | 10.1 | 8.7  | 10.4 | 10.0 | 9.9  | 10.2 | 9.8  | 9.5  |
| LOS by Move: | A    | B    | A    | B    | B    | A    | B    | B    | A    | B    | A    | A    |
| ApproachDel: | 10.4 |      |      | 9.8  |      |      | 10.1 |      |      | 9.8  |      |      |
| Delay Adj:   | 1.00 |      |      | 1.00 |      |      | 1.00 |      |      | 1.00 |      |      |
| ApprAdjDel:  | 10.4 |      |      | 9.8  |      |      | 10.1 |      |      | 9.8  |      |      |
| LOS by Appr: | B    |      |      | A    |      |      | B    |      |      | A    |      |      |
| AllWayAvgQ:  | 0.0  | 0.4  | 0.2  | 0.1  | 0.1  | 0.0  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  | 0.2  |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #33 Beech Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 1.065  
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): 59.4  
Optimal Cycle: 0 Level Of Service: F

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Stop Sign   |   |   | Stop Sign   |   |   | Stop Sign  |   |   | Stop Sign  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 0           | 1 | 0 | 0          | 1 | 0 | 0          | 0 | 1 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 316  | 38   | 13   | 2    | 5    | 73   | 117  | 412  | 137  | 1    | 303  | 11   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 389  | 47   | 16   | 2    | 6    | 90   | 144  | 508  | 169  | 1    | 373  | 14   |
| Added Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 389  | 47   | 16   | 2    | 6    | 90   | 144  | 508  | 169  | 1    | 373  | 14   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 410  | 49   | 17   | 3    | 6    | 95   | 152  | 534  | 178  | 1    | 393  | 14   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 410  | 49   | 17   | 3    | 6    | 95   | 152  | 534  | 178  | 1    | 393  | 14   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 410  | 49   | 17   | 3    | 6    | 95   | 152  | 534  | 178  | 1    | 393  | 14   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.35 | 1.24 | 0.41 | 0.01 | 0.96 | 0.03 |
| Final Sat.: | 385  | 404  | 437  | 322  | 337  | 361  | 158  | 572  | 196  | 1    | 429  | 16   |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 1.06 | 0.12 | 0.04 | 0.01 | 0.02 | 0.26 | 0.96 | 0.93 | 0.91 | 0.92 | 0.92 | 0.92 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Delay/Veh:   | 95.1 | 12.8 | 11.2 | 13.6 | 13.2 | 15.6 | 61.4 | 55.2 | 48.3 | 52.2 | 52.2 | 52.2 |
| Delay Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 95.1 | 12.8 | 11.2 | 13.6 | 13.2 | 15.6 | 61.4 | 55.2 | 48.3 | 52.2 | 52.2 | 52.2 |
| LOS by Move: | F    | B    | B    | B    | B    | C    | F    | F    | E    | F    | F    | F    |
| ApproachDel: | 83.6 |      |      | 15.4 |      |      | 54.9 |      |      | 52.2 |      |      |
| Delay Adj:   | 1.00 |      |      | 1.00 |      |      | 1.00 |      |      | 1.00 |      |      |
| ApprAdjDel:  | 83.6 |      |      | 15.4 |      |      | 54.9 |      |      | 52.2 |      |      |
| LOS by Appr: | F    |      |      | C    |      |      | F    |      |      | F    |      |      |
| AllWayAvgQ:  | 8.9  | 0.1  | 0.0  | 0.0  | 0.0  | 0.3  | 6.3  | 5.0  | 5.0  | 5.1  | 5.1  | 5.1  |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

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Intersection #34 Citrus Ave/Valley Blvd  
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 1.155  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 82.3  
Optimal Cycle: 180 Level Of Service: F

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| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 1           | 0 | 1 | 2          | 0 | 1 | 2          | 0 | 1 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 352  | 695  | 122  | 104  | 727  | 35   | 28   | 206  | 491  | 397  | 425  | 83   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 434  | 856  | 150  | 128  | 896  | 43   | 34   | 254  | 605  | 489  | 524  | 102  |
| Added Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 434  | 856  | 150  | 128  | 896  | 43   | 34   | 254  | 605  | 489  | 524  | 102  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 456  | 901  | 158  | 135  | 943  | 45   | 36   | 267  | 637  | 515  | 551  | 108  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 456  | 901  | 158  | 135  | 943  | 45   | 36   | 267  | 637  | 515  | 551  | 108  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 456  | 901  | 158  | 135  | 943  | 45   | 36   | 267  | 637  | 515  | 551  | 108  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 0.97 | 0.95 | 0.95 | 0.97 | 0.95 | 0.95 |
| Lanes:      | 1.00 | 1.70 | 0.30 | 1.00 | 1.91 | 0.09 | 2.00 | 1.00 | 1.00 | 2.00 | 1.67 | 0.33 |
| Final Sat.: | 1800 | 2909 | 511  | 1800 | 3263 | 157  | 3492 | 1710 | 1710 | 3492 | 2861 | 559  |

Capacity Analysis Module:

|              |       |      |      |      |      |       |      |      |       |       |      |      |
|--------------|-------|------|------|------|------|-------|------|------|-------|-------|------|------|
| Vol/Sat:     | 0.25  | 0.31 | 0.31 | 0.07 | 0.29 | 0.29  | 0.01 | 0.16 | 0.37  | 0.15  | 0.19 | 0.19 |
| Crit Moves:  | ****  |      |      | **** |      |       | **** |      | ****  | ****  |      |      |
| Green/Cycle: | 0.22  | 0.38 | 0.38 | 0.09 | 0.25 | 0.25  | 0.02 | 0.32 | 0.32  | 0.13  | 0.43 | 0.43 |
| Volume/Cap:  | 1.15  | 0.82 | 0.82 | 0.82 | 1.15 | 1.15  | 0.45 | 0.48 | 1.15  | 1.15  | 0.45 | 0.45 |
| Delay/Veh:   | 133.7 | 32.2 | 32.2 | 71.1 | 120  | 120.3 | 52.2 | 27.4 | 117.8 | 136.0 | 20.5 | 20.5 |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00  | 1.00  | 1.00 | 1.00 |
| AdjDel/Veh:  | 133.7 | 32.2 | 32.2 | 71.1 | 120  | 120.3 | 52.2 | 27.4 | 117.8 | 136.0 | 20.5 | 20.5 |
| LOS by Move: | F     | C    | C    | E    | F    | F     | D    | C    | F     | F     | C    | C    |
| HCM2kAvgQ:   | 25    | 18   | 18   | 6    | 28   | 28    | 1    | 7    | 35    | 16    | 8    | 8    |

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Note: Queue reported is the number of cars per lane.

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FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

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Intersection #37 Citrus Ave/Slover Ave  
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.987  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 54.7  
Optimal Cycle: 180 Level Of Service: D

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| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 1           | 0 | 1 | 1          | 0 | 2 | 1          | 0 | 1 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 17   | 376  | 62   | 245  | 179  | 505  | 237  | 235  | 7    | 48   | 422  | 224  |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 21   | 463  | 76   | 302  | 221  | 622  | 292  | 290  | 9    | 59   | 520  | 276  |
| Added Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 21   | 463  | 76   | 302  | 221  | 622  | 292  | 290  | 9    | 59   | 520  | 276  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 22   | 488  | 80   | 318  | 232  | 655  | 307  | 305  | 9    | 62   | 547  | 290  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 22   | 488  | 80   | 318  | 232  | 655  | 307  | 305  | 9    | 62   | 547  | 290  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 22   | 488  | 80   | 318  | 232  | 655  | 307  | 305  | 9    | 62   | 547  | 290  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 |
| Lanes:      | 1.00 | 0.86 | 0.14 | 1.00 | 1.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 1.31 | 0.69 |
| Final Sat.: | 1800 | 1545 | 255  | 1800 | 1800 | 1800 | 1800 | 3420 | 1800 | 1800 | 2234 | 1186 |

Capacity Analysis Module:

|              |       |      |      |      |      |      |      |      |      |      |      |      |
|--------------|-------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.01  | 0.32 | 0.32 | 0.18 | 0.13 | 0.36 | 0.17 | 0.09 | 0.01 | 0.03 | 0.24 | 0.24 |
| Crit Moves:  | ****  |      |      | **** |      |      | **** |      | **** | **** |      |      |
| Green/Cycle: | 0.02  | 0.32 | 0.32 | 0.18 | 0.48 | 0.48 | 0.17 | 0.30 | 0.30 | 0.12 | 0.25 | 0.25 |
| Volume/Cap:  | 0.75  | 0.99 | 0.99 | 0.99 | 0.27 | 0.75 | 0.99 | 0.29 | 0.02 | 0.29 | 0.99 | 0.99 |
| Delay/Veh:   | 119.9 | 67.8 | 67.8 | 87.3 | 15.5 | 24.8 | 88.4 | 26.8 | 24.4 | 41.1 | 64.9 | 64.9 |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 119.9 | 67.8 | 67.8 | 87.3 | 15.5 | 24.8 | 88.4 | 26.8 | 24.4 | 41.1 | 64.9 | 64.9 |
| LOS by Move: | F     | E    | E    | F    | B    | C    | F    | C    | C    | D    | E    | E    |
| HCM2kAvgQ:   | 2     | 24   | 24   | 15   | 4    | 18   | 14   | 4    | 0    | 2    | 19   | 19   |

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Note: Queue reported is the number of cars per lane.

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FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #38 Citrus Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.720  
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): 16.9  
Optimal Cycle: 0 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Stop Sign   |   |   | Stop Sign   |   |   | Stop Sign  |   |   | Stop Sign  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 0           | 0 | 1 | 0           | 0 | 1 | 0          | 1 | 0 | 0          | 1 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 11   | 280  | 37   | 18   | 155  | 33   | 49   | 103  | 0    | 20   | 178  | 21   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 14   | 345  | 46   | 22   | 191  | 41   | 60   | 127  | 0    | 25   | 219  | 26   |
| Added Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 14   | 345  | 46   | 22   | 191  | 41   | 60   | 127  | 0    | 25   | 219  | 26   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 14   | 363  | 48   | 23   | 201  | 43   | 64   | 134  | 0    | 26   | 231  | 27   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 14   | 363  | 48   | 23   | 201  | 43   | 64   | 134  | 0    | 26   | 231  | 27   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 14   | 363  | 48   | 23   | 201  | 43   | 64   | 134  | 0    | 26   | 231  | 27   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 0.03 | 0.86 | 0.11 | 0.09 | 0.75 | 0.16 | 0.32 | 0.68 | 0.00 | 0.10 | 0.90 |
| Final Sat.: | 20   | 504  | 67   | 47   | 409  | 87   | 156  | 328  | 0    | 49   | 439  |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.72 | 0.72 | 0.72 | 0.49 | 0.49 | 0.49 | 0.41 | 0.41 | xxxx | 0.53 | 0.53 | 0.05 |
| Crit Moves:  | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Delay/Veh:   | 21.2 | 21.2 | 21.2 | 14.2 | 14.2 | 14.2 | 13.5 | 13.5 | 0.0  | 16.1 | 16.1 | 9.1  |
| Delay Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 21.2 | 21.2 | 21.2 | 14.2 | 14.2 | 14.2 | 13.5 | 13.5 | 0.0  | 16.1 | 16.1 | 9.1  |
| LOS by Move: | C    | C    | C    | B    | B    | B    | B    | B    | *    | C    | C    | A    |
| ApproachDel: | 21.2 |      |      | 14.2 |      |      | 13.5 |      |      | 15.4 |      |      |
| Delay Adj:   | 1.00 |      |      | 1.00 |      |      | 1.00 |      |      | 1.00 |      |      |
| ApprAdjDel:  | 21.2 |      |      | 14.2 |      |      | 13.5 |      |      | 15.4 |      |      |
| LOS by Appr: | C    |      |      | B    |      |      | B    |      |      | C    |      | D    |
| AllWayAvgQ:  | 2.0  | 2.0  | 2.0  | 0.8  | 0.8  | 0.8  | 0.5  | 0.5  | 0.5  | 0.9  | 0.9  | 0.0  |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #39 Citrus Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.850  
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): 29.0  
Optimal Cycle: 0 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Stop Sign   |   |   | Stop Sign   |   |   | Stop Sign  |   |   | Stop Sign  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 0           | 0 | 1 | 1          | 0 | 2 | 1          | 0 | 1 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 71   | 174  | 240  | 40   | 63   | 51   | 119  | 422  | 23   | 99   | 347  | 35   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 87   | 214  | 296  | 49   | 78   | 63   | 147  | 520  | 28   | 122  | 428  | 43   |
| Added Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 87   | 214  | 296  | 49   | 78   | 63   | 147  | 520  | 28   | 122  | 428  | 43   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 92   | 226  | 311  | 52   | 82   | 66   | 154  | 547  | 30   | 128  | 450  | 45   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 92   | 226  | 311  | 52   | 82   | 66   | 154  | 547  | 30   | 128  | 450  | 45   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 92   | 226  | 311  | 52   | 82   | 66   | 154  | 547  | 30   | 128  | 450  | 45   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 1.00 | 1.00 | 1.00 | 0.55 | 0.45 | 1.00 | 2.84 | 0.16 | 1.00 | 1.82 |
| Final Sat.: | 315  | 337  | 366  | 325  | 195  | 158  | 327  | 983  | 54   | 317  | 620  |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.29 | 0.67 | 0.85 | 0.16 | 0.42 | 0.42 | 0.47 | 0.56 | 0.55 | 0.40 | 0.73 | 0.72 |
| Crit Moves:  | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Delay/Veh:   | 17.7 | 30.6 | 46.5 | 15.2 | 18.9 | 18.9 | 21.8 | 23.9 | 23.6 | 20.3 | 34.6 | 34.0 |
| Delay Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 17.7 | 30.6 | 46.5 | 15.2 | 18.9 | 18.9 | 21.8 | 23.9 | 23.6 | 20.3 | 34.6 | 34.0 |
| LOS by Move: | C    | D    | E    | C    | C    | C    | C    | C    | C    | C    | D    | D    |
| ApproachDel: | 36.6 |      |      | 17.9 |      |      | 23.4 |      |      | 31.6 |      |      |
| Delay Adj:   | 1.00 |      |      | 1.00 |      |      | 1.00 |      |      | 1.00 |      |      |
| ApprAdjDel:  | 36.6 |      |      | 17.9 |      |      | 23.4 |      |      | 31.6 |      |      |
| LOS by Appr: | E    |      |      | C    |      |      | C    |      |      | D    |      |      |
| AllWayAvgQ:  | 0.4  | 1.6  | 3.5  | 0.2  | 0.6  | 0.6  | 0.8  | 1.1  | 1.1  | 0.6  | 2.1  | 2.0  |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #40 Sierra Ave/Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.609  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 25.0  
Optimal Cycle: 39 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Ovl        |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 3 | 0           | 2 | 1 | 2          | 0 | 2 | 0          | 2 | 2 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 102  | 1006 | 50   | 409  | 555  | 277  | 200  | 103  | 45   | 25   | 182  | 366  |
| Growth Adj:   | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse:  | 126  | 1239 | 62   | 504  | 684  | 341  | 246  | 127  | 55   | 31   | 224  | 451  |
| Added Vol:    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:  | 126  | 1239 | 62   | 504  | 684  | 341  | 246  | 127  | 55   | 31   | 224  | 451  |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 132  | 1305 | 65   | 530  | 720  | 359  | 259  | 134  | 58   | 32   | 236  | 475  |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 132  | 1305 | 65   | 530  | 720  | 359  | 259  | 134  | 58   | 32   | 236  | 475  |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 132  | 1305 | 65   | 530  | 720  | 359  | 259  | 134  | 58   | 32   | 236  | 475  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.91 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 |
| Lanes:      | 2.00 | 3.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 |
| Final Sat.: | 3492 | 4914 | 1800 | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 | 3492 | 3168 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.04 | 0.27 | 0.04 | 0.15 | 0.21 | 0.20 | 0.07 | 0.04 | 0.03 | 0.01 | 0.07 | 0.15 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.10 | 0.44 | 0.44 | 0.25 | 0.58 | 0.58 | 0.12 | 0.19 | 0.19 | 0.05 | 0.11 | 0.36 |
| Volume/Cap:  | 0.36 | 0.61 | 0.08 | 0.61 | 0.36 | 0.34 | 0.61 | 0.21 | 0.17 | 0.21 | 0.61 | 0.41 |
| Delay/Veh:   | 42.3 | 22.2 | 16.6 | 34.5 | 11.3 | 11.2 | 44.2 | 34.3 | 34.1 | 46.7 | 45.1 | 24.1 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 42.3 | 22.2 | 16.6 | 34.5 | 11.3 | 11.2 | 44.2 | 34.3 | 34.1 | 46.7 | 45.1 | 24.1 |
| LOS by Move: | D    | C    | B    | C    | B    | B    | D    | C    | C    | D    | D    | C    |
| HCM2kAvgQ:   | 2    | 12   | 1    | 8    | 6    | 6    | 5    | 2    | 2    | 1    | 5    | 6    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #41 Sierra Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.417  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 21.4  
Optimal Cycle: 28 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 3 | 0           | 2 | 1 | 1          | 0 | 2 | 0          | 2 | 1 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 80   | 868  | 31   | 59   | 451  | 75   | 131  | 64   | 51   | 50   | 100  | 54   |
| Growth Adj:   | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse:  | 99   | 1069 | 38   | 73   | 556  | 92   | 161  | 79   | 63   | 62   | 123  | 67   |
| Added Vol:    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:  | 99   | 1069 | 38   | 73   | 556  | 92   | 161  | 79   | 63   | 62   | 123  | 67   |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 104  | 1126 | 40   | 77   | 585  | 97   | 170  | 83   | 66   | 65   | 130  | 70   |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 104  | 1126 | 40   | 77   | 585  | 97   | 170  | 83   | 66   | 65   | 130  | 70   |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 104  | 1126 | 40   | 77   | 585  | 97   | 170  | 83   | 66   | 65   | 130  | 70   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.91 | 1.00 | 0.97 | 0.91 | 0.91 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 |
| Lanes:      | 2.00 | 3.00 | 1.00 | 2.00 | 2.57 | 0.43 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 |
| Final Sat.: | 3492 | 4914 | 1800 | 3492 | 4213 | 701  | 1800 | 3420 | 1800 | 1800 | 3420 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |  |
|--------------|------|------|------|------|------|------|------|------|------|------|------|--|
| Vol/Sat:     | 0.03 | 0.23 | 0.02 | 0.02 | 0.14 | 0.14 | 0.09 | 0.02 | 0.04 | 0.04 | 0.04 |  |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |  |
| Green/Cycle: | 0.11 | 0.55 | 0.55 | 0.05 | 0.50 | 0.50 | 0.23 | 0.16 | 0.16 | 0.16 | 0.09 |  |
| Volume/Cap:  | 0.28 | 0.42 | 0.04 | 0.42 | 0.28 | 0.28 | 0.42 | 0.15 | 0.23 | 0.23 | 0.42 |  |
| Delay/Veh:   | 41.6 | 13.2 | 10.4 | 47.4 | 14.8 | 14.8 | 33.7 | 36.3 | 37.0 | 37.3 | 43.8 |  |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |  |
| AdjDel/Veh:  | 41.6 | 13.2 | 10.4 | 47.4 | 14.8 | 14.8 | 33.7 | 36.3 | 37.0 | 37.3 | 43.8 |  |
| LOS by Move: | D    | B    | B    | D    | B    | B    | C    | D    | D    | D    | D    |  |
| HCM2kAvgQ:   | 2    | 7    | 1    | 2    | 4    | 4    | 5    | 1    | 2    | 2    | 3    |  |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #42 Sierra Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.484  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 29.0  
Optimal Cycle: 31 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound  |   |   | West Bound  |   |   |
|-------------|-------------|---|---|-------------|---|---|-------------|---|---|-------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L           | T | R | L           | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Split Phase |   |   | Split Phase |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include     |   |   | Include     |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 |
| Lanes:      | 2           | 0 | 2 | 0           | 2 | 0 | 2           | 0 | 2 | 0           | 2 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 138  | 554  | 79   | 38   | 352  | 158  | 338  | 297  | 106  | 115  | 252  | 111  |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 170  | 683  | 97   | 47   | 434  | 195  | 416  | 366  | 131  | 142  | 310  | 137  |
| Added Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 170  | 683  | 97   | 47   | 434  | 195  | 416  | 366  | 131  | 142  | 310  | 137  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 179  | 718  | 102  | 49   | 456  | 205  | 438  | 385  | 137  | 149  | 327  | 144  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 179  | 718  | 102  | 49   | 456  | 205  | 438  | 385  | 137  | 149  | 327  | 144  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 179  | 718  | 102  | 49   | 456  | 205  | 438  | 385  | 137  | 149  | 327  | 144  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 |
| Lanes:      | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 |
| Final Sat.: | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.05 | 0.21 | 0.06 | 0.01 | 0.13 | 0.11 | 0.13 | 0.11 | 0.08 | 0.04 | 0.10 | 0.08 |
| Crit Moves:  | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Green/Cycle: | 0.13 | 0.43 | 0.43 | 0.03 | 0.33 | 0.33 | 0.26 | 0.26 | 0.26 | 0.20 | 0.20 | 0.20 |
| Volume/Cap:  | 0.40 | 0.48 | 0.13 | 0.48 | 0.40 | 0.34 | 0.48 | 0.43 | 0.29 | 0.22 | 0.48 | 0.41 |
| Delay/Veh:   | 40.6 | 20.5 | 17.1 | 51.4 | 25.8 | 25.3 | 31.8 | 31.3 | 30.0 | 33.8 | 36.2 | 35.8 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 40.6 | 20.5 | 17.1 | 51.4 | 25.8 | 25.3 | 31.8 | 31.3 | 30.0 | 33.8 | 36.2 | 35.8 |
| LOS by Move: | D    | C    | B    | D    | C    | C    | C    | C    | C    | C    | D    | D    |
| HCM2kAvgQ:   | 3    | 8    | 2    | 1    | 6    | 5    | 6    | 5    | 3    | 2    | 5    | 4    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #43 Armstrong Rd/Sierra Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.406  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 18.0  
Optimal Cycle: 27 Level Of Service: B

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Ignore     |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 0 | 1           | 0 | 0 | 1          | 0 | 2 | 1          | 0 | 1 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 572  | 136  | 18   | 11   | 171  | 21   | 9    | 6    | 459  | 29   | 23   | 13   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 705  | 168  | 22   | 14   | 211  | 26   | 11   | 7    | 565  | 36   | 28   | 16   |
| Added Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 705  | 168  | 22   | 14   | 211  | 26   | 11   | 7    | 565  | 36   | 28   | 16   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.00 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 742  | 176  | 23   | 14   | 222  | 27   | 12   | 8    | 0    | 38   | 30   | 17   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 742  | 176  | 23   | 14   | 222  | 27   | 12   | 8    | 0    | 38   | 30   | 17   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 742  | 176  | 23   | 14   | 222  | 27   | 12   | 8    | 0    | 38   | 30   | 17   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 |
| Lanes:      | 2.00 | 0.88 | 0.12 | 1.00 | 0.89 | 0.11 | 1.00 | 2.00 | 1.00 | 1.00 | 1.28 | 0.72 |
| Final Sat.: | 3492 | 1590 | 210  | 1800 | 1603 | 197  | 1800 | 3420 | 1800 | 1800 | 2185 | 1235 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.21 | 0.11 | 0.11 | 0.01 | 0.14 | 0.14 | 0.01 | 0.00 | 0.00 | 0.02 | 0.01 | 0.01 |
| Crit Moves:  | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Green/Cycle: | 0.52 | 0.81 | 0.81 | 0.06 | 0.34 | 0.34 | 0.02 | 0.01 | 0.00 | 0.05 | 0.04 | 0.04 |
| Volume/Cap:  | 0.41 | 0.14 | 0.14 | 0.14 | 0.41 | 0.41 | 0.35 | 0.41 | 0.00 | 0.41 | 0.35 | 0.35 |
| Delay/Veh:   | 14.6 | 2.2  | 2.2  | 45.4 | 25.7 | 25.7 | 54.9 | 63.0 | 0.0  | 48.9 | 48.5 | 48.5 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 14.6 | 2.2  | 2.2  | 45.4 | 25.7 | 25.7 | 54.9 | 63.0 | 0.0  | 48.9 | 48.5 | 48.5 |
| LOS by Move: | B    | A    | A    | D    | C    | C    | D    | E    | A    | D    | D    | D    |
| HCM2kAvgQ:   | 7    | 1    | 1    | 1    | 6    | 6    | 1    | 1    | 0    | 2    | 1    | 1    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #44 Armstrong Rd/SR-60 WB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.795  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 27.8  
Optimal Cycle: 57 Level Of Service: C

| Approach:   | North Bound | South Bound | East Bound  | West Bound  |
|-------------|-------------|-------------|-------------|-------------|
| Movement:   | L - T - R   | L - T - R   | L - T - R   | L - T - R   |
| Control:    | Protected   | Protected   | Split Phase | Split Phase |
| Rights:     | Include     | Include     | Include     | Include     |
| Min. Green: | 0 0 0       | 0 0 0       | 0 0 0       | 0 0 0       |
| Lanes:      | 1 0 2 0 0   | 0 0 1 1 0   | 0 0 0 0 0   | 1 0 0 1 0   |

| Volume Module: | Base Vol: | 202  | 512  | 0    | 0    | 611  | 240  | 0    | 0    | 199  | 9    | 378  |
|----------------|-----------|------|------|------|------|------|------|------|------|------|------|------|
| Growth Adj:    | 1.23      | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse:   | 249       | 631  | 0    | 0    | 753  | 296  | 0    | 0    | 0    | 245  | 11   | 466  |
| Added Vol:     | 0         | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol:   | 0         | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:   | 249       | 631  | 0    | 0    | 753  | 296  | 0    | 0    | 0    | 245  | 11   | 466  |
| User Adj:      | 1.00      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:       | 0.95      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:    | 262       | 664  | 0    | 0    | 792  | 311  | 0    | 0    | 0    | 258  | 12   | 490  |
| Reduct Vol:    | 0         | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:   | 262       | 664  | 0    | 0    | 792  | 311  | 0    | 0    | 0    | 258  | 12   | 490  |
| PCE Adj:       | 1.00      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:       | 1.00      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume:   | 262       | 664  | 0    | 0    | 792  | 311  | 0    | 0    | 0    | 258  | 12   | 490  |

| Saturation Flow Module: | Sat/Lane: | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
|-------------------------|-----------|------|------|------|------|------|------|------|------|------|------|
| Adjustment:             | 1.00      | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:                  | 1.00      | 2.00 | 0.00 | 0.00 | 1.44 | 0.56 | 0.00 | 0.00 | 0.00 | 1.00 | 0.02 |
| Final Sat.:             | 1800      | 3420 | 0    | 0    | 2455 | 965  | 0    | 0    | 0    | 1800 | 42   |

| Capacity Analysis Module: | Vol/Sat: | 0.15 | 0.19 | 0.00 | 0.00 | 0.32 | 0.32 | 0.00 | 0.00 | 0.00 | 0.14 | 0.28 |
|---------------------------|----------|------|------|------|------|------|------|------|------|------|------|------|
| Crit Moves:               | ****     | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Green/Cycle:              | 0.18     | 0.59 | 0.00 | 0.00 | 0.41 | 0.41 | 0.00 | 0.00 | 0.00 | 0.35 | 0.35 | 0.35 |
| Volume/Cap:               | 0.79     | 0.33 | 0.00 | 0.00 | 0.79 | 0.79 | 0.00 | 0.00 | 0.00 | 0.41 | 0.79 | 0.79 |
| Delay/Veh:                | 51.6     | 10.6 | 0.0  | 0.0  | 29.3 | 29.3 | 0.0  | 0.0  | 0.0  | 25.0 | 36.1 | 36.1 |
| User DelAdj:              | 1.00     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:               | 51.6     | 10.6 | 0.0  | 0.0  | 29.3 | 29.3 | 0.0  | 0.0  | 0.0  | 25.0 | 36.1 | 36.1 |
| LOS by Move:              | D        | B    | A    | A    | C    | C    | A    | A    | A    | C    | D    | D    |
| HCM2kAvgQ:                | 10       | 5    | 0    | 0    | 17   | 17   | 0    | 0    | 0    | 6    | 16   | 16   |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #45 Armstrong Rd/SR-60 EB Ramps

Average Delay (sec/veh): 79.7 Worst Case Level Of Service: F[640.2]

| Approach: | North Bound  | South Bound  | East Bound | West Bound |
|-----------|--------------|--------------|------------|------------|
| Movement: | L - T - R    | L - T - R    | L - T - R  | L - T - R  |
| Control:  | Uncontrolled | Uncontrolled | Stop Sign  | Stop Sign  |
| Rights:   | Include      | Include      | Include    | Include    |
| Lanes:    | 0 0 1 1 0    | 1 0 2 0 0    | 0 1 0 1 0  | 0 0 0 0 0  |

| Volume Module: | Base Vol: | 0    | 638  | 363  | 300  | 485  | 0    | 88   | 1    | 151  | 0    | 0    |
|----------------|-----------|------|------|------|------|------|------|------|------|------|------|------|
| Growth Adj:    | 1.23      | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse:   | 0         | 786  | 447  | 370  | 598  | 0    | 108  | 1    | 186  | 0    | 0    | 0    |
| Added Vol:     | 0         | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol:   | 0         | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:   | 0         | 786  | 447  | 370  | 598  | 0    | 108  | 1    | 186  | 0    | 0    | 0    |
| User Adj:      | 1.00      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:       | 0.95      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:    | 0         | 827  | 471  | 389  | 629  | 0    | 114  | 1    | 196  | 0    | 0    | 0    |
| Reduct Vol:    | 0         | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| FinalVolume:   | 0         | 827  | 471  | 389  | 629  | 0    | 114  | 1    | 196  | 0    | 0    | 0    |

| Critical Gap Module: | Critical Gap: | 4.1  | xxxx | xxxx | 6.8  | 6.5  | 6.9 | xxxx | xxxx | xxxx |
|----------------------|---------------|------|------|------|------|------|-----|------|------|------|
| FollowUpTim:         | xxxx          | xxxx | xxxx | 2.2  | xxxx | xxxx | 3.5 | 4.0  | 3.3  | xxxx |

| Capacity Module: | Cnflct Vol: | xxxx | xxxx | xxxx | 1298 | xxxx | xxxx | 1821 | 2705 | 314  | xxxx | xxxx |
|------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|
| Potent Cap.:     | xxxx        | xxxx | xxxx | 540  | xxxx | xxxx | 70   | 22   | 687  | xxxx | xxxx | xxxx |
| Move Cap.:       | xxxx        | xxxx | xxxx | 540  | xxxx | xxxx | 29   | 6    | 687  | xxxx | xxxx | xxxx |
| Volume/Cap:      | xxxx        | xxxx | xxxx | 0.72 | xxxx | xxxx | 3.91 | 0.22 | 0.28 | xxxx | xxxx | xxxx |

| Level Of Service Module: | 2Way95thQ:    | xxxx          | xxxx          | xxxx          | 5.9           | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          |
|--------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Control Del:             | xxxx          | xxxx          | xxxx          | 26.9          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          |
| LOS by Move:             | *             | *             | *             | D             | *             | *             | *             | *             | *             | *             | *             | *             |
| Movement:                | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT |
| Shared Cap.:             | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | 28            | xxxx          | 394           | xxxx          | xxxx          | xxxx          |
| SharedQueue:             | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | 14.0          | xxxx          | 2.7           | xxxx          | xxxx          | xxxx          |
| Shrd ConDel:             | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | 1694          | xxxx          | 22.9          | xxxx          | xxxx          | xxxx          |
| Shared LOS:              | *             | *             | *             | *             | *             | *             | F             | *             | C             | *             | *             | *             |
| ApproachDel:             | xxxxxx        | xxxxxx        | xxxxxx        | 640.2         | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        |
| ApproachLOS:             | *             | *             | *             | F             | *             | *             | F             | *             | F             | *             | *             | *             |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 I-15 SB Ramps/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.916  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 30.5  
Optimal Cycle: 104 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |   |
| Control:    | Split Phase |   |   | Split Phase |   |   | Protected  |   |   | Protected  |   |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |   |
| Lanes:      | 0           | 0 | 0 | 1           | 0 | 1 | 0          | 0 | 3 | 0          | 1 | 2 | 0 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 0    | 0    | 0    | 405  | 27   | 376  | 0    | 938  | 554  | 435  | 419  | 0    |
| Growth Adj:   | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse:  | 0    | 0    | 0    | 499  | 33   | 463  | 0    | 1156 | 683  | 536  | 516  | 0    |
| Added Vol:    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:  | 0    | 0    | 0    | 499  | 33   | 463  | 0    | 1156 | 683  | 536  | 516  | 0    |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 0    | 0    | 0    | 525  | 35   | 488  | 0    | 1216 | 718  | 564  | 543  | 0    |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 0    | 0    | 0    | 525  | 35   | 488  | 0    | 1216 | 718  | 564  | 543  | 0    |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 0    | 0    | 0    | 525  | 35   | 488  | 0    | 1216 | 718  | 564  | 543  | 0    |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 1.00 | 0.97 | 0.91 | 1.00 |
| Lanes:      | 0.00 | 0.00 | 0.00 | 1.49 | 0.06 | 1.45 | 0.00 | 3.00 | 1.00 | 2.00 | 3.00 | 0.00 |
| Final Sat.: | 0    | 0    | 0    | 2673 | 116  | 2611 | 0    | 4914 | 1800 | 3492 | 4914 | 0    |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.00 | 0.00 | 0.00 | 0.20 | 0.30 | 0.19 | 0.00 | 0.25 | 0.40 | 0.16 | 0.11 | 0.00 |
| Crit Moves:  | **** |      |      |      |      |      |      |      |      |      |      |      |
| Green/Cycle: | 0.00 | 0.00 | 0.00 | 0.33 | 0.33 | 0.33 | 0.00 | 0.44 | 0.44 | 0.18 | 0.61 | 0.00 |
| Volume/Cap:  | 0.00 | 0.00 | 0.00 | 0.60 | 0.92 | 0.57 | 0.00 | 0.57 | 0.92 | 0.92 | 0.18 | 0.00 |
| Delay/Veh:   | 0.0  | 0.0  | 0.0  | 28.7 | 43.7 | 28.2 | 0.0  | 21.5 | 42.0 | 59.1 | 8.5  | 0.0  |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 0.0  | 0.0  | 0.0  | 28.7 | 43.7 | 28.2 | 0.0  | 21.5 | 42.0 | 59.1 | 8.5  | 0.0  |
| LOS by Move: | A    | A    | A    | C    | D    | C    | A    | C    | D    | E    | A    | A    |
| HCM2kAvgQ:   | 0    | 0    | 0    | 10   | 20   | 9    | 0    | 11   | 25   | 13   | 3    | 0    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 I-15 NB Ramps/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 1.049  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 39.8  
Optimal Cycle: 180 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Split Phase |   |   | Split Phase |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 0           | 1 | 0 | 2          | 0 | 3 | 0          | 0 | 1 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 134  | 1    | 202  | 0    | 0    | 0    | 614  | 730  | 0    | 0    | 706  | 883  |
| Growth Adj:   | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse:  | 165  | 1    | 249  | 0    | 0    | 0    | 756  | 899  | 0    | 0    | 870  | 1088 |
| Added Vol:    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:  | 165  | 1    | 249  | 0    | 0    | 0    | 756  | 899  | 0    | 0    | 870  | 1088 |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 174  | 1    | 262  | 0    | 0    | 0    | 796  | 947  | 0    | 0    | 916  | 1145 |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 174  | 1    | 262  | 0    | 0    | 0    | 796  | 947  | 0    | 0    | 916  | 1145 |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 174  | 1    | 262  | 0    | 0    | 0    | 796  | 947  | 0    | 0    | 916  | 1145 |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.97 | 0.91 | 1.00 | 1.00 | 0.91 | 1.00 |
| Lanes:      | 1.39 | 0.01 | 1.60 | 0.00 | 0.00 | 0.00 | 2.00 | 3.00 | 0.00 | 0.00 | 3.00 | 1.00 |
| Final Sat.: | 2514 | 11   | 2876 | 0    | 0    | 0    | 3492 | 4914 | 0    | 0    | 4914 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.07 | 0.12 | 0.09 | 0.00 | 0.00 | 0.00 | 0.23 | 0.19 | 0.00 | 0.00 | 0.19 | 0.64 |
| Crit Moves:  | **** |      |      |      |      |      |      |      |      |      |      |      |
| Green/Cycle: | 0.12 | 0.12 | 0.12 | 0.00 | 0.00 | 0.00 | 0.22 | 0.82 | 0.00 | 0.00 | 0.61 | 0.61 |
| Volume/Cap:  | 0.60 | 1.05 | 0.78 | 0.00 | 0.00 | 0.00 | 1.05 | 0.23 | 0.00 | 0.00 | 0.31 | 1.05 |
| Delay/Veh:   | 43.3 | 102  | 50.2 | 0.0  | 0.0  | 0.0  | 85.3 | 2.0  | 0.0  | 0.0  | 9.6  | 60.7 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 43.3 | 102  | 50.2 | 0.0  | 0.0  | 0.0  | 85.3 | 2.0  | 0.0  | 0.0  | 9.6  | 60.7 |
| LOS by Move: | D    | F    | D    | A    | A    | A    | F    | A    | A    | A    | A    | E    |
| HCM2kAvgQ:   | 5    | 12   | 7    | 0    | 0    | 0    | 20   | 2    | 0    | 0    | 5    | 48   |

Note: Queue reported is the number of cars per lane.















FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #15 Mulberry Ave/Jurupa St  
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 1.119  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 65.9  
Optimal Cycle: 180 Level Of Service: E  
\*\*\*\*\*

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 2 | 0           | 1 | 0 | 2          | 0 | 1 | 1          | 0 | 2 |

Volume Module:  
Base Vol: 129 278 338 55 427 188 149 1232 417 387 758 49  
Growth Adj: 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23  
Initial Bse: 159 342 416 68 526 232 184 1518 514 477 934 60  
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0  
Initial Fut: 159 342 416 68 526 232 184 1518 514 477 934 60  
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95  
PHF Volume: 167 361 438 71 554 244 193 1598 541 502 983 64  
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
Reduced Vol: 167 361 438 71 554 244 193 1598 541 502 983 64  
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
FinalVolume: 167 361 438 71 554 244 193 1598 541 502 983 64  
-----

Saturation Flow Module:  
Sat/Lane: 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800  
Adjustment: 0.97 0.95 1.00 1.00 0.95 1.00 1.00 0.95 1.00 1.00 0.95 1.00  
Lanes: 2.00 2.00 1.00 1.00 2.00 1.00 1.00 2.00 1.00 1.00 2.00 1.00  
Final Sat.: 3492 3420 1800 1800 3420 1800 1800 3420 1800 1800 3420 1800  
-----

Capacity Analysis Module:  
Vol/Sat: 0.05 0.11 0.24 0.04 0.16 0.14 0.11 0.47 0.30 0.28 0.29 0.04  
Crit Moves: \*\*\*\*  
Green/Cycle: 0.06 0.22 0.22 0.04 0.20 0.20 0.18 0.42 0.42 0.25 0.49 0.49  
Volume/Cap: 0.83 0.48 1.12 1.12 0.83 0.69 0.59 1.12 0.72 1.12 0.59 0.07  
Delay/Veh: 70.6 34.7 120.8 197.1 47.2 43.3 40.4 92.5 27.6 116.5 19.1 13.8  
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
AdjDel/Veh: 70.6 34.7 120.8 197.1 47.2 43.3 40.4 92.5 27.6 116.5 19.1 13.8  
LOS by Move: E C F F D D D F C F B B  
HCM2kAvgQ: 5 6 23 5 11 8 6 41 15 26 12 1  
\*\*\*\*\*

Note: Queue reported is the number of cars per lane.  
\*\*\*\*\*

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #16 Mulberry Ave/Marlay Ave  
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.477  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 21.9  
Optimal Cycle: 31 Level Of Service: C  
\*\*\*\*\*

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 1 | 0 | 1          | 0 | 1 | 1          | 0 | 1 |

Volume Module:  
Base Vol: 40 377 70 47 688 37 93 125 142 65 21 25  
Growth Adj: 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23  
Initial Bse: 49 464 86 58 848 46 115 154 175 80 26 31  
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0  
Initial Fut: 49 464 86 58 848 46 115 154 175 80 26 31  
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95  
PHF Volume: 52 489 91 61 892 48 121 162 184 84 27 32  
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
Reduced Vol: 52 489 91 61 892 48 121 162 184 84 27 32  
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
FinalVolume: 52 489 91 61 892 48 121 162 184 84 27 32  
-----

Saturation Flow Module:  
Sat/Lane: 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800  
Adjustment: 1.00 0.95 1.00 1.00 0.95 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
Lanes: 1.00 2.00 1.00 1.00 2.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
Final Sat.: 1800 3420 1800 1800 3420 1800 1800 3420 1800 1800 3420 1800  
-----

Capacity Analysis Module:  
Vol/Sat: 0.03 0.14 0.05 0.03 0.26 0.03 0.07 0.09 0.10 0.05 0.02 0.02  
Crit Moves: \*\*\*\*  
Green/Cycle: 0.06 0.49 0.49 0.12 0.55 0.55 0.25 0.21 0.21 0.10 0.07 0.07  
Volume/Cap: 0.48 0.29 0.10 0.29 0.48 0.05 0.27 0.42 0.48 0.48 0.23 0.27  
Delay/Veh: 48.7 15.2 13.7 41.2 14.1 10.6 30.8 34.6 35.3 44.7 45.2 45.6  
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
AdjDel/Veh: 48.7 15.2 13.7 41.2 14.1 10.6 30.8 34.6 35.3 44.7 45.2 45.6  
LOS by Move: D B B D B B C C D D D D  
HCM2kAvgQ: 2 5 1 2 9 1 3 5 5 3 1 1  
\*\*\*\*\*

Note: Queue reported is the number of cars per lane.  
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FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #19 Mulberry Ave/SR-60 EB Ramps

|                           |                 |                          |                |                |
|---------------------------|-----------------|--------------------------|----------------|----------------|
| Cycle (sec):              | 100             | Critical Vol./Cap.(X):   |                | 1.028          |
| Loss Time (sec):          | 6 (Y+R=4.0 sec) | Average Delay (sec/veh): |                | 47.9           |
| Optimal Cycle:            | 180             | Level Of Service:        |                | D              |
| Approach:                 | North Bound     | South Bound              | East Bound     | West Bound     |
| Movement:                 | L - T - R       | L - T - R                | L - T - R      | L - T - R      |
| Control:                  | Protected       | Protected                | Split Phase    | Split Phase    |
| Rights:                   | Include         | Include                  | Include        | Include        |
| Min. Green:               | 0 0 0           | 0 0 0                    | 0 0 0          | 0 0 0          |
| Lanes:                    | 0 0 1 1 0       | 1 0 2 0 0                | 1 0 1 0 0      | 0 0 0 0 0      |
| Volume Module:            |                 |                          |                |                |
| Base Vol:                 | 0 634 157       | 235 496 0                | 745 0 317      | 0 0 0          |
| Growth Adj:               | 1.23 1.23 1.23  | 1.23 1.23 1.23           | 1.23 1.23 1.23 | 1.23 1.23 1.23 |
| Initial Bse:              | 0 781 193       | 290 611 0                | 918 0 391      | 0 0 0          |
| Added Vol:                | 0 0 0           | 0 0 0                    | 0 0 0          | 0 0 0          |
| PasserByVol:              | 0 0 0           | 0 0 0                    | 0 0 0          | 0 0 0          |
| Initial Fut:              | 0 781 193       | 290 611 0                | 918 0 391      | 0 0 0          |
| User Adj:                 | 1.00 1.00 1.00  | 1.00 1.00 1.00           | 1.00 1.00 1.00 | 1.00 1.00 1.00 |
| PHF Adj:                  | 0.95 0.95 0.95  | 0.95 0.95 0.95           | 0.95 0.95 0.95 | 0.95 0.95 0.95 |
| PHF Volume:               | 0 822 204       | 305 643 0                | 966 0 411      | 0 0 0          |
| Reduct Vol:               | 0 0 0           | 0 0 0                    | 0 0 0          | 0 0 0          |
| Reduced Vol:              | 0 822 204       | 305 643 0                | 966 0 411      | 0 0 0          |
| PCE Adj:                  | 1.00 1.00 1.00  | 1.00 1.00 1.00           | 1.00 1.00 1.00 | 1.00 1.00 1.00 |
| MLF Adj:                  | 1.00 1.00 1.00  | 1.00 1.00 1.00           | 1.00 1.00 1.00 | 1.00 1.00 1.00 |
| FinalVolume:              | 0 822 204       | 305 643 0                | 966 0 411      | 0 0 0          |
| Saturation Flow Module:   |                 |                          |                |                |
| Sat/Lane:                 | 1800 1800 1800  | 1800 1800 1800           | 1800 1800 1800 | 1800 1800 1800 |
| Adjustment:               | 1.00 0.95 0.95  | 1.00 0.95 1.00           | 1.00 1.00 1.00 | 1.00 1.00 1.00 |
| Lanes:                    | 0.00 1.60 0.40  | 1.00 2.00 0.00           | 1.54 0.00 0.46 | 0.00 0.00 0.00 |
| Final Sat.:               | 0 2741 679      | 1800 3420 0              | 2772 0 828     | 0 0 0          |
| Capacity Analysis Module: |                 |                          |                |                |
| Vol/Sat:                  | 0.00 0.30 0.30  | 0.17 0.19 0.00           | 0.35 0.00 0.50 | 0.00 0.00 0.00 |
| Crit Moves:               | ****            | ****                     | ****           | ****           |
| Green/Cycle:              | 0.00 0.29 0.29  | 0.16 0.46 0.00           | 0.48 0.00 0.48 | 0.00 0.00 0.00 |
| Volume/Cap:               | 0.00 1.03 1.03  | 1.03 0.41 0.00           | 0.72 0.00 1.03 | 0.00 0.00 0.00 |
| Delay/Veh:                | 0.0 71.2 71.2   | 101.3 18.4 0.0           | 21.9 0.0 57.7  | 0.0 0.0 0.0    |
| User DelAdj:              | 1.00 1.00 1.00  | 1.00 1.00 1.00           | 1.00 1.00 1.00 | 1.00 1.00 1.00 |
| AdjDel/Veh:               | 0.0 71.2 71.2   | 101.3 18.4 0.0           | 21.9 0.0 57.7  | 0.0 0.0 0.0    |
| LOS by Move:              | A E E           | F B A                    | C A E          | A A A          |
| HCM2kAvgQ:                | 0 24 24         | 15 7 0                   | 16 0 37        | 0 0 0          |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #20 Banana Ave/San Bernardino Ave

|                          |  |  |     |                    |  |                                       |                   |  |  |                   |  |  |                   |  |  |  |  |
|--------------------------|--|--|-----|--------------------|--|---------------------------------------|-------------------|--|--|-------------------|--|--|-------------------|--|--|--|--|
| Average Delay (sec/veh): |  |  | 0.7 |                    |  | Worst Case Level Of Service: B[ 13.6] |                   |  |  |                   |  |  |                   |  |  |  |  |
| *****                    |  |  |     |                    |  |                                       |                   |  |  |                   |  |  |                   |  |  |  |  |
| Approach:                |  |  |     | North Bound        |  |                                       | South Bound       |  |  | East Bound        |  |  | West Bound        |  |  |  |  |
| Movement:                |  |  |     | L - T - R          |  |                                       | L - T - R         |  |  | L - T - R         |  |  | L - T - R         |  |  |  |  |
| -----                    |  |  |     | -----              |  |                                       | -----             |  |  | -----             |  |  | -----             |  |  |  |  |
| Control:                 |  |  |     | Stop Sign          |  |                                       | Stop Sign         |  |  | Uncontrolled      |  |  | Uncontrolled      |  |  |  |  |
| Rights:                  |  |  |     | Include            |  |                                       | Include           |  |  | Include           |  |  | Include           |  |  |  |  |
| Lanes:                   |  |  |     | 0 0 1! 0 0         |  |                                       | 0 0 0 0 0         |  |  | 0 0 2 0 1         |  |  | 1 0 2 0 0         |  |  |  |  |
| -----                    |  |  |     | -----              |  |                                       | -----             |  |  | -----             |  |  | -----             |  |  |  |  |
| Volume Module:           |  |  |     |                    |  |                                       |                   |  |  |                   |  |  |                   |  |  |  |  |
| Base Vol:                |  |  |     | 6 0 42             |  |                                       | 0 0 0             |  |  | 0 652 12          |  |  | 9 331 0           |  |  |  |  |
| Growth Adj:              |  |  |     | 1.23 1.23 1.23     |  |                                       | 1.23 1.23 1.23    |  |  | 1.23 1.23 1.23    |  |  | 1.23 1.23 1.23    |  |  |  |  |
| Initial Bse:             |  |  |     | 7 0 52             |  |                                       | 0 0 0             |  |  | 0 803 15          |  |  | 11 408 0          |  |  |  |  |
| Added Vol:               |  |  |     | 0 0 0              |  |                                       | 0 0 0             |  |  | 0 0 0             |  |  | 0 0 0             |  |  |  |  |
| PasserByVol:             |  |  |     | 0 0 0              |  |                                       | 0 0 0             |  |  | 0 0 0             |  |  | 0 0 0             |  |  |  |  |
| Initial Fut:             |  |  |     | 7 0 52             |  |                                       | 0 0 0             |  |  | 0 803 15          |  |  | 11 408 0          |  |  |  |  |
| User Adj:                |  |  |     | 1.00 1.00 1.00     |  |                                       | 1.00 1.00 1.00    |  |  | 1.00 1.00 1.00    |  |  | 1.00 1.00 1.00    |  |  |  |  |
| PHF Adj:                 |  |  |     | 0.95 0.95 0.95     |  |                                       | 0.95 0.95 0.95    |  |  | 0.95 0.95 0.95    |  |  | 0.95 0.95 0.95    |  |  |  |  |
| PHF Volume:              |  |  |     | 8 0 54             |  |                                       | 0 0 0             |  |  | 0 846 16          |  |  | 12 429 0          |  |  |  |  |
| Reduct Vol:              |  |  |     | 0 0 0              |  |                                       | 0 0 0             |  |  | 0 0 0             |  |  | 0 0 0             |  |  |  |  |
| FinalVolume:             |  |  |     | 8 0 54             |  |                                       | 0 0 0             |  |  | 0 846 16          |  |  | 12 429 0          |  |  |  |  |
| -----                    |  |  |     | -----              |  |                                       | -----             |  |  | -----             |  |  | -----             |  |  |  |  |
| Critical Gap Module:     |  |  |     |                    |  |                                       |                   |  |  |                   |  |  |                   |  |  |  |  |
| Critical Gp:             |  |  |     | 6.8 6.5 6.9        |  |                                       | xxxxx xxxx xxxxx  |  |  | xxxxx xxxx xxxxx  |  |  | 4.1 xxxx xxxxx    |  |  |  |  |
| FollowUpTim:             |  |  |     | 3.5 4.0 3.3        |  |                                       | xxxxx xxxx xxxxx  |  |  | xxxxx xxxx xxxxx  |  |  | 2.2 xxxx xxxxx    |  |  |  |  |
| -----                    |  |  |     | -----              |  |                                       | -----             |  |  | -----             |  |  | -----             |  |  |  |  |
| Capacity Module:         |  |  |     |                    |  |                                       |                   |  |  |                   |  |  |                   |  |  |  |  |
| Cnflct Vol:              |  |  |     | 1084 1298 423      |  |                                       | xxxxx xxxx xxxxx  |  |  | xxxxx xxxx xxxxx  |  |  | 861 xxxx xxxxx    |  |  |  |  |
| Potent Cap.:             |  |  |     | 215 163 585        |  |                                       | xxxxx xxxx xxxxx  |  |  | xxxxx xxxx xxxxx  |  |  | 789 xxxx xxxxx    |  |  |  |  |
| Move Cap.:               |  |  |     | 212 161 585        |  |                                       | xxxxx xxxx xxxxx  |  |  | xxxxx xxxx xxxxx  |  |  | 789 xxxx xxxxx    |  |  |  |  |
| Volume/Cap:              |  |  |     | 0.04 0.00 0.09     |  |                                       | xxxxx xxxx xxxxx  |  |  | xxxxx xxxx xxxxx  |  |  | 0.01 xxxx xxxxx   |  |  |  |  |
| -----                    |  |  |     | -----              |  |                                       | -----             |  |  | -----             |  |  | -----             |  |  |  |  |
| Level Of Service Module: |  |  |     |                    |  |                                       |                   |  |  |                   |  |  |                   |  |  |  |  |
| 2Way95thQ:               |  |  |     | xxxxx xxxx xxxxx   |  |                                       | xxxxx xxxx xxxxx  |  |  | xxxxx xxxx xxxxx  |  |  | 0.0 xxxx xxxxx    |  |  |  |  |
| Control Del:             |  |  |     | xxxxx xxxx xxxxx   |  |                                       | xxxxx xxxx xxxxx  |  |  | xxxxx xxxx xxxxx  |  |  | 9.6 xxxx xxxxx    |  |  |  |  |
| LOS by Move:             |  |  |     | * * *              |  |                                       | * * *             |  |  | * * *             |  |  | A * *             |  |  |  |  |
| Movement:                |  |  |     | LT - LTR - RT      |  |                                       | LT - LTR - RT     |  |  | LT - LTR - RT     |  |  | LT - LTR - RT     |  |  |  |  |
| Shared Cap.:             |  |  |     | xxxxx 480 xxxxx    |  |                                       | xxxxx xxxx xxxxx  |  |  | xxxxx xxxx xxxxx  |  |  | xxxxx xxxx xxxxx  |  |  |  |  |
| SharedQueue:             |  |  |     | xxxxxx 0.4 xxxxxx  |  |                                       | xxxxxx xxxx xxxxx |  |  | xxxxxx xxxx xxxxx |  |  | xxxxxx xxxx xxxxx |  |  |  |  |
| Shrd ConDel:             |  |  |     | xxxxxx 13.6 xxxxxx |  |                                       | xxxxxx xxxx xxxxx |  |  | xxxxxx xxxx xxxxx |  |  | xxxxxx xxxx xxxxx |  |  |  |  |
| Shared LOS:              |  |  |     | * B *              |  |                                       | * * *             |  |  | * * *             |  |  | * * *             |  |  |  |  |
| ApproachDel:             |  |  |     | 13.6               |  |                                       | xxxxxxx           |  |  | xxxxxxx           |  |  | xxxxxxx           |  |  |  |  |
| ApproachLOS:             |  |  |     | B                  |  |                                       | *                 |  |  | *                 |  |  | *                 |  |  |  |  |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
PM PEAK HOUR

## Level Of Service Computation Report

## 2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #21 Banana Ave/Valley Blvd

Average Delay (sec/veh): 4.3 Worst Case Level Of Service: F[ 99.7]

Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Stop Sign Stop Sign Uncontrolled Uncontrolled  
Rights: Include Include Include Include  
Lanes: 0 0 1! 0 0 0 0 1! 0 0 1 0 2 0 1 1 0 1 1 0

## Volume Module:

Base Vol: 15 0 15 27 0 34 50 1023 12 8 577 36  
Growth Adj: 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23  
Initial Bse: 18 0 18 33 0 42 62 1260 15 10 711 44  
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0  
Initial Fut: 18 0 18 33 0 42 62 1260 15 10 711 44  
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95  
PHF Volume: 19 0 19 35 0 44 65 1327 16 10 748 47  
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
FinalVolume: 19 0 19 35 0 44 65 1327 16 10 748 47

## Critical Gap Module:

Critical Gap: 7.5 6.5 6.9 7.5 6.5 6.9 4.1 xxxx xxxxx 4.1 xxxx xxxxx  
FollowUpTim: 3.5 4.0 3.3 3.5 4.0 3.3 2.2 xxxx xxxxx 2.2 xxxx xxxxx

## Capacity Module:

Cnflct Vol: 1851 2272 663 1585 2264 397 795 xxxx xxxxx 1342 xxxx xxxxx  
Potent Cap.: 47 41 408 74 41 608 835 xxxx xxxxx 520 xxxx xxxxx  
Move Cap.: 40 37 408 65 37 608 835 xxxx xxxxx 520 xxxx xxxxx  
Volume/Cap: 0.48 0.00 0.05 0.53 0.00 0.07 0.08 xxxx xxxxx 0.02 xxxx xxxxx

## Level Of Service Module:

2Way95thQ: xxxx xxxx xxxxx xxxx xxxx xxxxx 0.3 xxxx xxxxx 0.1 xxxx xxxxx  
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx 9.7 xxxx xxxxx 12.1 xxxx xxxxx  
LOS by Move: \* \* \* \* \* A \* \* \* B \* \* \*  
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT  
Shared Cap.: xxxx 73 xxxxx xxxx 130 xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx  
SharedQueue:xxxxx 2.2 xxxxx xxxxx 3.1 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx  
Shrd ConDel:xxxxx 99.7 xxxxx xxxxx 68.2 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx  
Shared LOS: \* F \* \* F \* \* \* \*  
ApproachDel: 99.7 68.2 xxxxxx xxxxxx  
ApproachLOS: F F \* \*

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
PM PEAK HOUR

## Level Of Service Computation Report

## 2000 HCM Operations Method (Future Volume Alternative)

Intersection #22 Cherry Ave/San Bernardino Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.641

Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 28.5

Optimal Cycle: 42 Level Of Service: C

Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected  
Rights: Include Ignore Ignore Include  
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0  
Lanes: 1 0 2 1 0 1 0 3 0 1 1 0 2 0 1 1 0 1 1 0

## Volume Module:

Base Vol: 19 834 87 58 731 143 315 426 88 119 157 48  
Growth Adj: 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23  
Initial Bse: 23 1027 107 71 901 176 388 525 108 147 193 59  
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0  
Initial Fut: 23 1027 107 71 901 176 388 525 108 147 193 59  
User Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 0.00 1.00 1.00 1.00  
PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.00 0.95 0.95 0.00 0.95 0.95 0.95  
PHF Volume: 25 1082 113 75 948 0 409 552 0 154 204 62  
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
Reduced Vol: 25 1082 113 75 948 0 409 552 0 154 204 62  
PCE Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 0.00 1.00 1.00 1.00  
MLF Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 0.00 1.00 1.00 1.00  
FinalVolume: 25 1082 113 75 948 0 409 552 0 154 204 62

## Saturation Flow Module:

Sat/Lane: 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800  
Adjustment: 1.00 0.91 0.91 1.00 0.91 1.00 1.00 0.95 1.00 1.00 0.95 0.95  
Lanes: 1.00 2.72 0.28 1.00 3.00 1.00 1.00 2.00 1.00 1.00 1.53 0.47  
Final Sat.: 1800 4450 464 1800 4914 1800 1800 3420 1800 1800 2619 801

## Capacity Analysis Module:

Vol/Sat: 0.01 0.24 0.24 0.04 0.19 0.00 0.23 0.16 0.00 0.09 0.08 0.08  
Crit Moves: \*\*\*\* \*\*\*\* \*\*\*\*  
Green/Cycle: 0.03 0.38 0.38 0.07 0.42 0.00 0.35 0.31 0.00 0.16 0.12 0.12  
Volume/Cap: 0.46 0.64 0.64 0.64 0.46 0.00 0.64 0.52 0.00 0.52 0.64 0.64  
Delay/Veh: 54.1 26.2 26.2 57.0 21.4 0.0 29.2 28.8 0.0 39.8 45.2 45.2  
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
AdjDel/Veh: 54.1 26.2 26.2 57.0 21.4 0.0 29.2 28.8 0.0 39.8 45.2 45.2  
LOS by Move: D C C E C A C C A D D D  
HCM2kAvgQ: 1 12 12 3 8 0 11 8 0 5 5 5

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
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PM PEAK HOUR

## Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #23 Cherry Ave/Valley Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.856  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 40.9  
Optimal Cycle: 81 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 1 | 1 | 1          | 0 | 2 | 0          | 1 | 1 |

## Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 118  | 531  | 306  | 139  | 632  | 127  | 124  | 699  | 197  | 275  | 408  | 63   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 145  | 654  | 377  | 171  | 779  | 156  | 153  | 861  | 243  | 339  | 503  | 78   |
| Added Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 145  | 654  | 377  | 171  | 779  | 156  | 153  | 861  | 243  | 339  | 503  | 78   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 153  | 689  | 397  | 180  | 820  | 165  | 161  | 906  | 255  | 357  | 529  | 82   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 153  | 689  | 397  | 180  | 820  | 165  | 161  | 906  | 255  | 357  | 529  | 82   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 153  | 689  | 397  | 180  | 820  | 165  | 161  | 906  | 255  | 357  | 529  | 82   |

## Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 |

## Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.09 | 0.20 | 0.22 | 0.10 | 0.24 | 0.09 | 0.09 | 0.27 | 0.14 | 0.20 | 0.15 | 0.05 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.10 | 0.26 | 0.26 | 0.12 | 0.28 | 0.28 | 0.20 | 0.31 | 0.31 | 0.23 | 0.34 | 0.34 |
| Volume/Cap:  | 0.86 | 0.77 | 0.85 | 0.85 | 0.86 | 0.33 | 0.45 | 0.86 | 0.46 | 0.86 | 0.45 | 0.13 |
| Delay/Veh:   | 75.5 | 38.4 | 48.3 | 68.7 | 41.8 | 28.9 | 36.2 | 39.5 | 28.4 | 52.8 | 25.8 | 22.7 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 75.5 | 38.4 | 48.3 | 68.7 | 41.8 | 28.9 | 36.2 | 39.5 | 28.4 | 52.8 | 25.8 | 22.7 |
| LOS by Move: | E    | D    | D    | E    | D    | C    | D    | D    | C    | D    | C    | C    |
| HCM2kAvgQ:   | 7    | 12   | 14   | 8    | 15   | 4    | 5    | 17   | 7    | 13   | 7    | 2    |

Note: Queue reported is the number of cars per lane.

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FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
PM PEAK HOUR

## Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #26 Cherry Ave/Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.812  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 34.4  
Optimal Cycle: 61 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 1 | 1 | 1          | 0 | 2 | 0          | 1 | 1 |

## Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 34   | 405  | 23   | 245  | 392  | 304  | 307  | 724  | 52   | 44   | 280  | 294  |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 42   | 499  | 28   | 302  | 483  | 375  | 378  | 892  | 64   | 54   | 345  | 362  |
| Added Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 42   | 499  | 28   | 302  | 483  | 375  | 378  | 892  | 64   | 54   | 345  | 362  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 44   | 525  | 30   | 318  | 508  | 394  | 398  | 939  | 67   | 57   | 363  | 381  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 44   | 525  | 30   | 318  | 508  | 394  | 398  | 939  | 67   | 57   | 363  | 381  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 44   | 525  | 30   | 318  | 508  | 394  | 398  | 939  | 67   | 57   | 363  | 381  |

## Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 1.13 | 0.87 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 1926 | 1494 | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 |

## Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.02 | 0.15 | 0.02 | 0.18 | 0.26 | 0.26 | 0.22 | 0.27 | 0.04 | 0.03 | 0.11 | 0.21 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.03 | 0.19 | 0.19 | 0.22 | 0.37 | 0.37 | 0.27 | 0.48 | 0.48 | 0.06 | 0.26 | 0.26 |
| Volume/Cap:  | 0.71 | 0.81 | 0.09 | 0.81 | 0.71 | 0.71 | 0.81 | 0.57 | 0.08 | 0.57 | 0.41 | 0.81 |
| Delay/Veh:   | 79.3 | 46.5 | 33.5 | 49.3 | 28.7 | 28.7 | 43.9 | 19.3 | 14.2 | 54.0 | 30.9 | 45.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 79.3 | 46.5 | 33.5 | 49.3 | 28.7 | 28.7 | 43.9 | 19.3 | 14.2 | 54.0 | 30.9 | 45.0 |
| LOS by Move: | E    | D    | C    | D    | C    | C    | D    | B    | B    | D    | C    | D    |
| HCM2kAvgQ:   | 3    | 10   | 1    | 12   | 13   | 13   | 14   | 11   | 1    | 3    | 5    | 13   |

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #27 Cherry Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.282  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 13.6  
Optimal Cycle: 20 Level Of Service: B

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Permitted  |   |   | Permitted  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 1           | 0 | 2 | 0          | 1 | 0 | 0          | 1 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 12   | 399  | 6    | 17   | 575  | 59   | 117  | 29   | 8    | 7    | 20   | 34   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 15   | 492  | 7    | 21   | 708  | 73   | 144  | 36   | 10   | 9    | 25   | 42   |
| Added Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 15   | 492  | 7    | 21   | 708  | 73   | 144  | 36   | 10   | 9    | 25   | 42   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 16   | 517  | 8    | 22   | 746  | 77   | 152  | 38   | 10   | 9    | 26   | 44   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 16   | 517  | 8    | 22   | 746  | 77   | 152  | 38   | 10   | 9    | 26   | 44   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 16   | 517  | 8    | 22   | 746  | 77   | 152  | 38   | 10   | 9    | 26   | 44   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 2.96 | 0.04 | 1.00 | 2.72 | 0.28 | 1.00 | 0.78 | 0.22 | 0.26 | 0.74 |
| Final Sat.: | 1800 | 4841 | 73   | 1800 | 4457 | 457  | 1710 | 1340 | 370  | 467  | 1333 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.01 | 0.11 | 0.11 | 0.01 | 0.17 | 0.17 | 0.09 | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      |      |      |      |
| Green/Cycle: | 0.03 | 0.56 | 0.56 | 0.06 | 0.59 | 0.59 | 0.32 | 0.32 | 0.32 | 0.32 | 0.32 | 0.32 |
| Volume/Cap:  | 0.28 | 0.19 | 0.19 | 0.19 | 0.28 | 0.28 | 0.28 | 0.09 | 0.09 | 0.06 | 0.06 | 0.08 |
| Delay/Veh:   | 50.2 | 10.8 | 10.8 | 45.1 | 9.9  | 9.9  | 26.0 | 24.1 | 24.1 | 24.0 | 24.0 | 24.1 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 50.2 | 10.8 | 10.8 | 45.1 | 9.9  | 9.9  | 26.0 | 24.1 | 24.1 | 24.0 | 24.0 | 24.1 |
| LOS by Move: | D    | B    | B    | D    | A    | A    | C    | C    | C    | C    | C    | C    |
| HCM2kAvgQ:   | 1    | 3    | 3    | 1    | 4    | 4    | 4    | 1    | 1    | 1    | 1    | 1    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #28 Cherry Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.606  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 27.0  
Optimal Cycle: 39 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 2 | 2           | 0 | 2 | 2          | 0 | 2 | 2          | 0 | 2 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 183  | 260  | 40   | 123  | 423  | 105  | 138  | 813  | 213  | 87   | 734  | 69   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 225  | 320  | 49   | 152  | 521  | 129  | 170  | 1002 | 262  | 107  | 904  | 85   |
| Added Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 225  | 320  | 49   | 152  | 521  | 129  | 170  | 1002 | 262  | 107  | 904  | 85   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 237  | 337  | 52   | 160  | 549  | 136  | 179  | 1054 | 276  | 113  | 952  | 89   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 237  | 337  | 52   | 160  | 549  | 136  | 179  | 1054 | 276  | 113  | 952  | 89   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 237  | 337  | 52   | 160  | 549  | 136  | 179  | 1054 | 276  | 113  | 952  | 89   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.91 | 0.91 | 0.97 | 0.95 |
| Lanes:      | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 2.38 | 0.62 | 2.00 | 2.00 |
| Final Sat.: | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 | 3492 | 3894 | 1020 | 3492 | 3420 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.07 | 0.10 | 0.03 | 0.05 | 0.16 | 0.08 | 0.05 | 0.27 | 0.27 | 0.03 | 0.28 | 0.05 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      |      |      |      |
| Green/Cycle: | 0.11 | 0.26 | 0.26 | 0.12 | 0.26 | 0.26 | 0.08 | 0.49 | 0.49 | 0.06 | 0.46 | 0.46 |
| Volume/Cap:  | 0.61 | 0.38 | 0.11 | 0.38 | 0.61 | 0.29 | 0.61 | 0.56 | 0.56 | 0.56 | 0.61 | 0.11 |
| Delay/Veh:   | 45.0 | 30.9 | 28.5 | 41.2 | 33.4 | 29.6 | 47.8 | 18.4 | 18.4 | 49.3 | 21.0 | 15.5 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 45.0 | 30.9 | 28.5 | 41.2 | 33.4 | 29.6 | 47.8 | 18.4 | 18.4 | 49.3 | 21.0 | 15.5 |
| LOS by Move: | D    | C    | C    | D    | C    | C    | D    | B    | B    | D    | C    | B    |
| HCM2kAvgQ:   | 5    | 5    | 1    | 3    | 8    | 3    | 4    | 11   | 11   | 3    | 12   | 2    |

Note: Queue reported is the number of cars per lane.

Lanes, Volumes, Timings  
3: VALLEY BLVD & FONTANA AVE

FY 2030 - PM PEAK HOUR

6/25/2009

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL2                                                                              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                                | WBR2                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | NBR2                                                                                |
| Lane Configurations     |                                                                                   |  |  |  |  |  |                                                                                    |  |                                                                                     |  |                                                                                     |  |
| Volume (vph)            | 68                                                                                | 330                                                                               | 736                                                                               | 30                                                                                | 28                                                                                | 659                                                                               | 79                                                                                 | 23                                                                                  | 6                                                                                   | 6                                                                                   | 5                                                                                   | 13                                                                                  |
| Ideal Flow (vphpl)      | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (ft)     |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                 | 100                                                                               |                                                                                   | 0                                                                                  |                                                                                     | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |
| Storage Lanes           |                                                                                   | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                  |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (ft)       |                                                                                   | 25                                                                                |                                                                                   | 25                                                                                | 25                                                                                |                                                                                   | 25                                                                                 |                                                                                     | 25                                                                                  |                                                                                     | 25                                                                                  |                                                                                     |
| Lane Util. Factor       | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 0.91                                                                              | 0.91                                                                               | 0.91                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Frt                     |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   | 0.984                                                                             |                                                                                    | 0.850                                                                               |                                                                                     | 0.956                                                                               |                                                                                     | 0.850                                                                               |
| Flt Protected           |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                    |                                                                                     |                                                                                     | 0.983                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)       | 0                                                                                 | 1710                                                                              | 3420                                                                              | 1530                                                                              | 1710                                                                              | 3224                                                                              | 0                                                                                  | 1392                                                                                | 0                                                                                   | 1692                                                                                | 0                                                                                   | 1530                                                                                |
| Flt Permitted           |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                    |                                                                                     |                                                                                     | 0.896                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)       | 0                                                                                 | 1710                                                                              | 3420                                                                              | 1530                                                                              | 1710                                                                              | 3224                                                                              | 0                                                                                  | 1392                                                                                | 0                                                                                   | 1542                                                                                | 0                                                                                   | 1530                                                                                |
| Right Turn on Red       |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                    | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)       |                                                                                   |                                                                                   |                                                                                   | 32                                                                                |                                                                                   |                                                                                   |                                                                                    | 22                                                                                  |                                                                                     |                                                                                     |                                                                                     | 14                                                                                  |
| Link Speed (mph)        |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                    |                                                                                     |                                                                                     | 30                                                                                  |                                                                                     |                                                                                     |
| Link Distance (ft)      |                                                                                   |                                                                                   | 807                                                                               |                                                                                   |                                                                                   | 830                                                                               |                                                                                    |                                                                                     |                                                                                     | 743                                                                                 |                                                                                     |                                                                                     |
| Travel Time (s)         |                                                                                   |                                                                                   | 18.3                                                                              |                                                                                   |                                                                                   | 18.9                                                                              |                                                                                    |                                                                                     |                                                                                     | 16.9                                                                                |                                                                                     |                                                                                     |
| Peak Hour Factor        | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                               | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                |
| Heavy Vehicles (%)      | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                 | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Shared Lane Traffic (%) |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 10%                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)   | 0                                                                                 | 419                                                                               | 775                                                                               | 32                                                                                | 29                                                                                | 779                                                                               | 0                                                                                  | 22                                                                                  | 0                                                                                   | 17                                                                                  | 0                                                                                   | 14                                                                                  |
| Turn Type               | Prot                                                                              | Prot                                                                              |                                                                                   | Perm                                                                              | Prot                                                                              |                                                                                   |                                                                                    | Perm                                                                                | Perm                                                                                |                                                                                     |                                                                                     | Perm                                                                                |
| Protected Phases        | 7                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 3                                                                                 | 8                                                                                 |                                                                                    |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |                                                                                     |
| Permitted Phases        |                                                                                   |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   |                                                                                    | 8                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |
| Detector Phase          | 7                                                                                 | 7                                                                                 | 4                                                                                 | 4                                                                                 | 3                                                                                 | 8                                                                                 |                                                                                    | 8                                                                                   | 2                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |                                                                                    | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 |                                                                                     | 4.0                                                                                 |
| Minimum Split (s)       | 8.0                                                                               | 8.0                                                                               | 20.0                                                                              | 20.0                                                                              | 8.0                                                                               | 20.0                                                                              |                                                                                    | 20.0                                                                                | 20.0                                                                                | 20.0                                                                                |                                                                                     | 20.0                                                                                |
| Total Split (s)         | 25.0                                                                              | 25.0                                                                              | 40.0                                                                              | 40.0                                                                              | 9.0                                                                               | 24.0                                                                              | 0.0                                                                                | 24.0                                                                                | 21.0                                                                                | 21.0                                                                                | 0.0                                                                                 | 21.0                                                                                |
| Total Split (%)         | 27.8%                                                                             | 27.8%                                                                             | 44.4%                                                                             | 44.4%                                                                             | 10.0%                                                                             | 26.7%                                                                             | 0.0%                                                                               | 26.7%                                                                               | 23.3%                                                                               | 23.3%                                                                               | 0.0%                                                                                | 23.3%                                                                               |
| Maximum Green (s)       | 21.0                                                                              | 21.0                                                                              | 36.0                                                                              | 36.0                                                                              | 5.0                                                                               | 20.0                                                                              |                                                                                    | 20.0                                                                                | 17.0                                                                                | 17.0                                                                                |                                                                                     | 17.0                                                                                |
| Yellow Time (s)         | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               |                                                                                    | 3.5                                                                                 | 3.5                                                                                 | 3.5                                                                                 |                                                                                     | 3.5                                                                                 |
| All-Red Time (s)        | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               |                                                                                    | 0.5                                                                                 | 0.5                                                                                 | 0.5                                                                                 |                                                                                     | 0.5                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               | Lag                                                                               | Lead                                                                              | Lag                                                                               |                                                                                    | Lag                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               |                                                                                    | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                    | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |                                                                                     | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              |                                                                                    | None                                                                                | None                                                                                | None                                                                                |                                                                                     | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               |                                                                                    | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |                                                                                     | 5.0                                                                                 |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 11.0                                                                              | 11.0                                                                              |                                                                                   | 11.0                                                                              |                                                                                    | 11.0                                                                                | 11.0                                                                                | 11.0                                                                                |                                                                                     | 11.0                                                                                |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                    | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |
| Act Effect Green (s)    |                                                                                   | 21.2                                                                              | 42.1                                                                              | 42.1                                                                              | 5.1                                                                               | 20.2                                                                              |                                                                                    | 20.2                                                                                |                                                                                     | 9.1                                                                                 |                                                                                     | 9.1                                                                                 |
| Actuated g/C Ratio      |                                                                                   | 0.27                                                                              | 0.53                                                                              | 0.53                                                                              | 0.06                                                                              | 0.25                                                                              |                                                                                    | 0.25                                                                                |                                                                                     | 0.11                                                                                |                                                                                     | 0.11                                                                                |
| v/c Ratio               |                                                                                   | 0.92                                                                              | 0.43                                                                              | 0.04                                                                              | 0.27                                                                              | 0.95                                                                              |                                                                                    | 0.06                                                                                |                                                                                     | 0.10                                                                                |                                                                                     | 0.07                                                                                |
| Control Delay           |                                                                                   | 58.2                                                                              | 14.7                                                                              | 5.7                                                                               | 44.5                                                                              | 53.7                                                                              |                                                                                    | 11.5                                                                                |                                                                                     | 33.3                                                                                |                                                                                     | 16.8                                                                                |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                    | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |
| Total Delay             |                                                                                   | 58.2                                                                              | 14.7                                                                              | 5.7                                                                               | 44.5                                                                              | 53.7                                                                              |                                                                                    | 11.5                                                                                |                                                                                     | 33.3                                                                                |                                                                                     | 16.8                                                                                |
| LOS                     |                                                                                   | E                                                                                 | B                                                                                 | A                                                                                 | D                                                                                 | D                                                                                 |                                                                                    | B                                                                                   |                                                                                     | C                                                                                   |                                                                                     | B                                                                                   |

Lanes, Volumes, Timings  
3: VALLEY BLVD & FONTANA AVE

FY 2030 - PM PEAK HOUR

6/25/2009

|                         |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| Lane Group              | SBL                                                                               | SBT                                                                               | SBR                                                                               | SWL2                                                                              | SWL                                                                               | SWR                                                                               | SWR2                                                                               |
| Lane Configurations     |                                                                                   |  |  |                                                                                   |  |                                                                                   |                                                                                    |
| Volume (vph)            | 59                                                                                | 1                                                                                 | 49                                                                                | 7                                                                                 | 14                                                                                | 201                                                                               | 1                                                                                  |
| Ideal Flow (vphpl)      | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               |
| Storage Length (ft)     | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                    |
| Storage Lanes           | 0                                                                                 |                                                                                   | 1                                                                                 |                                                                                   | 1                                                                                 | 0                                                                                 |                                                                                    |
| Taper Length (ft)       | 25                                                                                |                                                                                   | 25                                                                                |                                                                                   | 25                                                                                | 25                                                                                |                                                                                    |
| Lane Util. Factor       | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               |
| Frt                     |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   | 0.878                                                                             |                                                                                   |                                                                                    |
| Flt Protected           |                                                                                   | 0.953                                                                             |                                                                                   |                                                                                   | 0.995                                                                             |                                                                                   |                                                                                    |
| Satd. Flow (prot)       | 0                                                                                 | 1715                                                                              | 1530                                                                              | 0                                                                                 | 1572                                                                              | 0                                                                                 | 0                                                                                  |
| Flt Permitted           |                                                                                   | 0.717                                                                             |                                                                                   |                                                                                   | 0.995                                                                             |                                                                                   |                                                                                    |
| Satd. Flow (perm)       | 0                                                                                 | 1291                                                                              | 1530                                                                              | 0                                                                                 | 1572                                                                              | 0                                                                                 | 0                                                                                  |
| Right Turn on Red       |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                   | No                                                                                 |
| Satd. Flow (RTOR)       |                                                                                   |                                                                                   | 52                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                    |
| Link Speed (mph)        |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                    |
| Link Distance (ft)      |                                                                                   | 792                                                                               |                                                                                   |                                                                                   | 998                                                                               |                                                                                   |                                                                                    |
| Travel Time (s)         |                                                                                   | 18.0                                                                              |                                                                                   |                                                                                   | 22.7                                                                              |                                                                                   |                                                                                    |
| Peak Hour Factor        | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                               |
| Heavy Vehicles (%)      | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                 |
| Shared Lane Traffic (%) |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |
| Lane Group Flow (vph)   | 0                                                                                 | 63                                                                                | 52                                                                                | 0                                                                                 | 235                                                                               | 0                                                                                 | 0                                                                                  |
| Turn Type               | Perm                                                                              |                                                                                   | Perm                                                                              | Perm                                                                              |                                                                                   |                                                                                   |                                                                                    |
| Protected Phases        |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                    |
| Permitted Phases        | 2                                                                                 |                                                                                   | 2                                                                                 | 6                                                                                 |                                                                                   |                                                                                   |                                                                                    |
| Detector Phase          | 2                                                                                 | 2                                                                                 | 2                                                                                 | 6                                                                                 | 6                                                                                 |                                                                                   |                                                                                    |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |
| Minimum Initial (s)     | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |                                                                                   |                                                                                    |
| Minimum Split (s)       | 20.0                                                                              | 20.0                                                                              | 20.0                                                                              | 20.0                                                                              | 20.0                                                                              |                                                                                   |                                                                                    |
| Total Split (s)         | 21.0                                                                              | 21.0                                                                              | 21.0                                                                              | 20.0                                                                              | 20.0                                                                              | 0.0                                                                               | 0.0                                                                                |
| Total Split (%)         | 23.3%                                                                             | 23.3%                                                                             | 23.3%                                                                             | 22.2%                                                                             | 22.2%                                                                             | 0.0%                                                                              | 0.0%                                                                               |
| Maximum Green (s)       | 17.0                                                                              | 17.0                                                                              | 17.0                                                                              | 16.0                                                                              | 16.0                                                                              |                                                                                   |                                                                                    |
| Yellow Time (s)         | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               |                                                                                   |                                                                                    |
| All-Red Time (s)        | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               |                                                                                   |                                                                                    |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                |
| Total Lost Time (s)     | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   |                                                                                    |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              |                                                                                   |                                                                                    |
| Walk Time (s)           | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                   |                                                                                    |
| Flash Dont Walk (s)     | 11.0                                                                              | 11.0                                                                              | 11.0                                                                              | 11.0                                                                              | 11.0                                                                              |                                                                                   |                                                                                    |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    |
| Act Effect Green (s)    |                                                                                   | 9.1                                                                               | 9.1                                                                               |                                                                                   | 15.1                                                                              |                                                                                   |                                                                                    |
| Actuated g/C Ratio      |                                                                                   | 0.11                                                                              | 0.11                                                                              |                                                                                   | 0.19                                                                              |                                                                                   |                                                                                    |
| v/c Ratio               |                                                                                   | 0.43                                                                              | 0.23                                                                              |                                                                                   | 0.79                                                                              |                                                                                   |                                                                                    |
| Control Delay           |                                                                                   | 42.8                                                                              | 12.7                                                                              |                                                                                   | 52.5                                                                              |                                                                                   |                                                                                    |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    |
| Total Delay             |                                                                                   | 42.8                                                                              | 12.7                                                                              |                                                                                   | 52.5                                                                              |                                                                                   |                                                                                    |
| LOS                     |                                                                                   | D                                                                                 | B                                                                                 |                                                                                   | D                                                                                 |                                                                                   |                                                                                    |

Lanes, Volumes, Timings  
3: VALLEY BLVD & FONTANA AVE

FY 2030 - PM PEAK HOUR

6/25/2009

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL2                                                                              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                                | WBR2                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | NBR2                                                                                |
| Approach Delay          |                                                                                   |                                                                                   | 29.3                                                                              |                                                                                   |                                                                                   | 52.3                                                                              |                                                                                    |                                                                                     |                                                                                     | 25.8                                                                                |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                    |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |                                                                                     |
| Queue Length 50th (ft)  |                                                                                   | 213                                                                               | 114                                                                               | 0                                                                                 | 15                                                                                | 220                                                                               |                                                                                    | 0                                                                                   |                                                                                     | 8                                                                                   |                                                                                     | 0                                                                                   |
| Queue Length 95th (ft)  |                                                                                   | #417                                                                              | 217                                                                               | 16                                                                                | 42                                                                                | #374                                                                              |                                                                                    | 20                                                                                  |                                                                                     | 27                                                                                  |                                                                                     | 17                                                                                  |
| Internal Link Dist (ft) |                                                                                   |                                                                                   | 727                                                                               |                                                                                   |                                                                                   | 750                                                                               |                                                                                    |                                                                                     |                                                                                     | 663                                                                                 |                                                                                     |                                                                                     |
| Turn Bay Length (ft)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 100                                                                               |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 457                                                                               | 1812                                                                              | 826                                                                               | 109                                                                               | 820                                                                               |                                                                                    | 370                                                                                 |                                                                                     | 333                                                                                 |                                                                                     | 342                                                                                 |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 0                                                                                   |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.92                                                                              | 0.43                                                                              | 0.04                                                                              | 0.27                                                                              | 0.95                                                                              |                                                                                    | 0.06                                                                                |                                                                                     | 0.05                                                                                |                                                                                     | 0.04                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 79.5

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.95

Intersection Signal Delay: 39.3

Intersection LOS: D

Intersection Capacity Utilization 83.3%

ICU Level of Service E

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 3: VALLEY BLVD & FONTANA AVE

|                                                                                                                                                                            |                                                                                        |                                                                                        |                                                                                          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
|   ø2 |  ø6 |  ø3 |  ø4   |
| 21 s                                                                                                                                                                       | 20 s                                                                                   | 9 s                                                                                    | 40 s                                                                                     |
|                                                                                                                                                                            |                                                                                        |  ø7 |  ø8 |
|                                                                                                                                                                            |                                                                                        | 25 s                                                                                   | 24 s                                                                                     |

Lanes, Volumes, Timings  
3: VALLEY BLVD & FONTANA AVE

FY 2030 - PM PEAK HOUR

6/25/2009

|                         |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| Lane Group              | SBL                                                                               | SBT                                                                               | SBR                                                                               | SWL2                                                                              | SWL                                                                               | SWR                                                                               | SWR2                                                                               |
| Approach Delay          |                                                                                   | 29.2                                                                              |                                                                                   |                                                                                   | 52.5                                                                              |                                                                                   |                                                                                    |
| Approach LOS            |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    |
| Queue Length 50th (ft)  |                                                                                   | 31                                                                                | 0                                                                                 |                                                                                   | 116                                                                               |                                                                                   |                                                                                    |
| Queue Length 95th (ft)  |                                                                                   | 68                                                                                | 31                                                                                |                                                                                   | #243                                                                              |                                                                                   |                                                                                    |
| Internal Link Dist (ft) |                                                                                   | 712                                                                               |                                                                                   |                                                                                   | 918                                                                               |                                                                                   |                                                                                    |
| Turn Bay Length (ft)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |
| Base Capacity (vph)     |                                                                                   | 279                                                                               | 372                                                                               |                                                                                   | 320                                                                               |                                                                                   |                                                                                    |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    |
| Reduced v/c Ratio       |                                                                                   | 0.23                                                                              | 0.14                                                                              |                                                                                   | 0.73                                                                              |                                                                                   |                                                                                    |
| Intersection Summary    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |





FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #32 Beech Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.306  
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 11.1  
Optimal Cycle: 0 Level Of Service: B

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Stop Sign   |   |   | Stop Sign   |   |   | Stop Sign  |   |   | Stop Sign  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 0           | 1 | 0 | 0          | 1 | 0 | 0          | 1 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 9    | 79   | 59   | 52   | 115  | 50   | 36   | 195  | 24   | 50   | 99   | 38   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 11   | 97   | 73   | 64   | 142  | 62   | 44   | 240  | 30   | 62   | 122  | 47   |
| Added Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 11   | 97   | 73   | 64   | 142  | 62   | 44   | 240  | 30   | 62   | 122  | 47   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 12   | 102  | 77   | 67   | 149  | 65   | 47   | 253  | 31   | 65   | 128  | 49   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 12   | 102  | 77   | 67   | 149  | 65   | 47   | 253  | 31   | 65   | 128  | 49   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 12   | 102  | 77   | 67   | 149  | 65   | 47   | 253  | 31   | 65   | 128  | 49   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.28 | 1.53 | 0.19 | 0.53 | 1.06 | 0.41 |
| Final Sat.: | 452  | 485  | 534  | 471  | 506  | 558  | 153  | 845  | 106  | 276  | 573  | 228  |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.03 | 0.21 | 0.14 | 0.14 | 0.29 | 0.12 | 0.31 | 0.30 | 0.29 | 0.23 | 0.22 | 0.22 |
| Crit Moves:  | ***  |      |      | ***  |      |      | ***  |      |      | ***  |      |      |
| Delay/Veh:   | 10.3 | 11.4 | 9.9  | 11.1 | 12.0 | 9.5  | 11.7 | 11.4 | 11.2 | 11.2 | 10.7 | 10.3 |
| Delay Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 10.3 | 11.4 | 9.9  | 11.1 | 12.0 | 9.5  | 11.7 | 11.4 | 11.2 | 11.2 | 10.7 | 10.3 |
| LOS by Move: | B    | B    | A    | B    | B    | A    | B    | B    | B    | B    | B    | B    |
| ApproachDel: | 10.7 |      |      | 11.2 |      |      | 11.4 |      |      | 10.8 |      |      |
| Delay Adj:   | 1.00 |      |      | 1.00 |      |      | 1.00 |      |      | 1.00 |      |      |
| ApprAdjDel:  | 10.7 |      |      | 11.2 |      |      | 11.4 |      |      | 10.8 |      |      |
| LOS by Appr: | B    |      |      | B    |      |      | B    |      |      | B    |      |      |
| AllWayAvgQ:  | 0.0  | 0.2  | 0.1  | 0.1  | 0.4  | 0.1  | 0.4  | 0.4  | 0.4  | 0.3  | 0.2  | 0.2  |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #33 Beech Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 1.304  
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): 107.7  
Optimal Cycle: 0 Level Of Service: F

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Stop Sign   |   |   | Stop Sign   |   |   | Stop Sign  |   |   | Stop Sign  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 0           | 1 | 0 | 0          | 1 | 0 | 0          | 0 | 1 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 180  | 21   | 11   | 10   | 39   | 125  | 78   | 584  | 266  | 8    | 332  | 7    |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 222  | 26   | 14   | 12   | 48   | 154  | 96   | 719  | 328  | 10   | 409  | 9    |
| Added Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 222  | 26   | 14   | 12   | 48   | 154  | 96   | 719  | 328  | 10   | 409  | 9    |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 233  | 27   | 14   | 13   | 51   | 162  | 101  | 757  | 345  | 10   | 431  | 9    |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 233  | 27   | 14   | 13   | 51   | 162  | 101  | 757  | 345  | 10   | 431  | 9    |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 233  | 27   | 14   | 13   | 51   | 162  | 101  | 757  | 345  | 10   | 431  | 9    |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.17 | 1.26 | 0.57 | 0.02 | 0.96 | 0.02 |
| Final Sat.: | 353  | 371  | 399  | 338  | 355  | 382  | 78   | 594  | 282  | 10   | 434  | 9    |

Capacity Analysis Module:

|              |      |      |      |      |      |      |       |      |       |      |      |      |
|--------------|------|------|------|------|------|------|-------|------|-------|------|------|------|
| Vol/Sat:     | 0.66 | 0.07 | 0.04 | 0.04 | 0.14 | 0.42 | 1.30  | 1.28 | 1.22  | 0.99 | 0.99 | 0.99 |
| Crit Moves:  | ***  |      |      | ***  |      |      | ***   |      |       | ***  |      |      |
| Delay/Veh:   | 30.1 | 13.1 | 11.9 | 13.6 | 14.3 | 18.4 | 174.7 | 163  | 140.7 | 68.6 | 68.6 | 68.6 |
| Delay Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 30.1 | 13.1 | 11.9 | 13.6 | 14.3 | 18.4 | 174.7 | 163  | 140.7 | 68.6 | 68.6 | 68.6 |
| LOS by Move: | D    | B    | B    | B    | B    | C    | F     | F    | F     | F    | F    | F    |
| ApproachDel: | 27.5 |      |      | 17.2 |      |      | 157.7 |      |       | 68.6 |      |      |
| Delay Adj:   | 1.00 |      |      | 1.00 |      |      | 1.00  |      |       | 1.00 |      |      |
| ApprAdjDel:  | 27.5 |      |      | 17.2 |      |      | 157.7 |      |       | 68.6 |      |      |
| LOS by Appr: | D    |      |      | C    |      |      | F     |      |       | F    |      |      |
| AllWayAvgQ:  | 1.7  | 0.1  | 0.0  | 0.0  | 0.2  | 0.7  | 21.0  | 17.9 | 17.9  | 7.3  | 7.3  | 7.3  |

Note: Queue reported is the number of cars per lane.









FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #44 Armstrong Rd/SR-60 WB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.834  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 27.6  
Optimal Cycle: 67 Level Of Service: C

| Approach:                 | North Bound    | South Bound    | East Bound     | West Bound     |
|---------------------------|----------------|----------------|----------------|----------------|
| Movement:                 | L - T - R      | L - T - R      | L - T - R      | L - T - R      |
| Control:                  | Protected      | Protected      | Split Phase    | Split Phase    |
| Rights:                   | Include        | Include        | Include        | Include        |
| Min. Green:               | 0 0 0          | 0 0 0          | 0 0 0          | 0 0 0          |
| Lanes:                    | 1 0 2 0 0      | 0 0 1 1 0      | 0 0 0 0 0      | 1 0 0 1 0      |
| Volume Module:            |                |                |                |                |
| Base Vol:                 | 203 700 0      | 0 835 196      | 0 0 0          | 290 1 341      |
| Growth Adj:               | 1.23 1.23 1.23 | 1.23 1.23 1.23 | 1.23 1.23 1.23 | 1.23 1.23 1.23 |
| Initial Bse:              | 250 862 0      | 0 1029 241     | 0 0 0          | 357 1 420      |
| Added Vol:                | 0 0 0          | 0 0 0          | 0 0 0          | 0 0 0          |
| PasserByVol:              | 0 0 0          | 0 0 0          | 0 0 0          | 0 0 0          |
| Initial Fut:              | 250 862 0      | 0 1029 241     | 0 0 0          | 357 1 420      |
| User Adj:                 | 1.00 1.00 1.00 | 1.00 1.00 1.00 | 1.00 1.00 1.00 | 1.00 1.00 1.00 |
| PHF Adj:                  | 0.95 0.95 0.95 | 0.95 0.95 0.95 | 0.95 0.95 0.95 | 0.95 0.95 0.95 |
| PHF Volume:               | 263 908 0      | 0 1083 254     | 0 0 0          | 376 1 442      |
| Reduct Vol:               | 0 0 0          | 0 0 0          | 0 0 0          | 0 0 0          |
| Reduced Vol:              | 263 908 0      | 0 1083 254     | 0 0 0          | 376 1 442      |
| PCE Adj:                  | 1.00 1.00 1.00 | 1.00 1.00 1.00 | 1.00 1.00 1.00 | 1.00 1.00 1.00 |
| MLF Adj:                  | 1.00 1.00 1.00 | 1.00 1.00 1.00 | 1.00 1.00 1.00 | 1.00 1.00 1.00 |
| FinalVolume:              | 263 908 0      | 0 1083 254     | 0 0 0          | 376 1 442      |
| Saturation Flow Module:   |                |                |                |                |
| Sat/Lane:                 | 1800 1800 1800 | 1800 1800 1800 | 1800 1800 1800 | 1800 1800 1800 |
| Adjustment:               | 1.00 0.95 1.00 | 1.00 0.95 0.95 | 1.00 1.00 1.00 | 1.00 1.00 1.00 |
| Lanes:                    | 1.00 2.00 0.00 | 0.00 1.62 0.38 | 0.00 0.00 0.00 | 1.00 0.01 0.99 |
| Final Sat.:               | 1800 3420 0    | 0 2770 650     | 0 0 0          | 1800 5 1795    |
| Capacity Analysis Module: |                |                |                |                |
| Vol/Sat:                  | 0.15 0.27 0.00 | 0.00 0.39 0.39 | 0.00 0.00 0.00 | 0.21 0.25 0.25 |
| Crit Moves:               | ****           | ****           | ****           | ****           |
| Green/Cycle:              | 0.18 0.64 0.00 | 0.00 0.47 0.47 | 0.00 0.00 0.00 | 0.30 0.30 0.30 |
| Volume/Cap:               | 0.83 0.41 0.00 | 0.00 0.83 0.83 | 0.00 0.00 0.00 | 0.71 0.83 0.83 |
| Delay/Veh:                | 56.9 8.7 0.0   | 0.0 27.1 27.1  | 0.0 0.0 0.0    | 35.7 43.8 43.8 |
| User DelAdj:              | 1.00 1.00 1.00 | 1.00 1.00 1.00 | 1.00 1.00 1.00 | 1.00 1.00 1.00 |
| AdjDel/Veh:               | 56.9 8.7 0.0   | 0.0 27.1 27.1  | 0.0 0.0 0.0    | 35.7 43.8 43.8 |
| LOS by Move:              | E A A          | A C C          | A A A          | D D D          |
| HCM2kAvgQ:                | 10 7 0         | 0 21 21        | 0 0 0          | 11 15 15       |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITHOUT PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #45 Armstrong Rd/SR-60 EB Ramps

Average Delay (sec/veh): 620.3 Worst Case Level Of Service: F[3915.8]

| Approach:                | North Bound     | South Bound     | East Bound        | West Bound        |
|--------------------------|-----------------|-----------------|-------------------|-------------------|
| Movement:                | L - T - R       | L - T - R       | L - T - R         | L - T - R         |
| Control:                 | Uncontrolled    | Uncontrolled    | Stop Sign         | Stop Sign         |
| Rights:                  | Include         | Include         | Include           | Include           |
| Lanes:                   | 0 0 1 1 0       | 1 0 2 0 0       | 0 1 0 1 0         | 0 0 0 0 0         |
| Volume Module:           |                 |                 |                   |                   |
| Base Vol:                | 0 696 153       | 296 804 0       | 212 1 152         | 0 0 0             |
| Growth Adj:              | 1.23 1.23 1.23  | 1.23 1.23 1.23  | 1.23 1.23 1.23    | 1.23 1.23 1.23    |
| Initial Bse:             | 0 857 188       | 365 991 0       | 261 1 187         | 0 0 0             |
| Added Vol:               | 0 0 0           | 0 0 0           | 0 0 0             | 0 0 0             |
| PasserByVol:             | 0 0 0           | 0 0 0           | 0 0 0             | 0 0 0             |
| Initial Fut:             | 0 857 188       | 365 991 0       | 261 1 187         | 0 0 0             |
| User Adj:                | 1.00 1.00 1.00  | 1.00 1.00 1.00  | 1.00 1.00 1.00    | 1.00 1.00 1.00    |
| PHF Adj:                 | 0.95 0.95 0.95  | 0.95 0.95 0.95  | 0.95 0.95 0.95    | 0.95 0.95 0.95    |
| PHF Volume:              | 0 903 198       | 384 1043 0      | 275 1 197         | 0 0 0             |
| Reduct Vol:              | 0 0 0           | 0 0 0           | 0 0 0             | 0 0 0             |
| FinalVolume:             | 0 903 198       | 384 1043 0      | 275 1 197         | 0 0 0             |
| Critical Gap Module:     |                 |                 |                   |                   |
| Critical Gp:xxxxx        | xxxxx           | 4.1 xxxx        | 6.8 6.5 6.9 xxxxx | xxxxx xxxxx xxxxx |
| FollowUpTim:xxxxx        | xxxxx           | 2.2 xxxx        | 3.5 4.0 3.3 xxxxx | xxxxx xxxxx xxxxx |
| Capacity Module:         |                 |                 |                   |                   |
| Cnflct Vol:              | xxxx xxxx xxxxx | 1101 xxxx xxxxx | 2262 2911 521     | xxxx xxxx xxxxx   |
| Potent Cap.:             | xxxx xxxx xxxxx | 642 xxxx xxxxx  | 35 16 505         | xxxx xxxx xxxxx   |
| Move Cap.:               | xxxx xxxx xxxxx | 642 xxxx xxxxx  | 19 6 505          | xxxx xxxx xxxxx   |
| Volume/Cap:              | xxxx xxxx xxxxx | 0.60 xxxx xxxxx | 14.80 0.20 0.39   | xxxx xxxx xxxxx   |
| Level Of Service Module: |                 |                 |                   |                   |
| 2Way95thQ:               | xxxx xxxx xxxxx | 4.0 xxxx xxxxx  | xxxx xxxx xxxxx   | xxxx xxxx xxxxx   |
| Control Del:xxxxx        | xxxxx           | 18.6 xxxx xxxxx | xxxxx xxxxx xxxxx | xxxxx xxxxx xxxxx |
| LOS by Move:             | * * *           | C * *           | * * *             | * * *             |
| Movement:                | LT - LTR - RT   | LT - LTR - RT   | LT - LTR - RT     | LT - LTR - RT     |
| Shared Cap.:             | xxxx xxxx xxxxx | xxxx xxxx xxxxx | 18 xxxx 334       | xxxx xxxx xxxxx   |
| SharedQueue:             | xxxx xxxx xxxxx | xxxx xxxx xxxxx | 35.2 xxxx 3.6     | xxxx xxxx xxxxx   |
| Shrd ConDel:             | xxxx xxxx xxxxx | xxxx xxxx xxxxx | 6707 xxxx 30.4    | xxxx xxxx xxxxx   |
| Shared LOS:              | * * *           | * * *           | F * D             | * * *             |
| ApproachDel:             | xxxxxx          | xxxxxx          | 3915.8            | xxxxxx            |
| ApproachLOS:             | *               | *               | F                 | *                 |

Note: Queue reported is the number of cars per lane.

**Forecast Year 2030 With Project Conditions**



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FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 I-15 SB Ramps/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 1.148  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 60.9  
Optimal Cycle: 180 Level Of Service: E

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |   |
| Control:    | Split Phase |   |   | Split Phase |   |   | Protected  |   |   | Protected  |   |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |   |
| Lanes:      | 0           | 0 | 0 | 1           | 0 | 1 | 0          | 0 | 3 | 0          | 1 | 2 | 0 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 0    | 0    | 0    | 790  | 1    | 647  | 0    | 302  | 139  | 244  | 639  | 0    |
| Growth Adj:   | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse:  | 0    | 0    | 0    | 973  | 1    | 797  | 0    | 372  | 171  | 301  | 787  | 0    |
| Added Vol:    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1823 | 0    | 0    | 259  | 0    |
| PasserByVol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:  | 0    | 0    | 0    | 973  | 1    | 797  | 0    | 2195 | 171  | 301  | 1046 | 0    |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 0    | 0    | 0    | 1025 | 1    | 839  | 0    | 2311 | 180  | 316  | 1101 | 0    |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 0    | 0    | 0    | 1025 | 1    | 839  | 0    | 2311 | 180  | 316  | 1101 | 0    |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 0    | 0    | 0    | 1025 | 1    | 839  | 0    | 2311 | 180  | 316  | 1101 | 0    |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 1.00 | 0.97 | 0.91 | 1.00 |
| Lanes:      | 0.00 | 0.00 | 0.00 | 1.54 | 0.01 | 1.45 | 0.00 | 3.00 | 1.00 | 2.00 | 3.00 | 0.00 |
| Final Sat.: | 0    | 0    | 0    | 2788 | 3    | 2609 | 0    | 4914 | 1800 | 3492 | 4914 | 0    |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |       |      |      |
|--------------|------|------|------|------|------|------|------|------|------|-------|------|------|
| Vol/Sat:     | 0.00 | 0.00 | 0.00 | 0.37 | 0.52 | 0.32 | 0.00 | 0.47 | 0.10 | 0.09  | 0.22 | 0.00 |
| Crit Moves:  |      |      |      | **** |      |      | **** |      |      | ****  |      |      |
| Green/Cycle: | 0.00 | 0.00 | 0.00 | 0.45 | 0.45 | 0.45 | 0.00 | 0.41 | 0.41 | 0.08  | 0.49 | 0.00 |
| Volume/Cap:  | 0.00 | 0.00 | 0.00 | 0.81 | 1.15 | 0.71 | 0.00 | 1.15 | 0.24 | 1.15  | 0.46 | 0.00 |
| Delay/Veh:   | 0.0  | 0.0  | 0.0  | 26.1 | 102  | 23.1 | 0.0  | 102  | 19.5 | 146.3 | 17.0 | 0.0  |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 |
| AdjDel/Veh:  | 0.0  | 0.0  | 0.0  | 26.1 | 102  | 23.1 | 0.0  | 102  | 19.5 | 146.3 | 17.0 | 0.0  |
| LOS by Move: | A    | A    | A    | C    | F    | C    | A    | F    | B    | F     | B    | A    |
| HCM2kAvgQ:   | 0    | 0    | 0    | 20   | 47   | 15   | 0    | 43   | 4    | 11    | 8    | 0    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 I-15 NB Ramps/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 1.004  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 30.4  
Optimal Cycle: 180 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Split Phase |   |   | Split Phase |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 0           | 1 | 0 | 2          | 0 | 3 | 0          | 0 | 1 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 340  | 1    | 536  | 0    | 0    | 0    | 175  | 899  | 0    | 0    | 530  | 446  |
| Growth Adj:   | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse:  | 419  | 1    | 660  | 0    | 0    | 0    | 216  | 1108 | 0    | 0    | 653  | 549  |
| Added Vol:    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1823 | 0    | 0    | 259  | 0    |
| PasserByVol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:  | 419  | 1    | 660  | 0    | 0    | 0    | 216  | 2931 | 0    | 0    | 912  | 549  |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 441  | 1    | 695  | 0    | 0    | 0    | 227  | 3085 | 0    | 0    | 960  | 578  |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 441  | 1    | 695  | 0    | 0    | 0    | 227  | 3085 | 0    | 0    | 960  | 578  |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 441  | 1    | 695  | 0    | 0    | 0    | 227  | 3085 | 0    | 0    | 960  | 578  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.97 | 0.91 | 1.00 | 1.00 | 0.91 | 1.00 |
| Lanes:      | 1.38 | 0.01 | 1.61 | 0.00 | 0.00 | 0.00 | 2.00 | 3.00 | 0.00 | 0.00 | 3.00 | 1.00 |
| Final Sat.: | 2497 | 4    | 2899 | 0    | 0    | 0    | 3492 | 4914 | 0    | 0    | 4914 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.18 | 0.32 | 0.24 | 0.00 | 0.00 | 0.00 | 0.06 | 0.63 | 0.00 | 0.00 | 0.20 | 0.32 |
| Crit Moves:  |      |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.31 | 0.31 | 0.31 | 0.00 | 0.00 | 0.00 | 0.11 | 0.63 | 0.00 | 0.00 | 0.52 | 0.52 |
| Volume/Cap:  | 0.56 | 1.00 | 0.76 | 0.00 | 0.00 | 0.00 | 0.62 | 1.00 | 0.00 | 0.00 | 0.38 | 0.62 |
| Delay/Veh:   | 28.9 | 62.0 | 33.2 | 0.0  | 0.0  | 0.0  | 46.0 | 36.0 | 0.0  | 0.0  | 14.4 | 18.2 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 28.9 | 62.0 | 33.2 | 0.0  | 0.0  | 0.0  | 46.0 | 36.0 | 0.0  | 0.0  | 14.4 | 18.2 |
| LOS by Move: | C    | E    | C    | A    | A    | A    | D    | D    | A    | A    | B    | B    |
| HCM2kAvgQ:   | 9    | 24   | 14   | 0    | 0    | 0    | 5    | 44   | 0    | 0    | 6    | 13   |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Etiwanda Ave/San Bernardino Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.620  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 24.4  
Optimal Cycle: 40 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 2 | 0           | 1 | 1 | 0          | 2 | 0 | 1          | 2 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 270  | 466  | 81   | 27   | 536  | 102  | 88   | 189  | 118  | 67   | 188  | 27   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 333  | 574  | 100  | 33   | 660  | 126  | 108  | 233  | 145  | 83   | 232  | 33   |
| Added Vol:   | 0    | 72   | 0    | 0    | 362  | 0    | 0    | 52   | 0    | 0    | 8    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 333  | 646  | 100  | 33   | 1022 | 126  | 108  | 285  | 145  | 83   | 240  | 33   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 350  | 680  | 105  | 35   | 1076 | 132  | 114  | 300  | 153  | 87   | 252  | 35   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 350  | 680  | 105  | 35   | 1076 | 132  | 114  | 300  | 153  | 87   | 252  | 35   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 350  | 680  | 105  | 35   | 1076 | 132  | 114  | 300  | 153  | 87   | 252  | 35   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 0.95 | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 0.95 |
| Lanes:      | 2.00 | 2.00 | 1.00 | 2.00 | 1.78 | 0.22 | 2.00 | 2.00 | 1.00 | 2.00 | 1.76 | 0.24 |
| Final Sat.: | 3492 | 3420 | 1800 | 3492 | 3046 | 374  | 3492 | 3420 | 1800 | 3492 | 3003 | 417  |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.10 | 0.20 | 0.06 | 0.01 | 0.35 | 0.35 | 0.03 | 0.09 | 0.09 | 0.02 | 0.08 | 0.08 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.16 | 0.70 | 0.70 | 0.04 | 0.57 | 0.57 | 0.05 | 0.15 | 0.15 | 0.04 | 0.14 | 0.14 |
| Volume/Cap:  | 0.62 | 0.29 | 0.08 | 0.29 | 0.62 | 0.62 | 0.62 | 0.60 | 0.58 | 0.60 | 0.62 | 0.62 |
| Delay/Veh:   | 41.2 | 5.8  | 4.9  | 48.3 | 14.9 | 14.9 | 52.7 | 41.9 | 43.0 | 53.8 | 43.4 | 43.4 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 41.2 | 5.8  | 4.9  | 48.3 | 14.9 | 14.9 | 52.7 | 41.9 | 43.0 | 53.8 | 43.4 | 43.4 |
| LOS by Move: | D    | A    | A    | D    | B    | B    | D    | D    | D    | D    | D    | D    |
| HCM2kAvgQ:   | 6    | 4    | 1    | 1    | 13   | 13   | 3    | 5    | 5    | 2    | 5    | 5    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Etiwanda Ave/I-10 WB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.561  
Loss Time (sec): 4 (Y+R=4.0 sec) Average Delay (sec/veh): 19.1  
Optimal Cycle: 25 Level Of Service: B

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound  |   |   | West Bound  |   |   |
|-------------|-------------|---|---|-------------|---|---|-------------|---|---|-------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L           | T | R | L           | T | R |
| Control:    | Permitted   |   |   | Permitted   |   |   | Split Phase |   |   | Split Phase |   |   |
| Rights:     | Ignore      |   |   | Ignore      |   |   | Include     |   |   | Include     |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 |
| Lanes:      | 0           | 0 | 2 | 0           | 0 | 3 | 0           | 0 | 0 | 0           | 0 | 2 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 0    | 493  | 466  | 0    | 684  | 246  | 0    | 0    | 0    | 403  | 0    | 214  |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 0    | 607  | 574  | 0    | 843  | 303  | 0    | 0    | 0    | 496  | 0    | 264  |
| Added Vol:   | 0    | 64   | 42   | 0    | 314  | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 0    | 671  | 616  | 0    | 1157 | 303  | 0    | 0    | 0    | 496  | 0    | 264  |
| User Adj:    | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.00 | 0.95 | 0.95 | 0.00 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 0    | 707  | 0    | 0    | 1218 | 0    | 0    | 0    | 0    | 523  | 0    | 278  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 0    | 707  | 0    | 0    | 1218 | 0    | 0    | 0    | 0    | 523  | 0    | 278  |
| PCE Adj:     | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 0    | 707  | 0    | 0    | 1218 | 0    | 0    | 0    | 0    | 523  | 0    | 278  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.88 |
| Lanes:      | 0.00 | 2.00 | 1.00 | 0.00 | 3.00 | 1.00 | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 2.00 |
| Final Sat.: | 0    | 3420 | 1800 | 0    | 4914 | 1800 | 0    | 0    | 0    | 1800 | 0    | 3168 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.00 | 0.21 | 0.00 | 0.00 | 0.25 | 0.00 | 0.00 | 0.00 | 0.00 | 0.29 | 0.00 | 0.09 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.00 | 0.44 | 0.00 | 0.00 | 0.44 | 0.00 | 0.00 | 0.00 | 0.00 | 0.52 | 0.00 | 0.52 |
| Volume/Cap:  | 0.00 | 0.47 | 0.00 | 0.00 | 0.56 | 0.00 | 0.00 | 0.00 | 0.00 | 0.56 | 0.00 | 0.17 |
| Delay/Veh:   | 0.0  | 19.9 | 0.0  | 0.0  | 21.0 | 0.0  | 0.0  | 0.0  | 0.0  | 17.1 | 0.0  | 12.8 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 0.0  | 19.9 | 0.0  | 0.0  | 21.0 | 0.0  | 0.0  | 0.0  | 0.0  | 17.1 | 0.0  | 12.8 |
| LOS by Move: | A    | B    | A    | A    | C    | A    | A    | A    | A    | B    | A    | B    |
| HCM2kAvgQ:   | 0    | 8    | 0    | 0    | 10   | 0    | 0    | 0    | 0    | 11   | 0    | 3    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 Etiwanda Ave/I-10 EB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 1.002  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 40.9  
Optimal Cycle: 180 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound  |   |   | West Bound  |   |   |
|-------------|-------------|---|---|-------------|---|---|-------------|---|---|-------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L           | T | R | L           | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Split Phase |   |   | Split Phase |   |   |
| Rights:     | Ignore      |   |   | Ignore      |   |   | Include     |   |   | Include     |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 |
| Lanes:      | 0           | 0 | 3 | 0           | 0 | 2 | 2           | 0 | 0 | 0           | 0 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 0    | 720  | 323  | 0    | 968  | 164  | 144  | 0    | 583  | 0    | 0    | 0    |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 0    | 887  | 398  | 0    | 1193 | 202  | 177  | 0    | 718  | 0    | 0    | 0    |
| Added Vol:   | 0    | 106  | 0    | 0    | 314  | 0    | 0    | 0    | 99   | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 0    | 993  | 398  | 0    | 1507 | 202  | 177  | 0    | 817  | 0    | 0    | 0    |
| User Adj:    | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.00 | 0.95 | 0.95 | 0.00 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 0    | 1045 | 0    | 0    | 1586 | 0    | 187  | 0    | 860  | 0    | 0    | 0    |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 0    | 1045 | 0    | 0    | 1586 | 0    | 187  | 0    | 860  | 0    | 0    | 0    |
| PCE Adj:     | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 0    | 1045 | 0    | 0    | 1586 | 0    | 187  | 0    | 860  | 0    | 0    | 0    |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.91 | 1.00 | 1.00 | 0.95 | 1.00 | 0.97 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 0.00 | 3.00 | 1.00 | 0.00 | 2.00 | 1.00 | 2.00 | 0.00 | 1.00 | 0.00 | 0.00 | 0.00 |
| Final Sat.: | 0    | 4914 | 1800 | 0    | 3420 | 1800 | 3492 | 0    | 1800 | 0    | 0    | 0    |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.00 | 0.21 | 0.00 | 0.00 | 0.46 | 0.00 | 0.05 | 0.00 | 0.48 | 0.00 | 0.00 | 0.00 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      |      |      |      |
| Green/Cycle: | 0.00 | 0.46 | 0.00 | 0.00 | 0.46 | 0.00 | 0.48 | 0.00 | 0.48 | 0.00 | 0.00 | 0.00 |
| Volume/Cap:  | 0.00 | 0.46 | 0.00 | 0.00 | 1.00 | 0.00 | 0.11 | 0.00 | 1.00 | 0.00 | 0.00 | 0.00 |
| Delay/Veh:   | 0.0  | 18.5 | 0.0  | 0.0  | 49.9 | 0.0  | 14.5 | 0.0  | 57.3 | 0.0  | 0.0  | 0.0  |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 0.0  | 18.5 | 0.0  | 0.0  | 49.9 | 0.0  | 14.5 | 0.0  | 57.3 | 0.0  | 0.0  | 0.0  |
| LOS by Move: | A    | B    | A    | A    | D    | A    | B    | A    | E    | A    | A    | A    |
| HCM2kAvgQ:   | 0    | 8    | 0    | 0    | 33   | 0    | 2    | 0    | 34   | 0    | 0    | 0    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #6 Etiwanda Ave/ East Airport Dr-Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 1.313  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 128.8  
Optimal Cycle: 180 Level Of Service: F

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound  |   |   | West Bound  |   |   |
|-------------|-------------|---|---|-------------|---|---|-------------|---|---|-------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L           | T | R | L           | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Prot+Permit |   |   | Prot+Permit |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include     |   |   | Include     |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 1           | 0 | 1 | 1           | 0 | 1 | 1           | 0 | 1 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 44   | 599  | 183  | 338  | 846  | 256  | 91   | 63   | 36   | 46   | 91   | 345  |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 54   | 738  | 225  | 416  | 1042 | 315  | 112  | 78   | 44   | 57   | 112  | 425  |
| Added Vol:   | 66   | 20   | 0    | 328  | 85   | 0    | 0    | 1095 | 227  | 0    | 217  | 86   |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 120  | 758  | 225  | 744  | 1127 | 315  | 112  | 1173 | 271  | 57   | 329  | 511  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 127  | 798  | 237  | 784  | 1187 | 332  | 118  | 1234 | 286  | 60   | 346  | 538  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 127  | 798  | 237  | 784  | 1187 | 332  | 118  | 1234 | 286  | 60   | 346  | 538  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 127  | 798  | 237  | 784  | 1187 | 332  | 118  | 1234 | 286  | 60   | 346  | 538  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Lanes:      | 1.00 | 1.54 | 0.46 | 1.00 | 1.56 | 0.44 | 1.00 | 1.62 | 0.38 | 1.00 | 1.00 | 1.00 |
| Final Sat.: | 1800 | 2636 | 784  | 1800 | 2672 | 748  | 1800 | 2777 | 643  | 1800 | 1710 | 1710 |

Capacity Analysis Module:

|              |      |      |       |       |      |      |       |      |       |       |      |      |
|--------------|------|------|-------|-------|------|------|-------|------|-------|-------|------|------|
| Vol/Sat:     | 0.07 | 0.30 | 0.30  | 0.44  | 0.44 | 0.44 | 0.00  | 0.44 | 0.44  | 0.00  | 0.20 | 0.31 |
| Crit Moves:  | **** |      |       | ****  |      |      | ****  |      |       | ****  |      |      |
| Green/Cycle: | 0.08 | 0.23 | 0.23  | 0.33  | 0.48 | 0.48 | 0.06  | 0.34 | 0.34  | 0.03  | 0.30 | 0.30 |
| Volume/Cap:  | 0.92 | 1.32 | 1.32  | 1.32  | 0.92 | 0.92 | 1.05  | 1.32 | 1.32  | 1.32  | 0.68 | 1.05 |
| Delay/Veh:   | 99.2 | 192  | 192.0 | 189.7 | 33.0 | 33.0 | 146.4 | 184  | 183.9 | 291.1 | 32.2 | 80.6 |
| User DelAdj: | 1.00 | 1.00 | 1.00  | 1.00  | 1.00 | 1.00 | 1.00  | 1.00 | 1.00  | 1.00  | 1.00 | 1.00 |
| AdjDel/Veh:  | 99.2 | 192  | 192.0 | 189.7 | 33.0 | 33.0 | 146.4 | 184  | 183.9 | 291.1 | 32.2 | 80.6 |
| LOS by Move: | F    | F    | F     | F     | C    | C    | F     | F    | F     | F     | C    | F    |
| HCM2kAvgQ:   | 7    | 35   | 35    | 49    | 27   | 27   | 7     | 50   | 50    | 5     | 11   | 26   |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 Etiwanda Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 1.155  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 86.4  
Optimal Cycle: 180 Level Of Service: F

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 2 | 0           | 2 | 0 | 1          | 2 | 0 | 0          | 2 | 0 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 208  | 559  | 52   | 115  | 640  | 159  | 145  | 358  | 218  | 75   | 677  | 126  |
| Growth Adj:   | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse:  | 256  | 689  | 64   | 142  | 788  | 196  | 179  | 441  | 269  | 92   | 834  | 155  |
| Added Vol:    | 6    | 10   | 50   | 269  | 42   | 0    | 0    | 1799 | 24   | 35   | 253  | 76   |
| PasserByVol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:  | 262  | 699  | 114  | 411  | 830  | 196  | 179  | 2240 | 293  | 127  | 1087 | 231  |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 276  | 735  | 120  | 432  | 874  | 206  | 188  | 2358 | 308  | 134  | 1144 | 243  |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 276  | 735  | 120  | 432  | 874  | 206  | 188  | 2358 | 308  | 134  | 1144 | 243  |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 276  | 735  | 120  | 432  | 874  | 206  | 188  | 2358 | 308  | 134  | 1144 | 243  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 |
| Lanes:      | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 |
| Final Sat.: | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 |

Capacity Analysis Module:

|              |       |      |      |       |      |      |      |      |      |       |      |      |
|--------------|-------|------|------|-------|------|------|------|------|------|-------|------|------|
| Vol/Sat:     | 0.08  | 0.22 | 0.07 | 0.12  | 0.26 | 0.11 | 0.05 | 0.69 | 0.17 | 0.04  | 0.33 | 0.14 |
| Crit Moves:  | ****  |      |      | ****  |      |      | **** |      |      | ****  |      |      |
| Green/Cycle: | 0.07  | 0.18 | 0.18 | 0.11  | 0.22 | 0.22 | 0.09 | 0.60 | 0.60 | 0.03  | 0.54 | 0.54 |
| Volume/Cap:  | 1.15  | 1.17 | 0.36 | 1.17  | 1.15 | 0.52 | 0.62 | 1.15 | 0.29 | 1.15  | 0.62 | 0.25 |
| Delay/Veh:   | 153.1 | 133  | 36.4 | 146.2 | 123  | 35.4 | 47.8 | 95.9 | 9.9  | 179.5 | 16.3 | 12.2 |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 |
| AdjDel/Veh:  | 153.1 | 133  | 36.4 | 146.2 | 123  | 35.4 | 47.8 | 95.9 | 9.9  | 179.5 | 16.3 | 12.2 |
| LOS by Move: | F     | F    | D    | F     | F    | D    | D    | F    | A    | F     | B    | B    |
| HCM2kAvgQ:   | 10    | 22   | 3    | 14    | 25   | 6    | 4    | 61   | 5    | 5     | 13   | 4    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Etiwanda Ave/Marlay Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.459  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 16.6  
Optimal Cycle: 25 Level Of Service: B

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Permitted  |   |   | Permitted  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 1           | 0 | 2 | 1          | 0 | 1 | 1          | 0 | 1 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 40   | 562  | 117  | 79   | 508  | 41   | 11   | 31   | 32   | 81   | 64   | 96   |
| Growth Adj:   | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse:  | 49   | 692  | 144  | 97   | 626  | 51   | 14   | 38   | 39   | 100  | 79   | 118  |
| Added Vol:    | 0    | 60   | 27   | 24   | 77   | 0    | 0    | 24   | 0    | 6    | 6    | 6    |
| PasserByVol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:  | 49   | 752  | 171  | 121  | 703  | 51   | 14   | 62   | 39   | 106  | 85   | 124  |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 52   | 792  | 180  | 128  | 740  | 53   | 14   | 65   | 41   | 111  | 89   | 131  |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 52   | 792  | 180  | 128  | 740  | 53   | 14   | 65   | 41   | 111  | 89   | 131  |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 52   | 792  | 180  | 128  | 740  | 53   | 14   | 65   | 41   | 111  | 89   | 131  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 0.95 | 1.00 | 0.91 | 0.91 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Lanes:      | 1.00 | 1.63 | 0.37 | 1.00 | 2.80 | 0.20 | 1.00 | 1.22 | 0.78 | 1.00 | 1.00 | 1.00 |
| Final Sat.: | 1800 | 2786 | 634  | 1800 | 4585 | 329  | 1800 | 2093 | 1327 | 1800 | 1710 | 1710 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.03 | 0.28 | 0.28 | 0.07 | 0.16 | 0.16 | 0.01 | 0.03 | 0.03 | 0.06 | 0.05 | 0.08 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.12 | 0.62 | 0.62 | 0.15 | 0.66 | 0.66 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 |
| Volume/Cap:  | 0.25 | 0.46 | 0.46 | 0.46 | 0.25 | 0.25 | 0.05 | 0.19 | 0.19 | 0.37 | 0.31 | 0.46 |
| Delay/Veh:   | 40.7 | 10.3 | 10.3 | 39.7 | 7.1  | 7.1  | 35.1 | 36.0 | 36.0 | 37.8 | 36.9 | 38.3 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 40.7 | 10.3 | 10.3 | 39.7 | 7.1  | 7.1  | 35.1 | 36.0 | 36.0 | 37.8 | 36.9 | 38.3 |
| LOS by Move: | D    | B    | B    | D    | A    | A    | D    | D    | D    | D    | D    | D    |
| HCM2kAvgQ:   | 2    | 8    | 8    | 4    | 4    | 4    | 0    | 2    | 2    | 3    | 3    | 4    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #9 Etiwanda Ave/Philadelphia Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.424  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 15.3  
Optimal Cycle: 24 Level Of Service: B

| Approach:   | North Bound |   |   |   | South Bound |   |   |   | East Bound |   |   |   | West Bound |   |   |  |
|-------------|-------------|---|---|---|-------------|---|---|---|------------|---|---|---|------------|---|---|--|
| Movement:   | L           | T | R |   | L           | T | R |   | L          | T | R |   | L          | T | R |  |
| Control:    | Protected   |   |   |   | Protected   |   |   |   | Permitted  |   |   |   | Permitted  |   |   |  |
| Rights:     | Include     |   |   |   | Include     |   |   |   | Include    |   |   |   | Include    |   |   |  |
| Min. Green: | 0           | 0 | 0 |   | 0           | 0 | 0 |   | 0          | 0 | 0 |   | 0          | 0 | 0 |  |
| Lanes:      | 1           | 0 | 2 | 0 | 1           | 0 | 2 | 1 | 1          | 0 | 1 | 0 | 1          | 0 | 1 |  |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 81   | 702  | 18   | 46   | 472  | 78   | 53   | 13   | 42   | 11   | 7    | 16   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 100  | 865  | 22   | 57   | 582  | 96   | 65   | 16   | 52   | 14   | 9    | 20   |
| Added Vol:   | 0    | 43   | 14   | 70   | 10   | 3    | 12   | 12   | 0    | 3    | 3    | 31   |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 100  | 908  | 36   | 127  | 592  | 99   | 77   | 28   | 52   | 17   | 12   | 51   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 105  | 956  | 38   | 133  | 623  | 104  | 81   | 29   | 54   | 17   | 12   | 53   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 105  | 956  | 38   | 133  | 623  | 104  | 81   | 29   | 54   | 17   | 12   | 53   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 105  | 956  | 38   | 133  | 623  | 104  | 81   | 29   | 54   | 17   | 12   | 53   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.91 | 0.91 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 2.57 | 0.43 | 1.00 | 1.00 | 1.00 | 1.00 | 0.19 | 0.81 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 4209 | 705  | 1800 | 1800 | 1800 | 1800 | 336  | 1464 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.06 | 0.28 | 0.02 | 0.07 | 0.15 | 0.15 | 0.05 | 0.02 | 0.03 | 0.01 | 0.04 | 0.04 |
| Crit Moves:  | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Green/Cycle: | 0.24 | 0.66 | 0.66 | 0.17 | 0.60 | 0.60 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 |
| Volume/Cap:  | 0.25 | 0.42 | 0.03 | 0.42 | 0.25 | 0.25 | 0.42 | 0.15 | 0.28 | 0.09 | 0.34 | 0.34 |
| Delay/Veh:   | 31.3 | 8.2  | 6.0  | 37.7 | 9.5  | 9.5  | 43.3 | 41.0 | 42.0 | 40.5 | 42.5 | 42.5 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 31.3 | 8.2  | 6.0  | 37.7 | 9.5  | 9.5  | 43.3 | 41.0 | 42.0 | 40.5 | 42.5 | 42.5 |
| LOS by Move: | C    | A    | A    | D    | A    | A    | D    | D    | D    | D    | D    | D    |
| HCM2kAvgQ:   | 3    | 7    | 0    | 4    | 4    | 4    | 3    | 1    | 2    | 1    | 2    | 2    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #10 Etiwanda Ave/SR-60 WB Ramp

Cycle (sec): 100 Critical Vol./Cap.(X): 0.590  
Loss Time (sec): 4 (Y+R=4.0 sec) Average Delay (sec/veh): 16.1  
Optimal Cycle: 27 Level Of Service: B

| Approach:   | North Bound |   |   |   | South Bound |   |   |   | East Bound  |   |   |   | West Bound  |   |   |  |
|-------------|-------------|---|---|---|-------------|---|---|---|-------------|---|---|---|-------------|---|---|--|
| Movement:   | L           | T | R |   | L           | T | R |   | L           | T | R |   | L           | T | R |  |
| Control:    | Permitted   |   |   |   | Permitted   |   |   |   | Split Phase |   |   |   | Split Phase |   |   |  |
| Rights:     | Include     |   |   |   | Include     |   |   |   | Include     |   |   |   | Include     |   |   |  |
| Min. Green: | 0           | 0 | 0 |   | 0           | 0 | 0 |   | 0           | 0 | 0 |   | 0           | 0 | 0 |  |
| Lanes:      | 0           | 0 | 2 | 0 | 0           | 0 | 2 | 0 | 0           | 0 | 0 | 0 | 1           | 0 | 0 |  |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 0    | 873  | 0    | 0    | 500  | 0    | 0    | 0    | 0    | 245  | 0    | 302  |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 0    | 1076 | 0    | 0    | 616  | 0    | 0    | 0    | 0    | 302  | 0    | 372  |
| Added Vol:   | 0    | 58   | 0    | 0    | 14   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 0    | 1134 | 0    | 0    | 630  | 0    | 0    | 0    | 0    | 302  | 0    | 372  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 0    | 1193 | 0    | 0    | 663  | 0    | 0    | 0    | 0    | 318  | 0    | 392  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 0    | 1193 | 0    | 0    | 663  | 0    | 0    | 0    | 0    | 318  | 0    | 392  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 0    | 1193 | 0    | 0    | 663  | 0    | 0    | 0    | 0    | 318  | 0    | 392  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 0.00 | 2.00 | 0.00 | 0.00 | 2.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 |
| Final Sat.: | 0    | 3420 | 0    | 0    | 3420 | 0    | 0    | 0    | 0    | 1800 | 0    | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.00 | 0.35 | 0.00 | 0.00 | 0.19 | 0.00 | 0.00 | 0.00 | 0.00 | 0.18 | 0.00 | 0.22 |
| Crit Moves:  | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Green/Cycle: | 0.00 | 0.59 | 0.00 | 0.00 | 0.59 | 0.00 | 0.00 | 0.00 | 0.00 | 0.37 | 0.00 | 0.37 |
| Volume/Cap:  | 0.00 | 0.59 | 0.00 | 0.00 | 0.33 | 0.00 | 0.00 | 0.00 | 0.00 | 0.48 | 0.00 | 0.59 |
| Delay/Veh:   | 0.0  | 13.3 | 0.0  | 0.0  | 10.5 | 0.0  | 0.0  | 0.0  | 0.0  | 24.7 | 0.0  | 26.9 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 0.0  | 13.3 | 0.0  | 0.0  | 10.5 | 0.0  | 0.0  | 0.0  | 0.0  | 24.7 | 0.0  | 26.9 |
| LOS by Move: | A    | B    | A    | A    | B    | A    | A    | A    | A    | C    | A    | C    |
| HCM2kAvgQ:   | 0    | 12   | 0    | 0    | 5    | 0    | 0    | 0    | 0    | 8    | 0    | 10   |

Note: Queue reported is the number of cars per lane.



FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #13 Mulberry Ave/Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.739  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 22.0  
Optimal Cycle: 47 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Split Phase |   |   | Split Phase |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 2 | 1          | 0 | 2 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 158  | 0    | 131  | 0    | 0    | 0    | 0    | 203  | 81   | 161  | 367  | 0    |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 195  | 0    | 161  | 0    | 0    | 0    | 0    | 250  | 100  | 198  | 452  | 0    |
| Added Vol:   | 38   | 0    | 145  | 0    | 0    | 0    | 0    | 1289 | 134  | 33   | 264  | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 233  | 0    | 306  | 0    | 0    | 0    | 0    | 1539 | 234  | 231  | 716  | 0    |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 245  | 0    | 323  | 0    | 0    | 0    | 0    | 1620 | 246  | 244  | 754  | 0    |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 245  | 0    | 323  | 0    | 0    | 0    | 0    | 1620 | 246  | 244  | 754  | 0    |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 245  | 0    | 323  | 0    | 0    | 0    | 0    | 1620 | 246  | 244  | 754  | 0    |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 0.91 | 1.00 | 0.95 | 1.00 |
| Lanes:      | 1.00 | 0.00 | 1.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.60 | 0.40 | 1.00 | 2.00 | 0.00 |
| Final Sat.: | 1800 | 0    | 1800 | 0    | 0    | 0    | 0    | 4266 | 648  | 1800 | 3420 | 0    |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.14 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 | 0.38 | 0.38 | 0.14 | 0.22 | 0.00 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.24 | 0.00 | 0.24 | 0.00 | 0.00 | 0.00 | 0.00 | 0.51 | 0.51 | 0.18 | 0.70 | 0.00 |
| Volume/Cap:  | 0.56 | 0.00 | 0.74 | 0.00 | 0.00 | 0.00 | 0.00 | 0.74 | 0.74 | 0.74 | 0.32 | 0.00 |
| Delay/Veh:   | 34.9 | 0.0  | 41.5 | 0.0  | 0.0  | 0.0  | 0.0  | 20.2 | 20.2 | 47.1 | 5.9  | 0.0  |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 34.9 | 0.0  | 41.5 | 0.0  | 0.0  | 0.0  | 0.0  | 20.2 | 20.2 | 47.1 | 5.9  | 0.0  |
| LOS by Move: | C    | A    | D    | A    | A    | A    | A    | C    | C    | D    | A    | A    |
| HCM2kAvgQ:   | 7    | 0    | 11   | 0    | 0    | 0    | 0    | 17   | 17   | 9    | 5    | 0    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #14 Mulberry Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.473  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 19.0  
Optimal Cycle: 26 Level Of Service: B

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Permitted  |   |   | Permitted  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 0           | 0 | 1 | 0          | 1 | 0 | 0          | 1 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 80   | 240  | 51   | 25   | 171  | 17   | 2    | 10   | 24   | 52   | 14   | 43   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 99   | 296  | 63   | 31   | 211  | 21   | 2    | 12   | 30   | 64   | 17   | 53   |
| Added Vol:   | 0    | 173  | 227  | 49   | 118  | 0    | 0    | 0    | 0    | 67   | 0    | 10   |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 99   | 469  | 290  | 80   | 329  | 21   | 2    | 12   | 30   | 131  | 17   | 63   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 104  | 493  | 305  | 84   | 346  | 22   | 3    | 13   | 31   | 138  | 18   | 66   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 104  | 493  | 305  | 84   | 346  | 22   | 3    | 13   | 31   | 138  | 18   | 66   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 104  | 493  | 305  | 84   | 346  | 22   | 3    | 13   | 31   | 138  | 18   | 66   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 1.00 | 1.00 | 1.00 | 0.94 | 0.06 | 0.17 | 0.83 | 1.00 | 0.62 | 0.08 | 0.30 |
| Final Sat.: | 1800 | 1800 | 1800 | 1800 | 1692 | 108  | 300  | 1500 | 1800 | 1117 | 147  | 537  |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.06 | 0.27 | 0.17 | 0.05 | 0.20 | 0.20 | 0.01 | 0.01 | 0.02 | 0.12 | 0.12 | 0.12 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.15 | 0.58 | 0.58 | 0.10 | 0.53 | 0.53 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 | 0.26 |
| Volume/Cap:  | 0.39 | 0.47 | 0.29 | 0.47 | 0.39 | 0.39 | 0.03 | 0.03 | 0.07 | 0.47 | 0.47 | 0.47 |
| Delay/Veh:   | 39.3 | 12.5 | 10.8 | 44.6 | 14.2 | 14.2 | 27.5 | 27.5 | 27.8 | 31.9 | 31.9 | 31.9 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 39.3 | 12.5 | 10.8 | 44.6 | 14.2 | 14.2 | 27.5 | 27.5 | 27.8 | 31.9 | 31.9 | 31.9 |
| LOS by Move: | D    | B    | B    | D    | B    | B    | C    | C    | C    | C    | C    | C    |
| HCM2kAvgQ:   | 3    | 9    | 5    | 3    | 7    | 7    | 0    | 0    | 1    | 6    | 6    | 6    |

Note: Queue reported is the number of cars per lane.



FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #15 Mulberry Ave/Jurupa St  
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 1.261  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 103.6  
Optimal Cycle: 180 Level Of Service: F  
\*\*\*\*\*

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 2 | 0           | 1 | 0 | 2          | 0 | 1 | 1          | 0 | 2 |

Volume Module:  
Base Vol: 417 378 222 8 217 61 84 227 72 205 723 35  
Growth Adj: 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23  
Initial Bse: 514 466 274 10 267 75 103 280 89 253 891 43  
Added Vol: 33 154 274 0 78 108 237 1786 19 87 296 6  
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0  
Initial Fut: 547 620 548 10 345 183 340 2066 108 340 1187 49  
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95  
PHF Volume: 576 652 576 10 364 193 358 2174 113 357 1249 52  
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
Reduced Vol: 576 652 576 10 364 193 358 2174 113 357 1249 52  
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
FinalVolume: 576 652 576 10 364 193 358 2174 113 357 1249 52  
-----

Saturation Flow Module:  
Sat/Lane: 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800  
Adjustment: 0.97 0.95 1.00 1.00 0.95 1.00 1.00 0.95 1.00 1.00 0.95 1.00  
Lanes: 2.00 2.00 1.00 1.00 2.00 1.00 1.00 2.00 1.00 1.00 2.00 1.00  
Final Sat.: 3492 3420 1800 1800 3420 1800 1800 3420 1800 1800 3420 1800  
-----

Capacity Analysis Module:  
Vol/Sat: 0.16 0.19 0.32 0.01 0.11 0.11 0.20 0.64 0.06 0.20 0.37 0.03  
Crit Moves: \*\*\*\*  
Green/Cycle: 0.16 0.25 0.25 0.00 0.10 0.10 0.23 0.50 0.50 0.16 0.43 0.43  
Volume/Cap: 1.05 0.75 1.26 1.26 1.04 1.05 0.85 1.26 0.12 1.26 0.85 0.07  
Delay/Veh: 95.1 38.1 171.5 465.8 105 125.8 52.1 147 13.2 184.9 30.8 16.9  
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
AdjDel/Veh: 95.1 38.1 171.5 465.8 105 125.8 52.1 147 13.2 184.9 30.8 16.9  
LOS by Move: F D F F F F D F B F C B  
HCM2kAvgQ: 15 11 35 2 11 11 13 66 2 23 21 1  
\*\*\*\*\*

Note: Queue reported is the number of cars per lane.  
\*\*\*\*\*

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #16 Mulberry Ave/Marlay Ave  
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.428  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 14.4  
Optimal Cycle: 28 Level Of Service: B  
\*\*\*\*\*

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 1 | 0 | 1          | 0 | 1 | 1          | 0 | 1 |

Volume Module:  
Base Vol: 62 468 34 7 277 53 41 14 42 41 52 52  
Growth Adj: 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23  
Initial Bse: 76 577 42 9 341 65 51 17 52 51 64 64  
Added Vol: 16 452 0 0 148 36 9 0 4 0 0 0  
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0  
Initial Fut: 92 1029 42 9 489 101 60 17 56 51 64 64  
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95  
PHF Volume: 97 1083 44 9 515 107 63 18 59 53 67 67  
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
Reduced Vol: 97 1083 44 9 515 107 63 18 59 53 67 67  
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
FinalVolume: 97 1083 44 9 515 107 63 18 59 53 67 67  
-----

Saturation Flow Module:  
Sat/Lane: 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800  
Adjustment: 1.00 0.95 1.00 1.00 0.95 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
Lanes: 1.00 2.00 1.00 1.00 2.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
Final Sat.: 1800 3420 1800 1800 3420 1800 1800 3420 1800 1800 3420 1800  
-----

Capacity Analysis Module:  
Vol/Sat: 0.05 0.32 0.02 0.01 0.15 0.06 0.03 0.01 0.03 0.03 0.04 0.04  
Crit Moves: \*\*\*\*  
Green/Cycle: 0.20 0.74 0.74 0.01 0.55 0.55 0.08 0.09 0.09 0.08 0.09 0.09  
Volume/Cap: 0.27 0.43 0.03 0.43 0.27 0.11 0.43 0.11 0.37 0.37 0.43 0.43  
Delay/Veh: 34.4 5.1 3.5 62.4 11.8 10.7 45.7 42.3 44.4 45.2 45.1 45.1  
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
AdjDel/Veh: 34.4 5.1 3.5 62.4 11.8 10.7 45.7 42.3 44.4 45.2 45.1 45.1  
LOS by Move: C A A E B B D D D D D D  
HCM2kAvgQ: 3 7 0 1 4 2 2 1 2 2 2 2  
\*\*\*\*\*

Note: Queue reported is the number of cars per lane.  
\*\*\*\*\*

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #17 Mulberry Ave/Philadelphia Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.564  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 9.9  
Optimal Cycle: 31 Level Of Service: A

| Approach:   | North Bound |   |   |   | South Bound |   |   |   | East Bound |   |   |   | West Bound |   |   |  |
|-------------|-------------|---|---|---|-------------|---|---|---|------------|---|---|---|------------|---|---|--|
| Movement:   | L           | T | R |   | L           | T | R |   | L          | T | R |   | L          | T | R |  |
| Control:    | Protected   |   |   |   | Protected   |   |   |   | Permitted  |   |   |   | Permitted  |   |   |  |
| Rights:     | Include     |   |   |   | Include     |   |   |   | Include    |   |   |   | Include    |   |   |  |
| Min. Green: | 0           | 0 | 0 |   | 0           | 0 | 0 |   | 0          | 0 | 0 |   | 0          | 0 | 0 |  |
| Lanes:      | 1           | 0 | 2 | 0 | 1           | 0 | 2 | 0 | 1          | 0 | 1 | 0 | 1          | 0 | 1 |  |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 96   | 857  | 19   | 10   | 977  | 33   | 28   | 1    | 52   | 66   | 5    | 19   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 118  | 1056 | 23   | 12   | 1204 | 41   | 34   | 1    | 64   | 81   | 6    | 23   |
| Added Vol:   | 31   | 438  | 0    | 0    | 82   | 70   | 30   | 0    | 7    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 149  | 1494 | 23   | 12   | 1286 | 111  | 64   | 1    | 71   | 81   | 6    | 23   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 157  | 1572 | 25   | 13   | 1353 | 116  | 68   | 1    | 75   | 86   | 6    | 25   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 157  | 1572 | 25   | 13   | 1353 | 116  | 68   | 1    | 75   | 86   | 6    | 25   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 157  | 1572 | 25   | 13   | 1353 | 116  | 68   | 1    | 75   | 86   | 6    | 25   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.21 | 0.79 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 | 1800 | 1800 | 1800 | 1800 | 375  | 1425 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.09 | 0.46 | 0.01 | 0.01 | 0.40 | 0.06 | 0.04 | 0.00 | 0.04 | 0.05 | 0.02 | 0.02 |
| Crit Moves:  | **** |      |      | **** |      |      |      |      |      | **** |      |      |
| Green/Cycle: | 0.15 | 0.84 | 0.84 | 0.01 | 0.70 | 0.70 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 |
| Volume/Cap:  | 0.56 | 0.55 | 0.02 | 0.55 | 0.56 | 0.09 | 0.45 | 0.01 | 0.49 | 0.56 | 0.21 | 0.21 |
| Delay/Veh:   | 41.8 | 2.5  | 1.3  | 72.9 | 7.7  | 4.8  | 45.7 | 42.0 | 46.3 | 48.9 | 43.3 | 43.3 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 41.8 | 2.5  | 1.3  | 72.9 | 7.7  | 4.8  | 45.7 | 42.0 | 46.3 | 48.9 | 43.3 | 43.3 |
| LOS by Move: | D    | A    | A    | E    | A    | A    | D    | D    | D    | D    | D    | D    |
| HCM2kAvgQ:   | 5    | 8    | 0    | 1    | 11   | 1    | 3    | 0    | 3    | 3    | 1    | 1    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #18 Mulberry Ave/SR-60 WB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.988  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 30.2  
Optimal Cycle: 180 Level Of Service: C

| Approach:   | North Bound |   |   |   | South Bound |   |   |   | East Bound  |   |   |   | West Bound  |   |   |  |
|-------------|-------------|---|---|---|-------------|---|---|---|-------------|---|---|---|-------------|---|---|--|
| Movement:   | L           | T | R |   | L           | T | R |   | L           | T | R |   | L           | T | R |  |
| Control:    | Protected   |   |   |   | Protected   |   |   |   | Split Phase |   |   |   | Split Phase |   |   |  |
| Rights:     | Include     |   |   |   | Include     |   |   |   | Include     |   |   |   | Include     |   |   |  |
| Min. Green: | 0           | 0 | 0 |   | 0           | 0 | 0 |   | 0           | 0 | 0 |   | 0           | 0 | 0 |  |
| Lanes:      | 1           | 0 | 2 | 0 | 0           | 0 | 1 | 1 | 0           | 0 | 0 | 0 | 0           | 1 | 0 |  |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 235  | 708  | 0    | 0    | 491  | 770  | 0    | 0    | 123  | 1    | 244  |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 290  | 872  | 0    | 0    | 605  | 949  | 0    | 0    | 152  | 1    | 301  |
| Added Vol:   | 0    | 469  | 0    | 0    | 89   | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 290  | 1341 | 0    | 0    | 694  | 949  | 0    | 0    | 152  | 1    | 301  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 305  | 1412 | 0    | 0    | 730  | 999  | 0    | 0    | 160  | 1    | 316  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 305  | 1412 | 0    | 0    | 730  | 999  | 0    | 0    | 160  | 1    | 316  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 305  | 1412 | 0    | 0    | 730  | 999  | 0    | 0    | 160  | 1    | 316  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 0.00 | 0.00 | 1.00 | 1.00 | 0.00 | 0.00 | 0.00 | 0.99 | 0.01 |
| Final Sat.: | 1800 | 3420 | 0    | 0    | 1710 | 1710 | 0    | 0    | 0    | 1785 | 15   |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.17 | 0.41 | 0.00 | 0.00 | 0.43 | 0.58 | 0.00 | 0.00 | 0.00 | 0.09 | 0.09 |
| Crit Moves:  | **** |      |      |      |      | **** |      |      |      | **** |      |
| Green/Cycle: | 0.17 | 0.76 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.00 | 0.00 | 0.18 | 0.18 |
| Volume/Cap:  | 0.99 | 0.54 | 0.00 | 0.00 | 0.72 | 0.99 | 0.00 | 0.00 | 0.00 | 0.50 | 0.50 |
| Delay/Veh:   | 89.3 | 5.1  | 0.0  | 0.0  | 15.7 | 38.9 | 0.0  | 0.0  | 0.0  | 38.4 | 88.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 89.3 | 5.1  | 0.0  | 0.0  | 15.7 | 38.9 | 0.0  | 0.0  | 0.0  | 38.4 | 88.0 |
| LOS by Move: | F    | A    | A    | A    | B    | D    | A    | A    | A    | D    | F    |
| HCM2kAvgQ:   | 14   | 10   | 0    | 0    | 18   | 39   | 0    | 0    | 0    | 5    | 15   |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #19 Mulberry Ave/SR-60 EB Ramps

|                           |                 |                          |                |
|---------------------------|-----------------|--------------------------|----------------|
| Cycle (sec):              | 100             | Critical Vol./Cap.(X):   | 0.907          |
| Loss Time (sec):          | 6 (Y+R=4.0 sec) | Average Delay (sec/veh): | 32.3           |
| Optimal Cycle:            | 98              | Level Of Service:        | C              |
| Approach:                 | North Bound     | South Bound              | East Bound     |
| Movement:                 | L - T - R       | L - T - R                | L - T - R      |
| Control:                  | Protected       | Protected                | Split Phase    |
| Rights:                   | Include         | Include                  | Include        |
| Min. Green:               | 0 0 0           | 0 0 0                    | 0 0 0          |
| Lanes:                    | 0 0 1 1 0       | 1 0 2 0 0                | 1 0 1 0 0      |
| Volume Module:            |                 |                          |                |
| Base Vol:                 | 0 548 93        | 164 425 0                | 378 3 290      |
| Growth Adj:               | 1.23 1.23 1.23  | 1.23 1.23 1.23           | 1.23 1.23 1.23 |
| Initial Bse:              | 0 675 115       | 202 524 0                | 466 4 357      |
| Added Vol:                | 0 469 0         | 0 89 0                   | 0 0 0          |
| PasserByVol:              | 0 0 0           | 0 0 0                    | 0 0 0          |
| Initial Fut:              | 0 1144 115      | 202 613 0                | 466 4 357      |
| User Adj:                 | 1.00 1.00 1.00  | 1.00 1.00 1.00           | 1.00 1.00 1.00 |
| PHF Adj:                  | 0.95 0.95 0.95  | 0.95 0.95 0.95           | 0.95 0.95 0.95 |
| PHF Volume:               | 0 1204 121      | 213 645 0                | 490 4 376      |
| Reduct Vol:               | 0 0 0           | 0 0 0                    | 0 0 0          |
| Reduced Vol:              | 0 1204 121      | 213 645 0                | 490 4 376      |
| PCE Adj:                  | 1.00 1.00 1.00  | 1.00 1.00 1.00           | 1.00 1.00 1.00 |
| MLF Adj:                  | 1.00 1.00 1.00  | 1.00 1.00 1.00           | 1.00 1.00 1.00 |
| FinalVolume:              | 0 1204 121      | 213 645 0                | 490 4 376      |
| Saturation Flow Module:   |                 |                          |                |
| Sat/Lane:                 | 1800 1800 1800  | 1800 1800 1800           | 1800 1800 1800 |
| Adjustment:               | 1.00 0.95 0.95  | 1.00 0.95 1.00           | 1.00 1.00 1.00 |
| Lanes:                    | 0.00 1.82 0.18  | 1.00 2.00 0.00           | 1.39 0.01 0.60 |
| Final Sat.:               | 0 3109 311      | 1800 3420 0              | 2506 11 1083   |
| Capacity Analysis Module: |                 |                          |                |
| Vol/Sat:                  | 0.00 0.39 0.39  | 0.12 0.19 0.00           | 0.20 0.35 0.35 |
| Crit Moves:               | ****            | ****                     | ****           |
| Green/Cycle:              | 0.00 0.43 0.43  | 0.13 0.56 0.00           | 0.38 0.38 0.38 |
| Volume/Cap:               | 0.00 0.91 0.91  | 0.91 0.34 0.00           | 0.51 0.91 0.91 |
| Delay/Veh:                | 0.0 35.3 35.3   | 77.8 12.2 0.0            | 23.9 41.3 41.3 |
| User DelAdj:              | 1.00 1.00 1.00  | 1.00 1.00 1.00           | 1.00 1.00 1.00 |
| AdjDel/Veh:               | 0.0 35.3 35.3   | 77.8 12.2 0.0            | 23.9 41.3 41.3 |
| LOS by Move:              | A D D           | E B A                    | C D D          |
| HCM2kAvgQ:                | 0 24 24         | 10 6 0                   | 9 22 22        |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #20 Banana Ave/San Bernardino Ave

|                          |  |  |                  |  |  |                                       |  |  |                   |  |  |                   |  |  |  |  |  |
|--------------------------|--|--|------------------|--|--|---------------------------------------|--|--|-------------------|--|--|-------------------|--|--|--|--|--|
| Average Delay (sec/veh): |  |  | 1.0              |  |  | Worst Case Level Of Service: B[ 10.5] |  |  |                   |  |  |                   |  |  |  |  |  |
| *****                    |  |  |                  |  |  |                                       |  |  |                   |  |  |                   |  |  |  |  |  |
| Approach:                |  |  | North Bound      |  |  | South Bound                           |  |  | East Bound        |  |  | West Bound        |  |  |  |  |  |
| Movement:                |  |  | L - T - R        |  |  | L - T - R                             |  |  | L - T - R         |  |  | L - T - R         |  |  |  |  |  |
| Control:                 |  |  | Stop Sign        |  |  | Stop Sign                             |  |  | Uncontrolled      |  |  | Uncontrolled      |  |  |  |  |  |
| Rights:                  |  |  | Include          |  |  | Include                               |  |  | Include           |  |  | Include           |  |  |  |  |  |
| Lanes:                   |  |  | 0 0 1! 0 0       |  |  | 0 0 0 0 0                             |  |  | 0 0 2 0 1         |  |  | 1 0 2 0 0         |  |  |  |  |  |
| -----                    |  |  |                  |  |  |                                       |  |  |                   |  |  |                   |  |  |  |  |  |
| Volume Module:           |  |  |                  |  |  |                                       |  |  |                   |  |  |                   |  |  |  |  |  |
| Base Vol:                |  |  | 7 0 36           |  |  | 0 0 0                                 |  |  | 0 244 5           |  |  | 25 315 0          |  |  |  |  |  |
| Growth Adj:              |  |  | 1.23 1.23 1.23   |  |  | 1.23 1.23 1.23                        |  |  | 1.23 1.23 1.23    |  |  | 1.23 1.23 1.23    |  |  |  |  |  |
| Initial Bse:             |  |  | 9 0 44           |  |  | 0 0 0                                 |  |  | 0 301 6           |  |  | 31 388 0          |  |  |  |  |  |
| Added Vol:               |  |  | 0 0 0            |  |  | 0 0 0                                 |  |  | 0 52 0            |  |  | 0 8 0             |  |  |  |  |  |
| PasserByVol:             |  |  | 0 0 0            |  |  | 0 0 0                                 |  |  | 0 0 0             |  |  | 0 0 0             |  |  |  |  |  |
| Initial Fut:             |  |  | 9 0 44           |  |  | 0 0 0                                 |  |  | 0 353 6           |  |  | 31 396 0          |  |  |  |  |  |
| User Adj:                |  |  | 1.00 1.00 1.00   |  |  | 1.00 1.00 1.00                        |  |  | 1.00 1.00 1.00    |  |  | 1.00 1.00 1.00    |  |  |  |  |  |
| PHF Adj:                 |  |  | 0.95 0.95 0.95   |  |  | 0.95 0.95 0.95                        |  |  | 0.95 0.95 0.95    |  |  | 0.95 0.95 0.95    |  |  |  |  |  |
| PHF Volume:              |  |  | 9 0 47           |  |  | 0 0 0                                 |  |  | 0 371 6           |  |  | 32 417 0          |  |  |  |  |  |
| Reduct Vol:              |  |  | 0 0 0            |  |  | 0 0 0                                 |  |  | 0 0 0             |  |  | 0 0 0             |  |  |  |  |  |
| FinalVolume:             |  |  | 9 0 47           |  |  | 0 0 0                                 |  |  | 0 371 6           |  |  | 32 417 0          |  |  |  |  |  |
| -----                    |  |  |                  |  |  |                                       |  |  |                   |  |  |                   |  |  |  |  |  |
| Critical Gap Module:     |  |  |                  |  |  |                                       |  |  |                   |  |  |                   |  |  |  |  |  |
| Critical Gp:             |  |  | 6.8 6.5 6.9      |  |  | xxxxx xxxx xxxxx                      |  |  | xxxxx xxxx xxxxx  |  |  | 4.1 xxxx xxxxx    |  |  |  |  |  |
| FollowUpTim:             |  |  | 3.5 4.0 3.3      |  |  | xxxxx xxxx xxxxx                      |  |  | xxxxx xxxx xxxxx  |  |  | 2.2 xxxx xxxxx    |  |  |  |  |  |
| -----                    |  |  |                  |  |  |                                       |  |  |                   |  |  |                   |  |  |  |  |  |
| Capacity Module:         |  |  |                  |  |  |                                       |  |  |                   |  |  |                   |  |  |  |  |  |
| Cnflct Vol:              |  |  | 644 853 186      |  |  | xxxx xxxx xxxxx                       |  |  | xxxx xxxx xxxxx   |  |  | 378 xxxx xxxxx    |  |  |  |  |  |
| Potent Cap.:             |  |  | 410 299 831      |  |  | xxxx xxxx xxxxx                       |  |  | xxxx xxxx xxxxx   |  |  | 1192 xxxx xxxxx   |  |  |  |  |  |
| Move Cap.:               |  |  | 401 290 831      |  |  | xxxx xxxx xxxxx                       |  |  | xxxx xxxx xxxxx   |  |  | 1192 xxxx xxxxx   |  |  |  |  |  |
| Volume/Cap:              |  |  | 0.02 0.00 0.06   |  |  | xxxx xxxx xxxxx                       |  |  | xxxx xxxx xxxxx   |  |  | 0.03 xxxx xxxxx   |  |  |  |  |  |
| -----                    |  |  |                  |  |  |                                       |  |  |                   |  |  |                   |  |  |  |  |  |
| Level Of Service Module: |  |  |                  |  |  |                                       |  |  |                   |  |  |                   |  |  |  |  |  |
| 2Way95thQ:               |  |  | xxxx xxxx xxxxx  |  |  | xxxx xxxx xxxxx                       |  |  | xxxx xxxx xxxxx   |  |  | 0.1 xxxx xxxxx    |  |  |  |  |  |
| Control Del:             |  |  | xxxxx xxxx xxxxx |  |  | xxxxx xxxx xxxxx                      |  |  | xxxxx xxxx xxxxx  |  |  | 8.1 xxxx xxxxx    |  |  |  |  |  |
| LOS by Move:             |  |  | * * *            |  |  | * * *                                 |  |  | * * *             |  |  | A * *             |  |  |  |  |  |
| Movement:                |  |  | LT - LTR - RT    |  |  | LT - LTR - RT                         |  |  | LT - LTR - RT     |  |  | LT - LTR - RT     |  |  |  |  |  |
| Shared Cap.:             |  |  | xxxx 708 xxxxx   |  |  | xxxx xxxx xxxxx                       |  |  | xxxx xxxx xxxxx   |  |  | xxxx xxxx xxxxx   |  |  |  |  |  |
| SharedQueue:             |  |  | xxxxx 0.3 xxxxx  |  |  | xxxxxx xxxx xxxxx                     |  |  | xxxxxx xxxx xxxxx |  |  | xxxxxx xxxx xxxxx |  |  |  |  |  |
| Shrd ConDel:             |  |  | xxxxx 10.5 xxxxx |  |  | xxxxxx xxxx xxxxx                     |  |  | xxxxxx xxxx xxxxx |  |  | xxxxxx xxxx xxxxx |  |  |  |  |  |
| Shared LOS:              |  |  | * B *            |  |  | * * *                                 |  |  | * * *             |  |  | * * *             |  |  |  |  |  |
| ApproachDel:             |  |  | 10.5             |  |  | xxxxxx                                |  |  | xxxxxx            |  |  | xxxxxx            |  |  |  |  |  |
| ApproachLOS:             |  |  | B                |  |  | *                                     |  |  | *                 |  |  | *                 |  |  |  |  |  |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

## Level Of Service Computation Report

## 2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #21 Banana Ave/Valley Blvd

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: D[ 33.6]

Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Stop Sign Stop Sign Uncontrolled Uncontrolled  
Rights: Include Include Include Include  
Lanes: 0 0 1! 0 0 0 0 1! 0 0 1 0 2 0 1 1 0 1 1 0

## Volume Module:

Base Vol: 4 0 1 14 0 22 50 424 18 12 609 40  
Growth Adj: 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23  
Initial Bse: 5 0 1 17 0 27 62 522 22 15 750 49  
Added Vol: 0 0 0 0 0 0 0 148 0 0 30 0  
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0  
Initial Fut: 5 0 1 17 0 27 62 670 22 15 780 49  
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95  
PHF Volume: 5 0 1 18 0 29 65 706 23 16 821 52  
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
FinalVolume: 5 0 1 18 0 29 65 706 23 16 821 52

## Critical Gap Module:

Critical Gap: 7.5 6.5 6.9 7.5 6.5 6.9 4.1 xxxx xxxxx 4.1 xxxx xxxxx  
FollowUpTim: 3.5 4.0 3.3 3.5 4.0 3.3 2.2 xxxx xxxxx 2.2 xxxx xxxxx

## Capacity Module:

Cnflct Vol: 1277 1740 353 1361 1737 437 873 xxxx xxxxx 729 xxxx xxxxx  
Potent Cap.: 126 88 649 109 88 573 781 xxxx xxxxx 884 xxxx xxxxx  
Move Cap.: 110 79 649 100 80 573 781 xxxx xxxxx 884 xxxx xxxxx  
Volume/Cap: 0.05 0.00 0.00 0.18 0.00 0.05 0.08 xxxx xxxxx 0.02 xxxx xxxxx

## Level Of Service Module:

2Way95thQ: xxxx xxxx xxxxx xxxx xxxx xxxxx 0.3 xxxx xxxxx 0.1 xxxx xxxxx  
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx 10.0 xxxx xxxxx 9.1 xxxx xxxxx  
LOS by Move: \* \* \* \* \* B \* \* \* A \* \* \*  
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT  
Shared Cap.: xxxx 132 xxxxx xxxx 202 xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx  
SharedQueue:xxxxx 0.2 xxxxx xxxxx 0.9 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx  
Shrd ConDel:xxxxx 33.6 xxxxx xxxxx 28.0 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx  
Shared LOS: \* D \* \* D \* \* \* \*  
ApproachDel: 33.6 28.0 xxxxxx xxxxxx  
ApproachLOS: D D \* \*

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

## Level Of Service Computation Report

## 2000 HCM Operations Method (Future Volume Alternative)

Intersection #22 Cherry Ave/San Bernardino Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 1.283

Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 117.5

Optimal Cycle: 180 Level Of Service: F

Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected  
Rights: Include Ignore Ignore Include  
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0  
Lanes: 1 0 2 1 0 1 0 3 0 1 1 0 2 0 1 1 0 1 1 0

## Volume Module:

Base Vol: 45 595 68 63 753 142 137 60 60 173 129 65  
Growth Adj: 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23  
Initial Bse: 55 733 84 78 928 175 169 74 74 213 159 80  
Added Vol: 0 630 2 0 3519 108 16 7 0 15 45 0  
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0  
Initial Fut: 55 1363 86 78 4447 283 185 81 74 228 204 80  
User Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 0.00 1.00 1.00 1.00  
PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.00 0.95 0.95 0.00 0.95 0.95 0.95  
PHF Volume: 58 1435 90 82 4681 0 195 85 0 240 215 84  
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
Reduced Vol: 58 1435 90 82 4681 0 195 85 0 240 215 84  
PCE Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 0.00 1.00 1.00 1.00  
MLF Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 0.00 1.00 1.00 1.00  
FinalVolume: 58 1435 90 82 4681 0 195 85 0 240 215 84

## Saturation Flow Module:

Sat/Lane: 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800  
Adjustment: 1.00 0.91 0.91 1.00 0.91 1.00 1.00 0.95 1.00 1.00 0.95 0.95  
Lanes: 1.00 2.82 0.18 1.00 3.00 1.00 1.00 2.00 1.00 1.00 1.44 0.56  
Final Sat.: 1800 4623 291 1800 4914 1800 1800 3420 1800 1800 2456 964

## Capacity Analysis Module:

Vol/Sat: 0.03 0.31 0.31 0.05 0.95 0.00 0.11 0.02 0.00 0.13 0.09 0.09  
Crit Moves: \*\*\*\* \*\*\*\* \*\*\*\*  
Green/Cycle: 0.03 0.67 0.67 0.10 0.74 0.00 0.08 0.02 0.00 0.13 0.07 0.07  
Volume/Cap: 1.28 0.46 0.46 0.46 1.28 0.00 1.28 1.04 0.00 1.04 1.28 1.28  
Delay/Veh: 276.5 8.0 8.0 44.5 142 0.0 213.9 159 0.0 113.4 203 202.6  
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
AdjDel/Veh: 276.5 8.0 8.0 44.5 142 0.0 213.9 159 0.0 113.4 203 202.6  
LOS by Move: F A A D F A F F A F F F  
HCM2kAvgQ: 5 8 8 3 99 0 14 4 0 13 11 11

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #23 Cherry Ave/Valley Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 2.063  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 349.9  
Optimal Cycle: 180 Level Of Service: F

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 1 |   | 1          | 0 | 2 | 0          | 1 |   |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 152  | 614  | 232  | 93   | 702  | 127  | 86   | 195  | 151  | 368  | 715  | 107  |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 187  | 756  | 286  | 115  | 865  | 156  | 106  | 240  | 186  | 453  | 881  | 132  |
| Added Vol:   | 64   | 972  | 70   | 3    | 3464 | 0    | 0    | 56   | 57   | 20   | 66   | 17   |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 251  | 1728 | 356  | 118  | 4329 | 156  | 106  | 296  | 243  | 473  | 947  | 149  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 264  | 1819 | 375  | 124  | 4557 | 165  | 112  | 312  | 256  | 498  | 997  | 157  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 264  | 1819 | 375  | 124  | 4557 | 165  | 112  | 312  | 256  | 498  | 997  | 157  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 264  | 1819 | 375  | 124  | 4557 | 165  | 112  | 312  | 256  | 498  | 997  | 157  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 |

Capacity Analysis Module:

|              |       |      |      |      |      |      |       |      |       |       |      |      |
|--------------|-------|------|------|------|------|------|-------|------|-------|-------|------|------|
| Vol/Sat:     | 0.15  | 0.53 | 0.21 | 0.07 | 1.33 | 0.09 | 0.06  | 0.09 | 0.14  | 0.28  | 0.29 | 0.09 |
| Crit Moves:  | ****  |      |      | **** |      |      | ****  |      | ****  |       |      |      |
| Green/Cycle: | 0.07  | 0.63 | 0.63 | 0.08 | 0.65 | 0.65 | 0.04  | 0.07 | 0.07  | 0.13  | 0.17 | 0.17 |
| Volume/Cap:  | 2.06  | 0.84 | 0.33 | 0.84 | 2.06 | 0.14 | 1.74  | 1.32 | 2.06  | 2.06  | 1.74 | 0.52 |
| Delay/Veh:   | 550.8 | 17.3 | 8.6  | 77.6 | 498  | 7.0  | 437.9 | 219  | 551.7 | 535.8 | 382  | 39.6 |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00  | 1.00  | 1.00 | 1.00 |
| AdjDel/Veh:  | 550.8 | 17.3 | 8.6  | 77.6 | 498  | 7.0  | 437.9 | 219  | 551.7 | 535.8 | 382  | 39.6 |
| LOS by Move: | F     | B    | A    | E    | F    | A    | F     | F    | F     | F     | F    | D    |
| HCM2kAvgQ:   | 26    | 25   | 5    | 6    | 223  | 2    | 11    | 12   | 25    | 48    | 45   | 5    |

Note: Queue reported is the number of cars per lane.

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FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #26 Cherry Ave/Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 2.492  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 575.1  
Optimal Cycle: 180 Level Of Service: F

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 1 |   | 1          | 0 | 1 | 1          | 0 |   |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 28   | 474  | 16   | 420  | 347  | 557  | 211  | 148  | 13   | 33   | 321  | 232  |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 34   | 584  | 20   | 517  | 428  | 686  | 260  | 182  | 16   | 41   | 395  | 286  |
| Added Vol:   | 211  | 731  | 130  | 789  | 3785 | 468  | 149  | 652  | 376  | 335  | 455  | 241  |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 245  | 1315 | 150  | 1306 | 4213 | 1154 | 409  | 834  | 392  | 376  | 850  | 527  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 258  | 1384 | 158  | 1375 | 4434 | 1215 | 430  | 878  | 413  | 395  | 895  | 555  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 258  | 1384 | 158  | 1375 | 4434 | 1215 | 430  | 878  | 413  | 395  | 895  | 555  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 258  | 1384 | 158  | 1375 | 4434 | 1215 | 430  | 878  | 413  | 395  | 895  | 555  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 1.57 | 0.43 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 2684 | 736  | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 |

Capacity Analysis Module:

|              |       |      |      |       |      |       |       |      |       |       |      |       |
|--------------|-------|------|------|-------|------|-------|-------|------|-------|-------|------|-------|
| Vol/Sat:     | 0.14  | 0.40 | 0.09 | 0.76  | 1.65 | 1.65  | 0.24  | 0.26 | 0.23  | 0.22  | 0.26 | 0.31  |
| Crit Moves:  | ****  |      |      | ****  |      |       | ****  |      | ****  |       |      |       |
| Green/Cycle: | 0.06  | 0.25 | 0.25 | 0.47  | 0.66 | 0.66  | 0.10  | 0.12 | 0.12  | 0.10  | 0.12 | 0.12  |
| Volume/Cap:  | 2.49  | 1.62 | 0.35 | 1.62  | 2.49 | 2.49  | 2.49  | 2.17 | 1.94  | 2.17  | 2.12 | 2.49  |
| Delay/Veh:   | 746.4 | 323  | 31.3 | 311.9 | 690  | 689.6 | 733.6 | 579  | 482.6 | 589.1 | 555  | 728.5 |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00  | 1.00 | 1.00  | 1.00  | 1.00 | 1.00  | 1.00  | 1.00 | 1.00  |
| AdjDel/Veh:  | 746.4 | 323  | 31.3 | 311.9 | 690  | 689.6 | 733.6 | 579  | 482.6 | 589.1 | 555  | 728.5 |
| LOS by Move: | F     | F    | C    | F     | F    | F     | F     | F    | F     | F     | F    | F     |
| HCM2kAvgQ:   | 28    | 58   | 4    | 107   | 307  | 307   | 46    | 46   | 38    | 39    | 46   | 59    |

Note: Queue reported is the number of cars per lane.

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FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #27 Cherry Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 1.481  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 180.5  
Optimal Cycle: 180 Level Of Service: F

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Permitted  |   |   | Permitted  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 1           | 0 | 2 | 0          | 1 | 0 | 0          | 1 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 17   | 454  | 10   | 41   | 358  | 162  | 222  | 43   | 67   | 8    | 91   | 19   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 21   | 559  | 12   | 51   | 441  | 200  | 274  | 53   | 83   | 10   | 112  | 23   |
| Added Vol:   | 496  | 756  | 28   | 241  | 2333 | 932  | 138  | 0    | 70   | 7    | 0    | 35   |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 517  | 1315 | 40   | 292  | 2774 | 1132 | 412  | 53   | 153  | 17   | 112  | 58   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 544  | 1385 | 42   | 307  | 2920 | 1191 | 433  | 56   | 161  | 18   | 118  | 61   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 544  | 1385 | 42   | 307  | 2920 | 1191 | 433  | 56   | 161  | 18   | 118  | 61   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 544  | 1385 | 42   | 307  | 2920 | 1191 | 433  | 56   | 161  | 18   | 118  | 61   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 2.91 | 0.09 | 1.00 | 2.13 | 0.87 | 1.00 | 0.26 | 0.74 | 0.13 | 0.87 | 1.00 |
| Final Sat.: | 1800 | 4768 | 146  | 1800 | 3490 | 1424 | 1710 | 441  | 1269 | 235  | 1565 | 1800 |

Capacity Analysis Module:

|              |       |      |      |      |      |       |       |      |      |      |      |      |
|--------------|-------|------|------|------|------|-------|-------|------|------|------|------|------|
| Vol/Sat:     | 0.30  | 0.29 | 0.29 | 0.17 | 0.84 | 0.84  | 0.25  | 0.13 | 0.13 | 0.08 | 0.08 | 0.03 |
| Crit Moves:  | ****  |      |      | **** |      |       | ****  |      |      |      |      |      |
| Green/Cycle: | 0.20  | 0.48 | 0.48 | 0.28 | 0.56 | 0.56  | 0.17  | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 |
| Volume/Cap:  | 1.48  | 0.60 | 0.60 | 0.60 | 1.48 | 1.48  | 1.48  | 0.74 | 0.74 | 0.44 | 0.44 | 0.20 |
| Delay/Veh:   | 270.5 | 19.1 | 19.1 | 32.8 | 240  | 240.2 | 269.9 | 42.7 | 42.7 | 38.2 | 38.2 | 35.9 |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 270.5 | 19.1 | 19.1 | 32.8 | 240  | 240.2 | 269.9 | 42.7 | 42.7 | 38.2 | 38.2 | 35.9 |
| LOS by Move: | F     | B    | B    | C    | F    | F     | F     | D    | D    | D    | D    | D    |
| HCM2kAvgQ:   | 40    | 12   | 12   | 9    | 106  | 106   | 34    | 8    | 8    | 4    | 4    | 2    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #28 Cherry Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 1.508  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 164.7  
Optimal Cycle: 180 Level Of Service: F

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 2 | 0           | 2 | 0 | 2          | 0 | 2 | 1          | 0 | 2 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 387  | 402  | 69   | 151  | 402  | 174  | 161  | 496  | 224  | 85   | 920  | 121  |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 477  | 495  | 85   | 186  | 495  | 214  | 198  | 611  | 276  | 105  | 1133 | 149  |
| Added Vol:   | 80   | 605  | 147  | 547  | 116  | 652  | 575  | 1084 | 12   | 22   | 426  | 434  |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 557  | 1100 | 232  | 733  | 611  | 866  | 773  | 1695 | 288  | 127  | 1559 | 583  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 586  | 1158 | 244  | 772  | 643  | 912  | 814  | 1784 | 303  | 133  | 1642 | 614  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 586  | 1158 | 244  | 772  | 643  | 912  | 814  | 1784 | 303  | 133  | 1642 | 614  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 586  | 1158 | 244  | 772  | 643  | 912  | 814  | 1784 | 303  | 133  | 1642 | 614  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.91 | 0.91 | 0.97 | 0.95 | 1.00 |
| Lanes:      | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 2.56 | 0.44 | 2.00 | 2.00 | 1.00 |
| Final Sat.: | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 | 3492 | 4200 | 714  | 3492 | 3420 | 1800 |

Capacity Analysis Module:

|              |       |      |      |       |      |       |       |      |      |       |      |      |
|--------------|-------|------|------|-------|------|-------|-------|------|------|-------|------|------|
| Vol/Sat:     | 0.17  | 0.34 | 0.14 | 0.22  | 0.19 | 0.51  | 0.23  | 0.42 | 0.42 | 0.04  | 0.48 | 0.34 |
| Crit Moves:  | ****  |      |      | ****  |      |       | ****  |      |      |       |      |      |
| Green/Cycle: | 0.11  | 0.27 | 0.27 | 0.18  | 0.34 | 0.34  | 0.15  | 0.43 | 0.43 | 0.04  | 0.32 | 0.32 |
| Volume/Cap:  | 1.51  | 1.25 | 0.50 | 1.25  | 0.56 | 1.51  | 1.51  | 0.98 | 0.98 | 0.98  | 1.51 | 1.07 |
| Delay/Veh:   | 286.2 | 159  | 31.6 | 167.3 | 27.8 | 270.4 | 280.5 | 42.7 | 42.7 | 118.5 | 268  | 92.3 |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00  | 1.00 | 1.00  | 1.00  | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 |
| AdjDel/Veh:  | 286.2 | 159  | 31.6 | 167.3 | 27.8 | 270.4 | 280.5 | 42.7 | 42.7 | 118.5 | 268  | 92.3 |
| LOS by Move: | F     | F    | C    | F     | C    | F     | F     | D    | D    | F     | F    | F    |
| HCM2kAvgQ:   | 24    | 36   | 7    | 25    | 9    | 67    | 32    | 30   | 30   | 5     | 63   | 29   |

Note: Queue reported is the number of cars per lane.

Lanes, Volumes, Timings  
3: VALLEY BLVD & FONTANA

FY2030 WITH PROJECT - AM PEAK HOUR

6/25/2009

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL2                                                                              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                                | WBR2                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | NBR2                                                                                |
| Lane Configurations     |                                                                                   |  |  |  |  |  |                                                                                    |  |                                                                                     |  |                                                                                     |  |
| Volume (vph)            | 89                                                                                | 101                                                                               | 536                                                                               | 10                                                                                | 5                                                                                 | 586                                                                               | 76                                                                                 | 20                                                                                  | 31                                                                                  | 16                                                                                  | 6                                                                                   | 12                                                                                  |
| Ideal Flow (vphpl)      | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Lane Util. Factor       | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 0.91                                                                              | 0.91                                                                               | 0.91                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Frt                     |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   | 0.982                                                                             |                                                                                    | 0.850                                                                               |                                                                                     | 0.984                                                                               |                                                                                     | 0.850                                                                               |
| Flt Protected           |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                    |                                                                                     |                                                                                     | 0.971                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)       | 0                                                                                 | 1710                                                                              | 3420                                                                              | 1530                                                                              | 1710                                                                              | 3217                                                                              | 0                                                                                  | 1392                                                                                | 0                                                                                   | 1720                                                                                | 0                                                                                   | 1530                                                                                |
| Flt Permitted           |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                    |                                                                                     |                                                                                     | 0.792                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)       | 0                                                                                 | 1710                                                                              | 3420                                                                              | 1530                                                                              | 1710                                                                              | 3217                                                                              | 0                                                                                  | 1392                                                                                | 0                                                                                   | 1403                                                                                | 0                                                                                   | 1530                                                                                |
| Right Turn on Red       |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                    | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)       |                                                                                   |                                                                                   |                                                                                   | 11                                                                                |                                                                                   |                                                                                   |                                                                                    | 19                                                                                  |                                                                                     |                                                                                     |                                                                                     | 13                                                                                  |
| Link Speed (mph)        |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                    |                                                                                     |                                                                                     | 30                                                                                  |                                                                                     |                                                                                     |
| Link Distance (ft)      |                                                                                   |                                                                                   | 807                                                                               |                                                                                   |                                                                                   | 830                                                                               |                                                                                    |                                                                                     |                                                                                     | 743                                                                                 |                                                                                     |                                                                                     |
| Travel Time (s)         |                                                                                   |                                                                                   | 18.3                                                                              |                                                                                   |                                                                                   | 18.9                                                                              |                                                                                    |                                                                                     |                                                                                     | 16.9                                                                                |                                                                                     |                                                                                     |
| Peak Hour Factor        | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                               | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                |
| Heavy Vehicles (%)      | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                 | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Shared Lane Traffic (%) |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 10%                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)   | 0                                                                                 | 200                                                                               | 564                                                                               | 11                                                                                | 5                                                                                 | 699                                                                               | 0                                                                                  | 19                                                                                  | 0                                                                                   | 56                                                                                  | 0                                                                                   | 13                                                                                  |
| Turn Type               | Prot                                                                              | Prot                                                                              |                                                                                   | Perm                                                                              | Prot                                                                              |                                                                                   |                                                                                    | Perm                                                                                | Perm                                                                                |                                                                                     |                                                                                     | Perm                                                                                |
| Protected Phases        | 7                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 3                                                                                 | 8                                                                                 |                                                                                    |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |                                                                                     |
| Permitted Phases        |                                                                                   |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   |                                                                                    | 8                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |
| Detector Phase          | 7                                                                                 | 7                                                                                 | 4                                                                                 | 4                                                                                 | 3                                                                                 | 8                                                                                 |                                                                                    | 8                                                                                   | 2                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |                                                                                    | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 |                                                                                     | 4.0                                                                                 |
| Minimum Split (s)       | 8.0                                                                               | 8.0                                                                               | 20.0                                                                              | 20.0                                                                              | 8.0                                                                               | 20.0                                                                              |                                                                                    | 20.0                                                                                | 20.0                                                                                | 20.0                                                                                |                                                                                     | 20.0                                                                                |
| Total Split (s)         | 15.0                                                                              | 15.0                                                                              | 31.0                                                                              | 31.0                                                                              | 8.0                                                                               | 24.0                                                                              | 0.0                                                                                | 24.0                                                                                | 20.0                                                                                | 20.0                                                                                | 0.0                                                                                 | 20.0                                                                                |
| Total Split (%)         | 16.7%                                                                             | 16.7%                                                                             | 34.4%                                                                             | 34.4%                                                                             | 8.9%                                                                              | 26.7%                                                                             | 0.0%                                                                               | 26.7%                                                                               | 22.2%                                                                               | 22.2%                                                                               | 0.0%                                                                                | 22.2%                                                                               |
| Maximum Green (s)       | 11.0                                                                              | 11.0                                                                              | 27.0                                                                              | 27.0                                                                              | 4.0                                                                               | 20.0                                                                              |                                                                                    | 20.0                                                                                | 16.0                                                                                | 16.0                                                                                |                                                                                     | 16.0                                                                                |
| Yellow Time (s)         | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               |                                                                                    | 3.5                                                                                 | 3.5                                                                                 | 3.5                                                                                 |                                                                                     | 3.5                                                                                 |
| All-Red Time (s)        | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               |                                                                                    | 0.5                                                                                 | 0.5                                                                                 | 0.5                                                                                 |                                                                                     | 0.5                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               | Lag                                                                               | Lead                                                                              | Lag                                                                               |                                                                                    | Lag                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               |                                                                                    | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                    | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |                                                                                     | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              |                                                                                    | None                                                                                | None                                                                                | None                                                                                |                                                                                     | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               |                                                                                    | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |                                                                                     | 5.0                                                                                 |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 11.0                                                                              | 11.0                                                                              |                                                                                   | 11.0                                                                              |                                                                                    | 11.0                                                                                | 11.0                                                                                | 11.0                                                                                |                                                                                     | 11.0                                                                                |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                    | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |
| Act Effect Green (s)    |                                                                                   | 11.0                                                                              | 33.5                                                                              | 33.5                                                                              | 4.0                                                                               | 20.0                                                                              |                                                                                    | 20.0                                                                                |                                                                                     | 11.9                                                                                |                                                                                     | 11.9                                                                                |
| Actuated g/C Ratio      |                                                                                   | 0.13                                                                              | 0.39                                                                              | 0.39                                                                              | 0.05                                                                              | 0.23                                                                              |                                                                                    | 0.23                                                                                |                                                                                     | 0.14                                                                                |                                                                                     | 0.14                                                                                |
| v/c Ratio               |                                                                                   | 0.91                                                                              | 0.42                                                                              | 0.02                                                                              | 0.06                                                                              | 0.93                                                                              |                                                                                    | 0.06                                                                                |                                                                                     | 0.29                                                                                |                                                                                     | 0.06                                                                                |
| Control Delay           |                                                                                   | 81.7                                                                              | 21.6                                                                              | 11.1                                                                              | 42.6                                                                              | 54.0                                                                              |                                                                                    | 12.8                                                                                |                                                                                     | 36.7                                                                                |                                                                                     | 16.2                                                                                |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                    | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |
| Total Delay             |                                                                                   | 81.7                                                                              | 21.6                                                                              | 11.1                                                                              | 42.6                                                                              | 54.0                                                                              |                                                                                    | 12.8                                                                                |                                                                                     | 36.7                                                                                |                                                                                     | 16.2                                                                                |
| LOS                     |                                                                                   | F                                                                                 | C                                                                                 | B                                                                                 | D                                                                                 | D                                                                                 |                                                                                    | B                                                                                   |                                                                                     | D                                                                                   |                                                                                     | B                                                                                   |
| Approach Delay          |                                                                                   |                                                                                   | 36.9                                                                              |                                                                                   |                                                                                   | 52.8                                                                              |                                                                                    |                                                                                     |                                                                                     | 32.8                                                                                |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                    |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |                                                                                     |
| Queue Length 50th (ft)  |                                                                                   | 109                                                                               | 112                                                                               | 0                                                                                 | 3                                                                                 | 206                                                                               |                                                                                    | 0                                                                                   |                                                                                     | 28                                                                                  |                                                                                     | 0                                                                                   |

Lanes, Volumes, Timings  
3: VALLEY BLVD & FONTANA

FY2030 WITH PROJECT - AM PEAK HOUR

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|                         |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | SBL2                                                                              | SBL                                                                               | SBT                                                                               | SBR                                                                               | SWL2                                                                              | SWL                                                                               | SWR                                                                               | SWR2                                                                                |
| Lane Configurations     |                                                                                   |                                                                                   |  |  |                                                                                   |  |                                                                                   |                                                                                     |
| Volume (vph)            | 1                                                                                 | 93                                                                                | 5                                                                                 | 96                                                                                | 11                                                                                | 27                                                                                | 391                                                                               | 6                                                                                   |
| Ideal Flow (vphpl)      | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                                |
| Lane Util. Factor       | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                |
| Frt                     |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   | 0.877                                                                             |                                                                                   |                                                                                     |
| Flt Protected           |                                                                                   |                                                                                   | 0.955                                                                             |                                                                                   |                                                                                   | 0.996                                                                             |                                                                                   |                                                                                     |
| Satd. Flow (prot)       | 0                                                                                 | 0                                                                                 | 1719                                                                              | 1530                                                                              | 0                                                                                 | 1572                                                                              | 0                                                                                 | 0                                                                                   |
| Flt Permitted           |                                                                                   |                                                                                   | 0.695                                                                             |                                                                                   |                                                                                   | 0.996                                                                             |                                                                                   |                                                                                     |
| Satd. Flow (perm)       | 0                                                                                 | 0                                                                                 | 1251                                                                              | 1530                                                                              | 0                                                                                 | 1572                                                                              | 0                                                                                 | 0                                                                                   |
| Right Turn on Red       |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                   | No                                                                                  |
| Satd. Flow (RTOR)       |                                                                                   |                                                                                   |                                                                                   | 101                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                     |
| Link Speed (mph)        |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                     |
| Link Distance (ft)      |                                                                                   |                                                                                   | 792                                                                               |                                                                                   |                                                                                   | 998                                                                               |                                                                                   |                                                                                     |
| Travel Time (s)         |                                                                                   |                                                                                   | 18.0                                                                              |                                                                                   |                                                                                   | 22.7                                                                              |                                                                                   |                                                                                     |
| Peak Hour Factor        | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                                |
| Heavy Vehicles (%)      | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                  |
| Shared Lane Traffic (%) |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |
| Lane Group Flow (vph)   | 0                                                                                 | 0                                                                                 | 104                                                                               | 101                                                                               | 0                                                                                 | 458                                                                               | 0                                                                                 | 0                                                                                   |
| Turn Type               | Perm                                                                              | Perm                                                                              |                                                                                   | Perm                                                                              | Perm                                                                              |                                                                                   |                                                                                   |                                                                                     |
| Protected Phases        |                                                                                   |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                     |
| Permitted Phases        | 2                                                                                 | 2                                                                                 |                                                                                   | 2                                                                                 | 6                                                                                 |                                                                                   |                                                                                   |                                                                                     |
| Detector Phase          | 2                                                                                 | 2                                                                                 | 2                                                                                 | 2                                                                                 | 6                                                                                 | 6                                                                                 |                                                                                   |                                                                                     |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |
| Minimum Initial (s)     | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |                                                                                   |                                                                                     |
| Minimum Split (s)       | 20.0                                                                              | 20.0                                                                              | 20.0                                                                              | 20.0                                                                              | 20.0                                                                              | 20.0                                                                              |                                                                                   |                                                                                     |
| Total Split (s)         | 20.0                                                                              | 20.0                                                                              | 20.0                                                                              | 20.0                                                                              | 31.0                                                                              | 31.0                                                                              | 0.0                                                                               | 0.0                                                                                 |
| Total Split (%)         | 22.2%                                                                             | 22.2%                                                                             | 22.2%                                                                             | 22.2%                                                                             | 34.4%                                                                             | 34.4%                                                                             | 0.0%                                                                              | 0.0%                                                                                |
| Maximum Green (s)       | 16.0                                                                              | 16.0                                                                              | 16.0                                                                              | 16.0                                                                              | 27.0                                                                              | 27.0                                                                              |                                                                                   |                                                                                     |
| Yellow Time (s)         | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               |                                                                                   |                                                                                     |
| All-Red Time (s)        | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               |                                                                                   |                                                                                     |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 |
| Total Lost Time (s)     | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   |                                                                                     |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              |                                                                                   |                                                                                     |
| Walk Time (s)           | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                   |                                                                                     |
| Flash Dont Walk (s)     | 11.0                                                                              | 11.0                                                                              | 11.0                                                                              | 11.0                                                                              | 11.0                                                                              | 11.0                                                                              |                                                                                   |                                                                                     |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                     |
| Act Effect Green (s)    |                                                                                   |                                                                                   | 11.9                                                                              | 11.9                                                                              |                                                                                   | 26.8                                                                              |                                                                                   |                                                                                     |
| Actuated g/C Ratio      |                                                                                   |                                                                                   | 0.14                                                                              | 0.14                                                                              |                                                                                   | 0.31                                                                              |                                                                                   |                                                                                     |
| v/c Ratio               |                                                                                   |                                                                                   | 0.60                                                                              | 0.34                                                                              |                                                                                   | 0.93                                                                              |                                                                                   |                                                                                     |
| Control Delay           |                                                                                   |                                                                                   | 49.4                                                                              | 10.4                                                                              |                                                                                   | 58.0                                                                              |                                                                                   |                                                                                     |
| Queue Delay             |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     |
| Total Delay             |                                                                                   |                                                                                   | 49.4                                                                              | 10.4                                                                              |                                                                                   | 58.0                                                                              |                                                                                   |                                                                                     |
| LOS                     |                                                                                   |                                                                                   | D                                                                                 | B                                                                                 |                                                                                   | E                                                                                 |                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   |                                                                                   | 30.2                                                                              |                                                                                   |                                                                                   | 58.0                                                                              |                                                                                   |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | E                                                                                 |                                                                                   |                                                                                     |
| Queue Length 50th (ft)  |                                                                                   |                                                                                   | 54                                                                                | 0                                                                                 |                                                                                   | 240                                                                               |                                                                                   |                                                                                     |



Lanes, Volumes, Timings  
3: VALLEY BLVD & FONTANA

FY2030 WITH PROJECT - AM PEAK HOUR

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|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL2                                                                              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                                | WBR2                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | NBR2                                                                                |
| Queue Length 95th (ft)  |                                                                                   | #248                                                                              | 193                                                                               | 12                                                                                | 14                                                                                | #341                                                                              |                                                                                    | 19                                                                                  |                                                                                     | 62                                                                                  |                                                                                     | 16                                                                                  |
| Internal Link Dist (ft) |                                                                                   |                                                                                   | 727                                                                               |                                                                                   |                                                                                   | 750                                                                               |                                                                                    |                                                                                     |                                                                                     | 663                                                                                 |                                                                                     |                                                                                     |
| Turn Bay Length (ft)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 220                                                                               | 1336                                                                              | 604                                                                               | 80                                                                                | 751                                                                               |                                                                                    | 340                                                                                 |                                                                                     | 262                                                                                 |                                                                                     | 296                                                                                 |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 0                                                                                   |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.91                                                                              | 0.42                                                                              | 0.02                                                                              | 0.06                                                                              | 0.93                                                                              |                                                                                    | 0.06                                                                                |                                                                                     | 0.21                                                                                |                                                                                     | 0.04                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 85.8

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.93

Intersection Signal Delay: 45.7

Intersection LOS: D

Intersection Capacity Utilization 84.9%

ICU Level of Service E

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 3: VALLEY BLVD & FONTANA

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                      |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
|  |  |  |  |   |
| ø2                                                                                  |                                                                                     | ø6                                                                                  | ø3                                                                                  | ø4                                                                                   |
| 20 s                                                                                |                                                                                     | 31 s                                                                                | 8 s                                                                                 | 31 s                                                                                 |
|                                                                                     |                                                                                     |                                                                                     |  |  |
|                                                                                     |                                                                                     |                                                                                     | ø7                                                                                  | ø8                                                                                   |
|                                                                                     |                                                                                     |                                                                                     | 15 s                                                                                | 24 s                                                                                 |

Lanes, Volumes, Timings  
3: VALLEY BLVD & FONTANA

FY2030 WITH PROJECT - AM PEAK HOUR

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| Lane Group              | SBL2 | SBL | SBT  | SBR  | SWL2 | SWL  | SWR | SWR2 |
|-------------------------|------|-----|------|------|------|------|-----|------|
| Queue Length 95th (ft)  |      |     | 105  | 42   |      | #451 |     |      |
| Internal Link Dist (ft) |      |     | 712  |      |      | 918  |     |      |
| Turn Bay Length (ft)    |      |     |      |      |      |      |     |      |
| Base Capacity (vph)     |      |     | 234  | 368  |      | 495  |     |      |
| Starvation Cap Reductn  |      |     | 0    | 0    |      | 0    |     |      |
| Spillback Cap Reductn   |      |     | 0    | 0    |      | 0    |     |      |
| Storage Cap Reductn     |      |     | 0    | 0    |      | 0    |     |      |
| Reduced v/c Ratio       |      |     | 0.44 | 0.27 |      | 0.93 |     |      |
| Intersection Summary    |      |     |      |      |      |      |     |      |

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

-----  
Level Of Service Computation Report  
2000 HCM Unsignalized Method (Future Volume Alternative)  
\*\*\*\*\*  
Intersection #30 Beech Ave/Valley Blvd  
\*\*\*\*\*  
Average Delay (sec/veh): 20.0 Worst Case Level Of Service: F[128.2]  
\*\*\*\*\*  
Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R  
-----  
Control: Stop Sign Stop Sign Uncontrolled Uncontrolled  
Rights: Include Include Include Include  
Lanes: 0 1 0 0 1 0 1 0 0 1 1 0 1 0 2 0 1  
-----  
Volume Module:  
Base Vol: 4 2 12 68 3 20 8 376 9 20 348 50  
Growth Adj: 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23  
Initial Bse: 5 2 15 84 4 25 10 463 11 25 429 62  
Added Vol: 0 16 8 0 55 55 16 43 0 55 154 0  
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0  
Initial Fut: 5 18 23 84 59 80 26 506 11 80 583 62  
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95  
PHF Volume: 5 19 24 88 62 84 27 533 12 84 613 65  
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
FinalVolume: 5 19 24 88 62 84 27 533 12 84 613 65  
-----  
Critical Gap Module:  
Critical Gp: 7.5 6.5 6.9 7.5 6.5 6.9 4.1 xxxx xxxxx 4.1 xxxx xxxxx  
FollowUpTim: 3.5 4.0 3.3 3.5 4.0 3.3 2.2 xxxx xxxxx 2.2 xxxx xxxxx  
-----  
Capacity Module:  
Cnflct Vol: 1098 1439 272 1112 1380 307 678 xxxx xxxxx 545 xxxx xxxxx  
Potent Cap.: 170 134 732 166 146 695 923 xxxx xxxxx 1035 xxxx xxxxx  
Move Cap.: 87 120 732 129 130 695 923 xxxx xxxxx 1035 xxxx xxxxx  
Volume/Cap: 0.06 0.16 0.03 0.68 0.48 0.12 0.03 xxxx xxxxx 0.08 xxxx xxxxx  
-----  
Level Of Service Module:  
2Way95thQ: xxxx xxxx 0.1 xxxx xxxx 0.4 0.1 xxxx xxxxx 0.3 xxxx xxxxx  
Control Del:xxxxx xxxx 10.1 xxxxx xxxx 10.9 9.0 xxxx xxxxx 8.8 xxxx xxxxx  
LOS by Move: \* \* B \* \* B A \* \* A \* \*  
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT  
Shared Cap.: 111 xxxx xxxxx 130 xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx  
SharedQueue: 0.8 xxxx xxxxx 8.9 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx  
Shrd ConDel: 46.6 xxxx xxxxx 193.8 xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx  
Shared LOS: E \* F \* \* \* \* \*  
ApproachDel: 28.6 128.2 xxxxxx xxxxxx  
ApproachLOS: D F \* \*  
\*\*\*\*\*  
Note: Queue reported is the number of cars per lane.  
\*\*\*\*\*

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

-----  
Level Of Service Computation Report  
2000 HCM 4-Way Stop Method (Future Volume Alternative)  
\*\*\*\*\*  
Intersection #31 Beech Ave/Slover Ave  
\*\*\*\*\*  
Cycle (sec): 100 Critical Vol./Cap.(X): 1.724  
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): 284.0  
Optimal Cycle: 0 Level Of Service: F  
\*\*\*\*\*  
Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R  
-----  
Control: Stop Sign Stop Sign Stop Sign Stop Sign  
Rights: Include Include Include Include  
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0  
Lanes: 0 0 1! 0 0 0 0 1! 0 0 1 0 1 1 0 1 0 1 1 0  
-----  
Volume Module:  
Base Vol: 72 8 73 8 0 5 427 111 121 381 16  
Growth Adj: 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23  
Initial Bse: 89 10 90 10 0 6 6 526 137 149 469 20  
Added Vol: 63 0 114 0 0 0 0 796 17 245 1105 0  
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0  
Initial Fut: 152 10 204 10 0 6 6 1322 154 394 1574 20  
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95  
PHF Volume: 160 10 215 10 0 6 6 1392 162 415 1657 21  
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
Reduced Vol: 160 10 215 10 0 6 6 1392 162 415 1657 21  
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
FinalVolume: 160 10 215 10 0 6 6 1392 162 415 1657 21  
-----  
Saturation Flow Module:  
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
Lanes: 0.41 0.03 0.56 0.62 0.00 0.38 1.00 1.79 0.21 1.00 1.98 0.02  
Final Sat.: 223 15 300 249 0 156 417 807 95 461 974 12  
-----  
Capacity Analysis Module:  
Vol/Sat: 0.72 0.72 0.72 0.04 xxxx 0.04 0.02 1.72 1.71 0.90 1.70 1.70  
Crit Moves: \*\*\*\* \*  
Delay/Veh: 24.7 24.7 24.7 11.7 0.0 11.7 11.4 354 345.9 48.4 342 340.7  
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
AdjDel/Veh: 24.7 24.7 24.7 11.7 0.0 11.7 11.4 354 345.9 48.4 342 340.7  
LOS by Move: C C C B \* B B F F E F F  
ApproachDel: 24.7 11.7 351.6 283.5  
Delay Adj: 1.00 1.00 1.00 1.00  
ApprAdjDel: 24.7 11.7 351.6 283.5  
LOS by Appr: C B F F  
AllWayAvgQ: 2.2 2.2 2.2 0.0 0.0 0.0 0.0 43.4 42.4 4.9 45.5 45.4  
\*\*\*\*\*  
Note: Queue reported is the number of cars per lane.  
\*\*\*\*\*

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #32 Beech Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.654  
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 15.3  
Optimal Cycle: 0 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Stop Sign   |   |   | Stop Sign   |   |   | Stop Sign  |   |   | Stop Sign  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 0           | 1 | 0 | 0          | 1 | 0 | 0          | 1 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 8    | 122  | 72   | 22   | 55   | 19   | 50   | 126  | 7    | 38   | 97   | 36   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 10   | 150  | 89   | 27   | 68   | 23   | 62   | 155  | 9    | 47   | 120  | 44   |
| Added Vol:   | 62   | 145  | 0    | 0    | 136  | 125  | 33   | 0    | 12   | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 72   | 295  | 89   | 27   | 204  | 148  | 95   | 155  | 21   | 47   | 120  | 44   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 76   | 311  | 93   | 29   | 214  | 156  | 100  | 163  | 22   | 49   | 126  | 47   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 76   | 311  | 93   | 29   | 214  | 156  | 100  | 163  | 22   | 49   | 126  | 47   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 76   | 311  | 93   | 29   | 214  | 156  | 100  | 163  | 22   | 49   | 126  | 47   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.70 | 1.15 | 0.15 | 0.44 | 1.14 | 0.42 |
| Final Sat.: | 439  | 475  | 515  | 424  | 457  | 498  | 309  | 528  | 71   | 194  | 511  | 196  |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.17 | 0.65 | 0.18 | 0.07 | 0.47 | 0.31 | 0.32 | 0.31 | 0.30 | 0.25 | 0.25 | 0.24 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Delay/Veh:   | 12.2 | 22.2 | 10.8 | 11.3 | 16.4 | 12.5 | 13.9 | 13.2 | 13.0 | 12.9 | 12.5 | 12.0 |
| Delay Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 12.2 | 22.2 | 10.8 | 11.3 | 16.4 | 12.5 | 13.9 | 13.2 | 13.0 | 12.9 | 12.5 | 12.0 |
| LOS by Move: | B    | C    | B    | B    | C    | B    | B    | B    | B    | B    | B    | B    |
| ApproachDel: | 18.4 |      | 14.5 |      |      | 13.4 |      |      | 12.5 |      |      |      |
| Delay Adj:   | 1.00 |      | 1.00 |      |      | 1.00 |      |      | 1.00 |      |      | 1.00 |
| ApprAdjDel:  | 18.4 |      | 14.5 |      |      | 13.4 |      |      | 12.5 |      |      |      |
| LOS by Appr: | C    |      | B    |      |      | B    |      |      | B    |      |      | F    |
| AllWayAvgQ:  | 0.2  | 1.6  | 0.2  | 0.1  | 0.8  | 0.4  | 0.4  | 0.4  | 0.4  | 0.3  | 0.3  | 0.3  |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #33 Beech Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 4.330  
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): 802.1  
Optimal Cycle: 0 Level Of Service: F

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Stop Sign   |   |   | Stop Sign   |   |   | Stop Sign  |   |   | Stop Sign  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 0           | 1 | 0 | 0          | 1 | 0 | 0          | 0 | 1 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 316  | 38   | 13   | 2    | 5    | 73   | 117  | 412  | 137  | 1    | 303  | 11   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 389  | 47   | 16   | 2    | 6    | 90   | 144  | 508  | 169  | 1    | 373  | 14   |
| Added Vol:   | 95   | 221  | 126  | 0    | 54   | 0    | 0    | 724  | 17   | 18   | 1352 | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 484  | 268  | 142  | 2    | 60   | 90   | 144  | 1232 | 186  | 19   | 1725 | 14   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 510  | 282  | 149  | 3    | 63   | 95   | 152  | 1296 | 196  | 20   | 1816 | 14   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 510  | 282  | 149  | 3    | 63   | 95   | 152  | 1296 | 196  | 20   | 1816 | 14   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 510  | 282  | 149  | 3    | 63   | 95   | 152  | 1296 | 196  | 20   | 1816 | 14   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.18 | 1.58 | 0.24 | 0.01 | 0.98 | 0.01 |
| Final Sat.: | 363  | 381  | 410  | 299  | 312  | 332  | 77   | 667  | 102  | 5    | 419  | 3    |

Capacity Analysis Module:

|              |       |      |      |      |      |       |       |      |        |      |      |       |
|--------------|-------|------|------|------|------|-------|-------|------|--------|------|------|-------|
| Vol/Sat:     | 1.41  | 0.74 | 0.37 | 0.01 | 0.20 | 0.28  | 1.97  | 1.94 | 1.91   | 4.33 | 4.33 | 4.33  |
| Crit Moves:  | ****  |      |      | **** |      |       | ****  |      |        | **** |      |       |
| Delay/Veh:   | 224.7 | 34.5 | 16.3 | 14.7 | 16.9 | 17.5  | 465.5 | 453  | 438.6  | 1521 | 1521 | 1521  |
| Delay Adj:   | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00  | 1.00 | 1.00   | 1.00 | 1.00 | 1.00  |
| AdjDel/Veh:  | 224.7 | 34.5 | 16.3 | 14.7 | 16.9 | 17.5  | 465.5 | 453  | 438.6  | 1521 | 1521 | 1521  |
| LOS by Move: | F     | D    | C    | B    | C    | C     | F     | F    | F      | F    | F    | F     |
| ApproachDel: | 134.6 |      | 17.2 |      |      | 452.0 |       |      | 1520.6 |      |      |       |
| Delay Adj:   | 1.00  |      | 1.00 |      |      | 1.00  |       |      | 1.00   |      |      | 1.00  |
| ApprAdjDel:  | 134.6 |      | 17.2 |      |      | 452.0 |       |      | 1520.6 |      |      |       |
| LOS by Appr: | F     |      | C    |      |      | F     |       |      | F      |      |      | F     |
| AllWayAvgQ:  | 21.4  | 2.4  | 0.6  | 0.0  | 0.2  | 0.4   | 52.6  | 51.0 | 51.0   | 179  | 179  | 179.2 |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

## Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #34 Citrus Ave/Valley Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 1.926  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 305.8  
Optimal Cycle: 180 Level Of Service: F

| Approach:   | North Bound | South Bound | East Bound | West Bound |
|-------------|-------------|-------------|------------|------------|
| Movement:   | L - T - R   | L - T - R   | L - T - R  | L - T - R  |
| Control:    | Protected   | Protected   | Protected  | Protected  |
| Rights:     | Include     | Include     | Include    | Include    |
| Min. Green: | 0 0 0       | 0 0 0       | 0 0 0      | 0 0 0      |
| Lanes:      | 1 0 1 1 0   | 1 0 1 1 0   | 2 0 1 1 0  | 2 0 1 1 0  |

## Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 352  | 695  | 122  | 104  | 727  | 35   | 28   | 206  | 491  | 397  | 425  | 83   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 434  | 856  | 150  | 128  | 896  | 43   | 34   | 254  | 605  | 489  | 524  | 102  |
| Added Vol:   | 85   | 339  | 0    | 0    | 2095 | 0    | 0    | 26   | 25   | 0    | 124  | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 519  | 1195 | 150  | 128  | 2991 | 43   | 34   | 280  | 630  | 489  | 648  | 102  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 546  | 1258 | 158  | 135  | 3148 | 45   | 36   | 295  | 663  | 515  | 682  | 108  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 546  | 1258 | 158  | 135  | 3148 | 45   | 36   | 295  | 663  | 515  | 682  | 108  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 546  | 1258 | 158  | 135  | 3148 | 45   | 36   | 295  | 663  | 515  | 682  | 108  |

## Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 0.97 | 0.95 | 0.95 | 0.97 | 0.95 | 0.95 |
| Lanes:      | 1.00 | 1.78 | 0.22 | 1.00 | 1.97 | 0.03 | 2.00 | 1.00 | 1.00 | 2.00 | 1.73 | 0.27 |
| Final Sat.: | 1800 | 3038 | 382  | 1800 | 3371 | 49   | 3492 | 1710 | 1710 | 3492 | 2954 | 466  |

## Capacity Analysis Module:

|              |       |      |      |      |      |       |       |      |       |       |      |      |
|--------------|-------|------|------|------|------|-------|-------|------|-------|-------|------|------|
| Vol/Sat:     | 0.30  | 0.41 | 0.41 | 0.07 | 0.93 | 0.93  | 0.01  | 0.17 | 0.39  | 0.15  | 0.23 | 0.23 |
| Crit Moves:  | ****  |      |      | **** |      |       | ****  |      | ****  |       |      |      |
| Green/Cycle: | 0.16  | 0.54 | 0.54 | 0.10 | 0.48 | 0.48  | 0.01  | 0.20 | 0.20  | 0.08  | 0.27 | 0.27 |
| Volume/Cap:  | 1.93  | 0.76 | 0.76 | 0.76 | 1.93 | 1.93  | 0.87  | 0.86 | 1.93  | 1.93  | 0.87 | 0.87 |
| Delay/Veh:   | 471.8 | 19.7 | 19.7 | 61.4 | 445  | 444.9 | 138.6 | 45.2 | 464.2 | 476.6 | 44.0 | 44.0 |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00  | 1.00 | 1.00  | 1.00  | 1.00 | 1.00 |
| AdjDel/Veh:  | 471.8 | 19.7 | 19.7 | 61.4 | 445  | 444.9 | 138.6 | 45.2 | 464.2 | 476.6 | 44.0 | 44.0 |
| LOS by Move: | F     | B    | B    | E    | F    | F     | F     | D    | F     | F     | D    | D    |
| HCM2kAvgQ:   | 50    | 19   | 19   | 6    | 150  | 150   | 2     | 12   | 63    | 25    | 15   | 15   |

Note: Queue reported is the number of cars per lane.

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FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

## Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #37 Citrus Ave/Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 2.207  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 464.2  
Optimal Cycle: 180 Level Of Service: F

| Approach:   | North Bound | South Bound | East Bound | West Bound |
|-------------|-------------|-------------|------------|------------|
| Movement:   | L - T - R   | L - T - R   | L - T - R  | L - T - R  |
| Control:    | Protected   | Protected   | Protected  | Protected  |
| Rights:     | Include     | Include     | Include    | Include    |
| Min. Green: | 0 0 0       | 0 0 0       | 0 0 0      | 0 0 0      |
| Lanes:      | 1 0 0 1 0   | 1 0 1 0 1   | 1 0 2 0 1  | 1 0 1 1 0  |

## Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 17   | 376  | 62   | 245  | 179  | 505  | 237  | 235  | 7    | 48   | 422  | 224  |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 21   | 463  | 76   | 302  | 221  | 622  | 292  | 290  | 9    | 59   | 520  | 276  |
| Added Vol:   | 86   | 227  | 25   | 0    | 1541 | 1181 | 204  | 273  | 25   | 174  | 1228 | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 107  | 690  | 101  | 302  | 1762 | 1803 | 496  | 563  | 34   | 233  | 1748 | 276  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 113  | 727  | 107  | 318  | 1854 | 1898 | 522  | 592  | 35   | 245  | 1840 | 290  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 113  | 727  | 107  | 318  | 1854 | 1898 | 522  | 592  | 35   | 245  | 1840 | 290  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 113  | 727  | 107  | 318  | 1854 | 1898 | 522  | 592  | 35   | 245  | 1840 | 290  |

## Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 |
| Lanes:      | 1.00 | 0.87 | 0.13 | 1.00 | 1.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 1.73 | 0.27 |
| Final Sat.: | 1800 | 1569 | 231  | 1800 | 1800 | 1800 | 1800 | 3420 | 1800 | 1800 | 2954 | 466  |

## Capacity Analysis Module:

|              |       |      |       |       |      |       |       |      |      |      |      |       |
|--------------|-------|------|-------|-------|------|-------|-------|------|------|------|------|-------|
| Vol/Sat:     | 0.06  | 0.46 | 0.46  | 0.18  | 1.03 | 1.05  | 0.29  | 0.17 | 0.02 | 0.14 | 0.62 | 0.62  |
| Crit Moves:  | ****  |      |       | ****  |      | ****  | ****  |      |      | **** |      |       |
| Green/Cycle: | 0.03  | 0.37 | 0.37  | 0.14  | 0.48 | 0.48  | 0.13  | 0.23 | 0.23 | 0.18 | 0.28 | 0.28  |
| Volume/Cap:  | 2.21  | 1.26 | 1.26  | 1.26  | 2.16 | 2.21  | 2.21  | 0.75 | 0.08 | 0.75 | 2.21 | 2.21  |
| Delay/Veh:   | 649.8 | 162  | 162.0 | 189.2 | 550  | 572.8 | 599.9 | 39.7 | 30.2 | 47.9 | 582  | 582.2 |
| User DelAdj: | 1.00  | 1.00 | 1.00  | 1.00  | 1.00 | 1.00  | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  |
| AdjDel/Veh:  | 649.8 | 162  | 162.0 | 189.2 | 550  | 572.8 | 599.9 | 39.7 | 30.2 | 47.9 | 582  | 582.2 |
| LOS by Move: | F     | F    | F     | F     | F    | F     | F     | D    | C    | D    | F    | F     |
| HCM2kAvgQ:   | 12    | 49   | 49    | 21    | 178  | 184   | 52    | 11   | 1    | 9    | 110  | 110   |

Note: Queue reported is the number of cars per lane.

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FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM 4-Way Stop Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #38 Citrus Ave/Santa Ana Ave  
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 4.365  
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): 964.8  
Optimal Cycle: 0 Level Of Service: F  
\*\*\*\*\*

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Stop Sign   |   |   | Stop Sign   |   |   | Stop Sign  |   |   | Stop Sign  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 0           | 0 | 1 | 0           | 0 | 1 | 0          | 0 | 1 | 0          | 1 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 11   | 280  | 37   | 18   | 155  | 33   | 49   | 103  | 0    | 20   | 178  | 21   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 14   | 345  | 46   | 22   | 191  | 41   | 60   | 127  | 0    | 25   | 219  | 26   |
| Added Vol:   | 87   | 290  | 0    | 0    | 1005 | 532  | 71   | 18   | 11   | 0    | 126  | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 101  | 635  | 46   | 22   | 1196 | 573  | 131  | 145  | 11   | 25   | 345  | 26   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 106  | 668  | 48   | 23   | 1259 | 603  | 138  | 153  | 12   | 26   | 363  | 27   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 106  | 668  | 48   | 23   | 1259 | 603  | 138  | 153  | 12   | 26   | 363  | 27   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 106  | 668  | 48   | 23   | 1259 | 603  | 138  | 153  | 12   | 26   | 363  | 27   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 0.13 | 0.81 | 0.06 | 0.01 | 0.67 | 0.32 | 0.46 | 0.50 | 0.04 | 0.07 | 0.93 | 1.00 |
| Final Sat.: | 54   | 344  | 25   | 5    | 288  | 138  | 177  | 195  | 15   | 27   | 378  | 441  |

Capacity Analysis Module:

|              |       |        |       |      |      |       |      |      |      |      |      |      |
|--------------|-------|--------|-------|------|------|-------|------|------|------|------|------|------|
| Vol/Sat:     | 1.94  | 1.94   | 1.94  | 4.36 | 4.36 | 4.36  | 0.78 | 0.78 | 0.78 | 0.96 | 0.96 | 0.96 |
| Crit Moves:  | ****  |        |       |      |      |       |      |      |      |      |      |      |
| Delay/Veh:   | 453.6 | 454    | 453.6 | 1536 | 1536 | 1536  | 37.4 | 37.4 | 37.4 | 65.4 | 65.4 | 11.4 |
| Delay Adj:   | 1.00  | 1.00   | 1.00  | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 453.6 | 454    | 453.6 | 1536 | 1536 | 1536  | 37.4 | 37.4 | 37.4 | 65.4 | 65.4 | 11.4 |
| LOS by Move: | F     | F      | F     | F    | F    | F     | E    | E    | E    | F    | F    | B    |
| ApproachDel: | 453.6 | 1536.2 |       |      |      |       | 37.4 |      |      | 61.9 |      |      |
| Delay Adj:   | 1.00  | 1.00   |       |      |      |       | 1.00 |      |      | 1.00 |      |      |
| ApprAdjDel:  | 453.6 | 1536.2 |       |      |      |       | 37.4 |      |      | 61.9 |      |      |
| LOS by Appr: | F     | F      |       |      |      |       | E    |      |      | F    |      |      |
| AllWayAvgQ:  | 51.9  | 51.9   | 51.9  | 183  | 183  | 182.9 | 2.7  | 2.7  | 2.7  | 6.1  | 6.1  | 0.1  |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM 4-Way Stop Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #39 Citrus Ave/Jurupa St  
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 4.311  
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): 801.8  
Optimal Cycle: 0 Level Of Service: F  
\*\*\*\*\*

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Stop Sign   |   |   | Stop Sign   |   |   | Stop Sign  |   |   | Stop Sign  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 0           | 0 | 1 | 1          | 0 | 2 | 1          | 0 | 1 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 71   | 174  | 240  | 40   | 63   | 51   | 119  | 422  | 23   | 99   | 347  | 35   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 87   | 214  | 296  | 49   | 78   | 63   | 147  | 520  | 28   | 122  | 428  | 43   |
| Added Vol:   | 95   | 265  | 0    | 32   | 52   | 455  | 112  | 242  | 13   | 0    | 1674 | 184  |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 182  | 479  | 296  | 81   | 130  | 518  | 259  | 762  | 41   | 122  | 2102 | 227  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 192  | 505  | 311  | 86   | 136  | 545  | 272  | 802  | 44   | 128  | 2212 | 239  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 192  | 505  | 311  | 86   | 136  | 545  | 272  | 802  | 44   | 128  | 2212 | 239  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 192  | 505  | 311  | 86   | 136  | 545  | 272  | 802  | 44   | 128  | 2212 | 239  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 1.00 | 1.00 | 1.00 | 0.20 | 0.80 | 1.00 | 2.85 | 0.15 | 1.00 | 1.80 | 0.20 |
| Final Sat.: | 272  | 283  | 300  | 313  | 69   | 276  | 276  | 820  | 45   | 272  | 513  | 56   |

Capacity Analysis Module:

|              |       |       |      |      |      |       |      |      |      |        |      |       |
|--------------|-------|-------|------|------|------|-------|------|------|------|--------|------|-------|
| Vol/Sat:     | 0.70  | 1.78  | 1.04 | 0.27 | 1.98 | 1.98  | 0.99 | 0.98 | 0.97 | 0.47   | 4.31 | 4.29  |
| Crit Moves:  | ****  |       |      |      |      |       |      |      |      |        |      |       |
| Delay/Veh:   | 42.2  | 394   | 98.8 | 18.5 | 473  | 473.2 | 88.6 | 84.7 | 83.0 | 27.2   | 1522 | 1510  |
| Delay Adj:   | 1.00  | 1.00  | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 | 1.00   | 1.00 | 1.00  |
| AdjDel/Veh:  | 42.2  | 394   | 98.8 | 18.5 | 473  | 473.2 | 88.6 | 84.7 | 83.0 | 27.2   | 1522 | 1510  |
| LOS by Move: | E     | F     | F    | C    | F    | F     | F    | F    | F    | D      | F    | F     |
| ApproachDel: | 235.9 | 422.5 |      |      |      |       | 85.6 |      |      | 1446.2 |      |       |
| Delay Adj:   | 1.00  | 1.00  |      |      |      |       | 1.00 |      |      | 1.00   |      |       |
| ApprAdjDel:  | 235.9 | 422.5 |      |      |      |       | 85.6 |      |      | 1446.2 |      |       |
| LOS by Appr: | F     | F     |      |      |      |       | F    |      |      | F      |      |       |
| AllWayAvgQ:  | 2.0   | 29.8  | 7.0  | 0.4  | 44.0 | 44.0  | 5.6  | 5.6  | 5.5  | 0.9    | 119  | 118.7 |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #40 Sierra Ave/Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 1.079  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 63.1  
Optimal Cycle: 180 Level Of Service: E

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Ovl        |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 3 | 0           | 2 | 1 | 2          | 0 | 2 | 0          | 2 | 2 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 102  | 1006 | 50   | 409  | 555  | 277  | 200  | 103  | 45   | 25   | 182  | 366  |
| Growth Adj:   | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse:  | 126  | 1239 | 62   | 504  | 684  | 341  | 246  | 127  | 55   | 31   | 224  | 451  |
| Added Vol:    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 298  | 0    | 0    | 1403 | 0    |
| PasserByVol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:  | 126  | 1239 | 62   | 504  | 684  | 341  | 246  | 425  | 55   | 31   | 1627 | 451  |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 132  | 1305 | 65   | 530  | 720  | 359  | 259  | 447  | 58   | 32   | 1713 | 475  |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 132  | 1305 | 65   | 530  | 720  | 359  | 259  | 447  | 58   | 32   | 1713 | 475  |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 132  | 1305 | 65   | 530  | 720  | 359  | 259  | 447  | 58   | 32   | 1713 | 475  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.91 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 0.88 |
| Lanes:      | 2.00 | 3.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 2.00 |
| Final Sat.: | 3492 | 4914 | 1800 | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 | 3492 | 3420 | 3168 |

Capacity Analysis Module:

|              |      |      |      |       |      |      |       |      |      |      |      |      |
|--------------|------|------|------|-------|------|------|-------|------|------|------|------|------|
| Vol/Sat:     | 0.04 | 0.27 | 0.04 | 0.15  | 0.21 | 0.20 | 0.07  | 0.13 | 0.03 | 0.01 | 0.50 | 0.15 |
| Crit Moves:  | **** |      |      | ****  |      |      | ****  |      |      | **** |      |      |
| Green/Cycle: | 0.06 | 0.25 | 0.25 | 0.14  | 0.33 | 0.33 | 0.07  | 0.50 | 0.50 | 0.04 | 0.46 | 0.61 |
| Volume/Cap:  | 0.64 | 1.08 | 0.15 | 1.08  | 0.64 | 0.61 | 1.08  | 0.26 | 0.07 | 0.26 | 1.08 | 0.25 |
| Delay/Veh:   | 52.7 | 87.6 | 29.6 | 106.4 | 29.9 | 30.1 | 127.1 | 14.6 | 13.1 | 48.1 | 73.9 | 9.2  |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 52.7 | 87.6 | 29.6 | 106.4 | 29.9 | 30.1 | 127.1 | 14.6 | 13.1 | 48.1 | 73.9 | 9.2  |
| LOS by Move: | D    | F    | C    | F     | C    | C    | F     | B    | B    | D    | E    | A    |
| HCM2kAvgQ:   | 3    | 23   | 2    | 15    | 11   | 10   | 8     | 4    | 1    | 1    | 41   | 4    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #41 Sierra Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.417  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 21.4  
Optimal Cycle: 28 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 3 | 0           | 2 | 1 | 1          | 0 | 2 | 0          | 2 | 1 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 80   | 868  | 31   | 59   | 451  | 75   | 131  | 64   | 51   | 50   | 100  | 54   |
| Growth Adj:   | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse:  | 99   | 1069 | 38   | 73   | 556  | 92   | 161  | 79   | 63   | 62   | 123  | 67   |
| Added Vol:    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:  | 99   | 1069 | 38   | 73   | 556  | 92   | 161  | 79   | 63   | 62   | 123  | 67   |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 104  | 1126 | 40   | 77   | 585  | 97   | 170  | 83   | 66   | 65   | 130  | 70   |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 104  | 1126 | 40   | 77   | 585  | 97   | 170  | 83   | 66   | 65   | 130  | 70   |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 104  | 1126 | 40   | 77   | 585  | 97   | 170  | 83   | 66   | 65   | 130  | 70   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.91 | 1.00 | 0.97 | 0.91 | 0.91 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 |
| Lanes:      | 2.00 | 3.00 | 1.00 | 2.00 | 2.57 | 0.43 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 3492 | 4914 | 1800 | 3492 | 4213 | 701  | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.03 | 0.23 | 0.02 | 0.02 | 0.14 | 0.14 | 0.09 | 0.02 | 0.04 | 0.04 | 0.04 | 0.04 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.11 | 0.55 | 0.55 | 0.05 | 0.50 | 0.50 | 0.23 | 0.16 | 0.16 | 0.16 | 0.09 | 0.09 |
| Volume/Cap:  | 0.28 | 0.42 | 0.04 | 0.42 | 0.28 | 0.28 | 0.42 | 0.15 | 0.23 | 0.23 | 0.42 | 0.43 |
| Delay/Veh:   | 41.6 | 13.2 | 10.4 | 47.4 | 14.8 | 14.8 | 33.7 | 36.3 | 37.0 | 37.3 | 43.8 | 44.8 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 41.6 | 13.2 | 10.4 | 47.4 | 14.8 | 14.8 | 33.7 | 36.3 | 37.0 | 37.3 | 43.8 | 44.8 |
| LOS by Move: | D    | B    | B    | D    | B    | B    | C    | D    | D    | D    | D    | D    |
| HCM2kAvgQ:   | 2    | 7    | 1    | 2    | 4    | 4    | 5    | 1    | 2    | 2    | 2    | 3    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #42 Sierra Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 1.181  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 112.1  
Optimal Cycle: 180 Level Of Service: F

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound  |   |   | West Bound  |   |   |
|-------------|-------------|---|---|-------------|---|---|-------------|---|---|-------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L           | T | R | L           | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Split Phase |   |   | Split Phase |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include     |   |   | Include     |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 |
| Lanes:      | 2           | 0 | 2 | 0           | 2 | 0 | 2           | 0 | 2 | 0           | 2 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 138  | 554  | 79   | 38   | 352  | 158  | 338  | 297  | 106  | 115  | 252  | 111  |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 170  | 683  | 97   | 47   | 434  | 195  | 416  | 366  | 131  | 142  | 310  | 137  |
| Added Vol:   | 112  | 0    | 0    | 0    | 0    | 0    | 0    | 273  | 18   | 0    | 1872 | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 282  | 683  | 97   | 47   | 434  | 195  | 416  | 639  | 149  | 142  | 2182 | 137  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 297  | 718  | 102  | 49   | 456  | 205  | 438  | 673  | 156  | 149  | 2297 | 144  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 297  | 718  | 102  | 49   | 456  | 205  | 438  | 673  | 156  | 149  | 2297 | 144  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 297  | 718  | 102  | 49   | 456  | 205  | 438  | 673  | 156  | 149  | 2297 | 144  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 |
| Lanes:      | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 |
| Final Sat.: | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 |

Capacity Analysis Module:

|              |       |      |      |       |      |       |      |      |      |      |      |      |
|--------------|-------|------|------|-------|------|-------|------|------|------|------|------|------|
| Vol/Sat:     | 0.09  | 0.21 | 0.06 | 0.01  | 0.13 | 0.11  | 0.13 | 0.20 | 0.09 | 0.04 | 0.67 | 0.08 |
| Crit Moves:  | ****  |      |      | ****  |      |       | **** |      |      | **** |      |      |
| Green/Cycle: | 0.07  | 0.17 | 0.17 | 0.01  | 0.11 | 0.11  | 0.17 | 0.17 | 0.17 | 0.57 | 0.57 | 0.57 |
| Volume/Cap:  | 1.18  | 1.21 | 0.33 | 1.21  | 1.18 | 1.01  | 0.75 | 1.18 | 0.52 | 0.08 | 1.18 | 0.14 |
| Delay/Veh:   | 161.2 | 152  | 36.9 | 259.7 | 150  | 109.4 | 45.3 | 140  | 39.7 | 9.7  | 109  | 10.2 |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00  | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 161.2 | 152  | 36.9 | 259.7 | 150  | 109.4 | 45.3 | 140  | 39.7 | 9.7  | 109  | 10.2 |
| LOS by Move: | F     | F    | D    | F     | F    | F     | D    | F    | D    | A    | F    | B    |
| HCM2kAvgQ:   | 10    | 23   | 3    | 3     | 15   | 11    | 8    | 21   | 5    | 1    | 62   | 2    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #43 Armstrong Rd/Sierra Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.443  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 17.4  
Optimal Cycle: 29 Level Of Service: B

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Ignore     |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 0 | 1           | 0 | 0 | 1          | 0 | 2 | 1          | 0 | 1 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 572  | 136  | 18   | 11   | 171  | 21   | 9    | 6    | 459  | 29   | 23   | 13   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 705  | 168  | 22   | 14   | 211  | 26   | 11   | 7    | 565  | 36   | 28   | 16   |
| Added Vol:   | 112  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 18   | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 817  | 168  | 22   | 14   | 211  | 26   | 11   | 7    | 583  | 36   | 28   | 16   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.00 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 860  | 176  | 23   | 14   | 222  | 27   | 12   | 8    | 0    | 38   | 30   | 17   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 860  | 176  | 23   | 14   | 222  | 27   | 12   | 8    | 0    | 38   | 30   | 17   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 860  | 176  | 23   | 14   | 222  | 27   | 12   | 8    | 0    | 38   | 30   | 17   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 |
| Lanes:      | 2.00 | 0.88 | 0.12 | 1.00 | 0.89 | 0.11 | 1.00 | 2.00 | 1.00 | 1.00 | 1.28 | 0.72 |
| Final Sat.: | 3492 | 1590 | 210  | 1800 | 1603 | 197  | 1800 | 3420 | 1800 | 1800 | 2185 | 1235 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.25 | 0.11 | 0.11 | 0.01 | 0.14 | 0.14 | 0.01 | 0.00 | 0.00 | 0.02 | 0.01 | 0.01 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.56 | 0.81 | 0.81 | 0.06 | 0.31 | 0.31 | 0.02 | 0.01 | 0.00 | 0.05 | 0.04 | 0.04 |
| Volume/Cap:  | 0.44 | 0.14 | 0.14 | 0.14 | 0.44 | 0.44 | 0.39 | 0.44 | 0.00 | 0.44 | 0.39 | 0.39 |
| Delay/Veh:   | 13.3 | 2.1  | 2.1  | 45.3 | 28.0 | 28.0 | 56.6 | 66.4 | 0.0  | 50.0 | 49.2 | 49.2 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 13.3 | 2.1  | 2.1  | 45.3 | 28.0 | 28.0 | 56.6 | 66.4 | 0.0  | 50.0 | 49.2 | 49.2 |
| LOS by Move: | B    | A    | A    | D    | C    | C    | E    | E    | A    | D    | D    | D    |
| HCM2kAvgQ:   | 8    | 1    | 1    | 1    | 6    | 6    | 1    | 1    | 0    | 2    | 1    | 1    |

Note: Queue reported is the number of cars per lane.



FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #44 Armstrong Rd/SR-60 WB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.801  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 27.4  
Optimal Cycle: 58 Level Of Service: C

| Approach:   | North Bound | South Bound | East Bound  | West Bound  |
|-------------|-------------|-------------|-------------|-------------|
| Movement:   | L - T - R   | L - T - R   | L - T - R   | L - T - R   |
| Control:    | Protected   | Protected   | Split Phase | Split Phase |
| Rights:     | Include     | Include     | Include     | Include     |
| Min. Green: | 0 0 0       | 0 0 0       | 0 0 0       | 0 0 0       |
| Lanes:      | 1 0 2 0 0   | 0 0 1 1 0   | 0 0 0 0 0   | 1 0 0 1 0   |

| Volume Module: | Base Vol: | 202  | 512  | 0    | 0    | 611  | 240  | 0    | 0    | 199  | 9    | 378  |
|----------------|-----------|------|------|------|------|------|------|------|------|------|------|------|
| Growth Adj:    | 1.23      | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse:   | 249       | 631  | 0    | 0    | 753  | 296  | 0    | 0    | 0    | 245  | 11   | 466  |
| Added Vol:     | 0         | 112  | 0    | 0    | 18   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol:   | 0         | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:   | 249       | 743  | 0    | 0    | 771  | 296  | 0    | 0    | 0    | 245  | 11   | 466  |
| User Adj:      | 1.00      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:       | 0.95      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:    | 262       | 782  | 0    | 0    | 811  | 311  | 0    | 0    | 0    | 258  | 12   | 490  |
| Reduct Vol:    | 0         | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:   | 262       | 782  | 0    | 0    | 811  | 311  | 0    | 0    | 0    | 258  | 12   | 490  |
| PCE Adj:       | 1.00      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:       | 1.00      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume:   | 262       | 782  | 0    | 0    | 811  | 311  | 0    | 0    | 0    | 258  | 12   | 490  |

| Saturation Flow Module: | Sat/Lane: | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
|-------------------------|-----------|------|------|------|------|------|------|------|------|------|------|
| Adjustment:             | 1.00      | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:                  | 1.00      | 2.00 | 0.00 | 0.00 | 1.45 | 0.55 | 0.00 | 0.00 | 0.00 | 1.00 | 0.02 |
| Final Sat.:             | 1800      | 3420 | 0    | 0    | 2472 | 948  | 0    | 0    | 0    | 1800 | 42   |

| Capacity Analysis Module: | Vol/Sat: | 0.15 | 0.23 | 0.00 | 0.00 | 0.33 | 0.33 | 0.00 | 0.00 | 0.00 | 0.14 | 0.28 |
|---------------------------|----------|------|------|------|------|------|------|------|------|------|------|------|
| Crit Moves:               | ****     |      |      |      |      | **** |      |      |      |      |      | **** |
| Green/Cycle:              | 0.18     | 0.59 | 0.00 | 0.00 | 0.41 | 0.41 | 0.00 | 0.00 | 0.00 | 0.35 | 0.35 | 0.35 |
| Volume/Cap:               | 0.80     | 0.39 | 0.00 | 0.00 | 0.80 | 0.80 | 0.00 | 0.00 | 0.00 | 0.41 | 0.80 | 0.80 |
| Delay/Veh:                | 52.3     | 10.9 | 0.0  | 0.0  | 29.3 | 29.3 | 0.0  | 0.0  | 0.0  | 25.2 | 36.7 | 36.7 |
| User DelAdj:              | 1.00     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:               | 52.3     | 10.9 | 0.0  | 0.0  | 29.3 | 29.3 | 0.0  | 0.0  | 0.0  | 25.2 | 36.7 | 36.7 |
| LOS by Move:              | D        | B    | A    | A    | C    | C    | A    | A    | A    | C    | D    | D    |
| HCM2kAvgQ:                | 10       | 7    | 0    | 0    | 18   | 18   | 0    | 0    | 0    | 6    | 16   | 16   |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #45 Armstrong Rd/SR-60 EB Ramps

Average Delay (sec/veh): 112.9 Worst Case Level Of Service: F[959.3]

| Approach: | North Bound  | South Bound  | East Bound | West Bound |
|-----------|--------------|--------------|------------|------------|
| Movement: | L - T - R    | L - T - R    | L - T - R  | L - T - R  |
| Control:  | Uncontrolled | Uncontrolled | Stop Sign  | Stop Sign  |
| Rights:   | Include      | Include      | Include    | Include    |
| Lanes:    | 0 0 1 1 0    | 1 0 2 0 0    | 0 1 0 1 0  | 0 0 0 0 0  |

| Volume Module: | Base Vol: | 0    | 638  | 363  | 300  | 485  | 0    | 88   | 1    | 151  | 0    | 0    |
|----------------|-----------|------|------|------|------|------|------|------|------|------|------|------|
| Growth Adj:    | 1.23      | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse:   | 0         | 786  | 447  | 370  | 598  | 0    | 108  | 1    | 186  | 0    | 0    | 0    |
| Added Vol:     | 0         | 112  | 0    | 0    | 18   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol:   | 0         | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:   | 0         | 898  | 447  | 370  | 616  | 0    | 108  | 1    | 186  | 0    | 0    | 0    |
| User Adj:      | 1.00      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:       | 0.95      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:    | 0         | 945  | 471  | 389  | 648  | 0    | 114  | 1    | 196  | 0    | 0    | 0    |
| Reduct Vol:    | 0         | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| FinalVolume:   | 0         | 945  | 471  | 389  | 648  | 0    | 114  | 1    | 196  | 0    | 0    | 0    |

| Critical Gap Module: | Critical Gp: | xxxx | xxxx | xxxx | 4.1 | xxxx | xxxx | 6.8 | 6.5 | 6.9 | xxxx | xxxx | xxxx |
|----------------------|--------------|------|------|------|-----|------|------|-----|-----|-----|------|------|------|
| FollowUpTim:         | xxxx         | xxxx | xxxx | xxxx | 2.2 | xxxx | xxxx | 3.5 | 4.0 | 3.3 | xxxx | xxxx | xxxx |

| Capacity Module: | Cnflct Vol: | xxxx | xxxx | xxxx | 1416 | xxxx | xxxx | 1899 | 2842 | 324  | xxxx | xxxx | xxxx |
|------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Potent Cap.:     | xxxx        | xxxx | xxxx | xxxx | 487  | xxxx | xxxx | 62   | 18   | 678  | xxxx | xxxx | xxxx |
| Move Cap.:       | xxxx        | xxxx | xxxx | xxxx | 487  | xxxx | xxxx | 21   | 4    | 678  | xxxx | xxxx | xxxx |
| Volume/Cap:      | xxxx        | xxxx | xxxx | xxxx | 0.80 | xxxx | xxxx | 5.41 | 0.37 | 0.29 | xxxx | xxxx | xxxx |

| Level Of Service Module: | 2Way95thQ:    | xxxx          | xxxx          | xxxx          | 7.4           | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          |
|--------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Control Del:             | xxxx          | xxxx          | xxxx          | xxxx          | 35.6          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          |
| LOS by Move:             | *             | *             | *             | *             | E             | *             | *             | *             | *             | *             | *             | *             | *             |
| Movement:                | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT |
| Shared Cap.:             | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | 20            | xxxx          | 301           | xxxx          | xxxx          | xxxx          |
| SharedQueue:             | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | 14.8          | xxxx          | 4.3           | xxxx          | xxxx          | xxxx          |
| Shrd ConDel:             | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | xxxx          | 2534          | xxxx          | 37.1          | xxxx          | xxxx          | xxxx          |
| Shared LOS:              | *             | *             | *             | *             | *             | *             | *             | F             | *             | E             | *             | *             | *             |
| ApproachDel:             | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | 959.3         | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        |
| ApproachLOS:             | *             | *             | *             | *             | F             | *             | *             | F             | *             | F             | *             | *             | *             |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 I-15 SB Ramps/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.916  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 27.0  
Optimal Cycle: 104 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |   |
| Control:    | Split Phase |   |   | Split Phase |   |   | Protected  |   |   | Protected  |   |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |   |
| Lanes:      | 0           | 0 | 0 | 1           | 0 | 1 | 0          | 0 | 3 | 0          | 1 | 2 | 0 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 0    | 0    | 0    | 405  | 27   | 376  | 0    | 938  | 554  | 435  | 419  | 0    |
| Growth Adj:   | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse:  | 0    | 0    | 0    | 499  | 33   | 463  | 0    | 1156 | 683  | 536  | 516  | 0    |
| Added Vol:    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 273  | 0    | 0    | 1685 | 0    |
| PasserByVol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:  | 0    | 0    | 0    | 499  | 33   | 463  | 0    | 1429 | 683  | 536  | 2201 | 0    |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 0    | 0    | 0    | 525  | 35   | 488  | 0    | 1504 | 718  | 564  | 2317 | 0    |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 0    | 0    | 0    | 525  | 35   | 488  | 0    | 1504 | 718  | 564  | 2317 | 0    |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 0    | 0    | 0    | 525  | 35   | 488  | 0    | 1504 | 718  | 564  | 2317 | 0    |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 1.00 | 0.97 | 0.91 | 1.00 |
| Lanes:      | 0.00 | 0.00 | 0.00 | 1.49 | 0.06 | 1.45 | 0.00 | 3.00 | 1.00 | 2.00 | 3.00 | 0.00 |
| Final Sat.: | 0    | 0    | 0    | 2673 | 116  | 2611 | 0    | 4914 | 1800 | 3492 | 4914 | 0    |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.00 | 0.00 | 0.00 | 0.20 | 0.30 | 0.19 | 0.00 | 0.31 | 0.40 | 0.16 | 0.47 | 0.00 |
| Crit Moves:  | **** |      |      |      |      |      |      |      |      |      |      |      |
| Green/Cycle: | 0.00 | 0.00 | 0.00 | 0.33 | 0.33 | 0.33 | 0.00 | 0.44 | 0.44 | 0.18 | 0.61 | 0.00 |
| Volume/Cap:  | 0.00 | 0.00 | 0.00 | 0.60 | 0.92 | 0.57 | 0.00 | 0.70 | 0.92 | 0.92 | 0.77 | 0.00 |
| Delay/Veh:   | 0.0  | 0.0  | 0.0  | 28.7 | 43.7 | 28.2 | 0.0  | 24.0 | 42.0 | 59.1 | 15.5 | 0.0  |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 0.0  | 0.0  | 0.0  | 28.7 | 43.7 | 28.2 | 0.0  | 24.0 | 42.0 | 59.1 | 15.5 | 0.0  |
| LOS by Move: | A    | A    | A    | C    | D    | C    | A    | C    | D    | E    | B    | A    |
| HCM2kAvgQ:   | 0    | 0    | 0    | 10   | 20   | 9    | 0    | 15   | 25   | 13   | 20   | 0    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 I-15 NB Ramps/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 1.049  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 34.6  
Optimal Cycle: 180 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Split Phase |   |   | Split Phase |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 0           | 1 | 0 | 2          | 0 | 3 | 0          | 0 | 1 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 134  | 1    | 202  | 0    | 0    | 0    | 614  | 730  | 0    | 0    | 706  | 883  |
| Growth Adj:   | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse:  | 165  | 1    | 249  | 0    | 0    | 0    | 756  | 899  | 0    | 0    | 870  | 1088 |
| Added Vol:    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 273  | 0    | 0    | 1685 | 0    |
| PasserByVol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:  | 165  | 1    | 249  | 0    | 0    | 0    | 756  | 1172 | 0    | 0    | 2555 | 1088 |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 174  | 1    | 262  | 0    | 0    | 0    | 796  | 1234 | 0    | 0    | 2689 | 1145 |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 174  | 1    | 262  | 0    | 0    | 0    | 796  | 1234 | 0    | 0    | 2689 | 1145 |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 174  | 1    | 262  | 0    | 0    | 0    | 796  | 1234 | 0    | 0    | 2689 | 1145 |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.97 | 0.91 | 1.00 | 1.00 | 0.91 | 1.00 |
| Lanes:      | 1.39 | 0.01 | 1.60 | 0.00 | 0.00 | 0.00 | 2.00 | 3.00 | 0.00 | 0.00 | 3.00 | 1.00 |
| Final Sat.: | 2514 | 11   | 2876 | 0    | 0    | 0    | 3492 | 4914 | 0    | 0    | 4914 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.07 | 0.12 | 0.09 | 0.00 | 0.00 | 0.00 | 0.23 | 0.25 | 0.00 | 0.00 | 0.55 | 0.64 |
| Crit Moves:  | **** |      |      |      |      |      |      |      |      |      |      |      |
| Green/Cycle: | 0.12 | 0.12 | 0.12 | 0.00 | 0.00 | 0.00 | 0.22 | 0.82 | 0.00 | 0.00 | 0.61 | 0.61 |
| Volume/Cap:  | 0.60 | 1.05 | 0.78 | 0.00 | 0.00 | 0.00 | 1.05 | 0.30 | 0.00 | 0.00 | 0.90 | 1.05 |
| Delay/Veh:   | 43.3 | 102  | 50.2 | 0.0  | 0.0  | 0.0  | 85.3 | 2.1  | 0.0  | 0.0  | 21.4 | 60.7 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 43.3 | 102  | 50.2 | 0.0  | 0.0  | 0.0  | 85.3 | 2.1  | 0.0  | 0.0  | 21.4 | 60.7 |
| LOS by Move: | D    | F    | D    | A    | A    | A    | F    | A    | A    | A    | C    | E    |
| HCM2kAvgQ:   | 5    | 12   | 7    | 0    | 0    | 0    | 20   | 3    | 0    | 0    | 30   | 48   |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Etiwanda Ave/San Bernardino Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.721  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 29.1  
Optimal Cycle: 51 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 2 | 0           | 1 | 1 | 0          | 2 | 0 | 1          | 2 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 242  | 694  | 52   | 42   | 603  | 113  | 274  | 407  | 348  | 55   | 178  | 21   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 298  | 855  | 64   | 52   | 743  | 139  | 338  | 501  | 429  | 68   | 219  | 26   |
| Added Vol:   | 0    | 368  | 0    | 0    | 93   | 0    | 0    | 9    | 0    | 0    | 54   | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 298  | 1223 | 64   | 52   | 836  | 139  | 338  | 510  | 429  | 68   | 273  | 26   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 314  | 1287 | 67   | 54   | 880  | 147  | 355  | 537  | 451  | 71   | 288  | 27   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 314  | 1287 | 67   | 54   | 880  | 147  | 355  | 537  | 451  | 71   | 288  | 27   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 314  | 1287 | 67   | 54   | 880  | 147  | 355  | 537  | 451  | 71   | 288  | 27   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 0.95 | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 0.95 |
| Lanes:      | 2.00 | 2.00 | 1.00 | 2.00 | 1.71 | 0.29 | 2.00 | 2.00 | 1.00 | 2.00 | 1.83 | 0.17 |
| Final Sat.: | 3492 | 3420 | 1800 | 3492 | 2932 | 488  | 3492 | 3420 | 1800 | 3492 | 3124 | 296  |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.09 | 0.38 | 0.04 | 0.02 | 0.30 | 0.30 | 0.10 | 0.16 | 0.25 | 0.02 | 0.09 | 0.09 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.13 | 0.52 | 0.52 | 0.02 | 0.42 | 0.42 | 0.20 | 0.35 | 0.35 | 0.03 | 0.18 | 0.18 |
| Volume/Cap:  | 0.72 | 0.72 | 0.07 | 0.72 | 0.72 | 0.72 | 0.52 | 0.45 | 0.72 | 0.72 | 0.52 | 0.52 |
| Delay/Veh:   | 47.7 | 19.8 | 11.9 | 77.1 | 25.9 | 25.9 | 36.5 | 25.5 | 32.5 | 70.8 | 37.9 | 37.9 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 47.7 | 19.8 | 11.9 | 77.1 | 25.9 | 25.9 | 36.5 | 25.5 | 32.5 | 70.8 | 37.9 | 37.9 |
| LOS by Move: | D    | B    | B    | E    | C    | C    | D    | C    | C    | E    | D    | D    |
| HCM2kAvgQ:   | 6    | 17   | 1    | 2    | 15   | 15   | 6    | 7    | 13   | 2    | 5    | 5    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Etiwanda Ave/I-10 WB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.514  
Loss Time (sec): 4 (Y+R=4.0 sec) Average Delay (sec/veh): 9.7  
Optimal Cycle: 23 Level Of Service: A

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound  |   |   | West Bound  |   |   |
|-------------|-------------|---|---|-------------|---|---|-------------|---|---|-------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L           | T | R | L           | T | R |
| Control:    | Permitted   |   |   | Permitted   |   |   | Split Phase |   |   | Split Phase |   |   |
| Rights:     | Ignore      |   |   | Ignore      |   |   | Include     |   |   | Include     |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 |
| Lanes:      | 0           | 0 | 2 | 0           | 0 | 3 | 0           | 0 | 0 | 0           | 0 | 2 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 0    | 761  | 537  | 0    | 903  | 212  | 0    | 0    | 0    | 148  | 0    | 237  |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 0    | 938  | 662  | 0    | 1112 | 261  | 0    | 0    | 0    | 182  | 0    | 292  |
| Added Vol:   | 0    | 319  | 210  | 0    | 83   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 0    | 1257 | 872  | 0    | 1195 | 261  | 0    | 0    | 0    | 182  | 0    | 292  |
| User Adj:    | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.00 | 0.95 | 0.95 | 0.00 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 0    | 1323 | 0    | 0    | 1258 | 0    | 0    | 0    | 0    | 192  | 0    | 307  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 0    | 1323 | 0    | 0    | 1258 | 0    | 0    | 0    | 0    | 192  | 0    | 307  |
| PCE Adj:     | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 0    | 1323 | 0    | 0    | 1258 | 0    | 0    | 0    | 0    | 192  | 0    | 307  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.88 |
| Lanes:      | 0.00 | 2.00 | 1.00 | 0.00 | 3.00 | 1.00 | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 2.00 |
| Final Sat.: | 0    | 3420 | 1800 | 0    | 4914 | 1800 | 0    | 0    | 0    | 1800 | 0    | 3168 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.00 | 0.39 | 0.00 | 0.00 | 0.26 | 0.00 | 0.00 | 0.00 | 0.00 | 0.11 | 0.00 | 0.10 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.00 | 0.75 | 0.00 | 0.00 | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 0.21 | 0.00 | 0.21 |
| Volume/Cap:  | 0.00 | 0.51 | 0.00 | 0.00 | 0.34 | 0.00 | 0.00 | 0.00 | 0.00 | 0.51 | 0.00 | 0.47 |
| Delay/Veh:   | 0.0  | 5.2  | 0.0  | 0.0  | 4.2  | 0.0  | 0.0  | 0.0  | 0.0  | 36.4 | 0.0  | 35.3 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 0.0  | 5.2  | 0.0  | 0.0  | 4.2  | 0.0  | 0.0  | 0.0  | 0.0  | 36.4 | 0.0  | 35.3 |
| LOS by Move: | A    | A    | A    | A    | A    | A    | A    | A    | A    | D    | A    | D    |
| HCM2kAvgQ:   | 0    | 9    | 0    | 0    | 5    | 0    | 0    | 0    | 0    | 6    | 0    | 5    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 Etiwanda Ave/I-10 EB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.651  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 15.7  
Optimal Cycle: 37 Level Of Service: B

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound  |   |   | West Bound  |   |   |
|-------------|-------------|---|---|-------------|---|---|-------------|---|---|-------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L           | T | R | L           | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Split Phase |   |   | Split Phase |   |   |
| Rights:     | Ignore      |   |   | Ignore      |   |   | Include     |   |   | Include     |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 |
| Lanes:      | 0           | 0 | 3 | 0           | 0 | 2 | 0           | 0 | 0 | 0           | 0 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 0    | 1041 | 714  | 0    | 839  | 252  | 126  | 0    | 250  | 0    | 0    | 0    |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 0    | 1283 | 880  | 0    | 1034 | 310  | 155  | 0    | 308  | 0    | 0    | 0    |
| Added Vol:   | 0    | 529  | 0    | 0    | 83   | 0    | 0    | 0    | 75   | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 0    | 1812 | 880  | 0    | 1117 | 310  | 155  | 0    | 383  | 0    | 0    | 0    |
| User Adj:    | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.00 | 0.95 | 0.95 | 0.00 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 0    | 1907 | 0    | 0    | 1175 | 0    | 163  | 0    | 403  | 0    | 0    | 0    |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 0    | 1907 | 0    | 0    | 1175 | 0    | 163  | 0    | 403  | 0    | 0    | 0    |
| PCE Adj:     | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 0    | 1907 | 0    | 0    | 1175 | 0    | 163  | 0    | 403  | 0    | 0    | 0    |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.91 | 1.00 | 1.00 | 0.95 | 1.00 | 0.97 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 0.00 | 3.00 | 1.00 | 0.00 | 2.00 | 1.00 | 2.00 | 0.00 | 1.00 | 0.00 | 0.00 | 0.00 |
| Final Sat.: | 0    | 4914 | 1800 | 0    | 3420 | 1800 | 3492 | 0    | 1800 | 0    | 0    | 0    |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.00 | 0.39 | 0.00 | 0.00 | 0.34 | 0.00 | 0.05 | 0.00 | 0.22 | 0.00 | 0.00 | 0.00 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.00 | 0.60 | 0.00 | 0.00 | 0.60 | 0.00 | 0.34 | 0.00 | 0.34 | 0.00 | 0.00 | 0.00 |
| Volume/Cap:  | 0.00 | 0.65 | 0.00 | 0.00 | 0.58 | 0.00 | 0.14 | 0.00 | 0.65 | 0.00 | 0.00 | 0.00 |
| Delay/Veh:   | 0.0  | 13.9 | 0.0  | 0.0  | 12.8 | 0.0  | 22.6 | 0.0  | 30.2 | 0.0  | 0.0  | 0.0  |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 0.0  | 13.9 | 0.0  | 0.0  | 12.8 | 0.0  | 22.6 | 0.0  | 30.2 | 0.0  | 0.0  | 0.0  |
| LOS by Move: | A    | B    | A    | A    | B    | A    | C    | A    | C    | A    | A    | A    |
| HCM2kAvgQ:   | 0    | 15   | 0    | 0    | 12   | 0    | 2    | 0    | 11   | 0    | 0    | 0    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #6 Etiwanda Ave/ East Airport Dr-Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 1.558  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 278.4  
Optimal Cycle: 180 Level Of Service: F

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound  |   |   | West Bound  |   |   |
|-------------|-------------|---|---|-------------|---|---|-------------|---|---|-------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L           | T | R | L           | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Prot+Permit |   |   | Prot+Permit |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include     |   |   | Include     |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 1           | 0 | 1 | 1           | 0 | 1 | 1           | 0 | 1 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 26   | 839  | 30   | 188  | 713  | 74   | 316  | 97   | 72   | 69   | 93   | 582  |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 32   | 1034 | 37   | 232  | 878  | 91   | 389  | 120  | 89   | 85   | 115  | 717  |
| Added Vol:   | 288  | 85   | 0    | 132  | 26   | 0    | 0    | 326  | 173  | 0    | 1087 | 444  |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 320  | 1119 | 37   | 364  | 904  | 91   | 389  | 446  | 262  | 85   | 1202 | 1161 |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 337  | 1178 | 39   | 383  | 952  | 96   | 410  | 469  | 275  | 89   | 1265 | 1222 |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 337  | 1178 | 39   | 383  | 952  | 96   | 410  | 469  | 275  | 89   | 1265 | 1222 |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 337  | 1178 | 39   | 383  | 952  | 96   | 410  | 469  | 275  | 89   | 1265 | 1222 |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Lanes:      | 1.00 | 1.94 | 0.06 | 1.00 | 1.82 | 0.18 | 1.00 | 1.26 | 0.74 | 1.00 | 1.02 | 0.98 |
| Final Sat.: | 1800 | 3311 | 109  | 1800 | 3107 | 313  | 1800 | 2154 | 1266 | 1800 | 1739 | 1681 |

Capacity Analysis Module:

|              |       |      |       |       |      |       |       |      |      |      |      |       |
|--------------|-------|------|-------|-------|------|-------|-------|------|------|------|------|-------|
| Vol/Sat:     | 0.19  | 0.36 | 0.36  | 0.21  | 0.31 | 0.31  | 0.00  | 0.22 | 0.22 | 0.00 | 0.73 | 0.73  |
| Crit Moves:  | ****  |      |       | ****  |      |       | ****  |      |      | **** |      |       |
| Green/Cycle: | 0.13  | 0.21 | 0.21  | 0.13  | 0.21 | 0.21  | 0.14  | 0.47 | 0.47 | 0.11 | 0.44 | 0.44  |
| Volume/Cap:  | 1.44  | 1.66 | 1.66  | 1.66  | 1.44 | 1.44  | 1.66  | 0.46 | 0.46 | 0.46 | 1.66 | 1.66  |
| Delay/Veh:   | 263.2 | 340  | 340.3 | 357.1 | 244  | 244.2 | 355.5 | 18.2 | 18.2 | 43.7 | 326  | 326.1 |
| User DelAdj: | 1.00  | 1.00 | 1.00  | 1.00  | 1.00 | 1.00  | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  |
| AdjDel/Veh:  | 263.2 | 340  | 340.3 | 357.1 | 244  | 244.2 | 355.5 | 18.2 | 18.2 | 43.7 | 326  | 326.1 |
| LOS by Move: | F     | F    | F     | F     | F    | F     | F     | B    | B    | D    | F    | F     |
| HCM2kAvgQ:   | 25    | 52   | 52    | 32    | 39   | 39    | 34    | 8    | 8    | 3    | 104  | 104   |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 Etiwanda Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 1.333  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 129.5  
Optimal Cycle: 180 Level Of Service: F

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 2 | 0           | 2 | 0 | 1          | 2 | 0 | 0          | 2 | 0 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 323  | 595  | 140  | 390  | 771  | 231  | 169  | 964  | 355  | 71   | 561  | 100  |
| Growth Adj:   | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse:  | 398  | 733  | 172  | 480  | 950  | 285  | 208  | 1188 | 437  | 87   | 691  | 123  |
| Added Vol:    | 24   | 43   | 38   | 186  | 13   | 0    | 0    | 266  | 8    | 53   | 1660 | 331  |
| PasserByVol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:  | 422  | 776  | 210  | 666  | 963  | 285  | 208  | 1454 | 445  | 140  | 2351 | 454  |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 444  | 817  | 222  | 702  | 1014 | 300  | 219  | 1530 | 469  | 148  | 2475 | 478  |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 444  | 817  | 222  | 702  | 1014 | 300  | 219  | 1530 | 469  | 148  | 2475 | 478  |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 444  | 817  | 222  | 702  | 1014 | 300  | 219  | 1530 | 469  | 148  | 2475 | 478  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 |
| Lanes:      | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 |
| Final Sat.: | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 |

Capacity Analysis Module:

|              |       |      |      |       |      |      |       |      |      |      |      |      |
|--------------|-------|------|------|-------|------|------|-------|------|------|------|------|------|
| Vol/Sat:     | 0.13  | 0.24 | 0.12 | 0.20  | 0.30 | 0.17 | 0.06  | 0.45 | 0.26 | 0.04 | 0.72 | 0.27 |
| Crit Moves:  | ****  | **** | **** | ****  | **** | **** | ****  | **** | **** | **** | **** | **** |
| Green/Cycle: | 0.10  | 0.18 | 0.18 | 0.15  | 0.23 | 0.23 | 0.05  | 0.54 | 0.54 | 0.05 | 0.54 | 0.54 |
| Volume/Cap:  | 1.28  | 1.33 | 0.69 | 1.33  | 1.28 | 0.72 | 1.33  | 0.83 | 0.48 | 0.83 | 1.33 | 0.49 |
| Delay/Veh:   | 193.0 | 202  | 44.5 | 204.9 | 176  | 41.6 | 232.9 | 22.6 | 14.7 | 73.7 | 176  | 14.6 |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 193.0 | 202  | 44.5 | 204.9 | 176  | 41.6 | 232.9 | 22.6 | 14.7 | 73.7 | 176  | 14.6 |
| LOS by Move: | F     | F    | D    | F     | F    | D    | F     | C    | B    | E    | F    | B    |
| HCM2kAvgQ:   | 16    | 29   | 8    | 24    | 33   | 10   | 9     | 23   | 9    | 4    | 81   | 9    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Etiwanda Ave/Marlay Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.458  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 15.7  
Optimal Cycle: 25 Level Of Service: B

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Permitted  |   |   | Permitted  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 1           | 0 | 2 | 1          | 0 | 1 | 1          | 0 | 1 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 18   | 590  | 79   | 61   | 659  | 15   | 31   | 41   | 61   | 74   | 77   | 113  |
| Growth Adj:   | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse:  | 22   | 727  | 97   | 75   | 812  | 18   | 38   | 51   | 75   | 91   | 95   | 139  |
| Added Vol:    | 0    | 81   | 8    | 8    | 66   | 0    | 0    | 8    | 0    | 27   | 24   | 24   |
| PasserByVol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:  | 22   | 808  | 105  | 83   | 878  | 18   | 38   | 59   | 75   | 118  | 119  | 163  |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 23   | 850  | 111  | 88   | 924  | 19   | 40   | 62   | 79   | 124  | 125  | 172  |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 23   | 850  | 111  | 88   | 924  | 19   | 40   | 62   | 79   | 124  | 125  | 172  |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 23   | 850  | 111  | 88   | 924  | 19   | 40   | 62   | 79   | 124  | 125  | 172  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 0.95 | 1.00 | 0.91 | 0.91 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Lanes:      | 1.00 | 1.77 | 0.23 | 1.00 | 2.94 | 0.06 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Sat.: | 1800 | 3026 | 394  | 1800 | 4813 | 101  | 1800 | 1710 | 1710 | 1800 | 1710 | 1710 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.01 | 0.28 | 0.28 | 0.05 | 0.19 | 0.19 | 0.02 | 0.04 | 0.05 | 0.07 | 0.07 | 0.10 |
| Crit Moves:  | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Green/Cycle: | 0.05 | 0.61 | 0.61 | 0.11 | 0.67 | 0.67 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 | 0.22 |
| Volume/Cap:  | 0.28 | 0.46 | 0.46 | 0.46 | 0.28 | 0.28 | 0.10 | 0.16 | 0.21 | 0.31 | 0.33 | 0.46 |
| Delay/Veh:   | 48.1 | 10.5 | 10.5 | 43.7 | 6.6  | 6.6  | 31.3 | 31.7 | 32.1 | 33.2 | 33.1 | 34.4 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 48.1 | 10.5 | 10.5 | 43.7 | 6.6  | 6.6  | 31.3 | 31.7 | 32.1 | 33.2 | 33.1 | 34.4 |
| LOS by Move: | D    | B    | B    | D    | A    | A    | C    | C    | C    | C    | C    | C    |
| HCM2kAvgQ:   | 1    | 8    | 8    | 3    | 4    | 4    | 1    | 2    | 2    | 3    | 4    | 5    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #9 Etiwanda Ave/Philadelphia Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.393  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 16.3  
Optimal Cycle: 23 Level Of Service: B

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Permitted  |   |   | Permitted  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 1 | 0 | 1          | 0 | 1 | 0          | 1 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 43   | 539  | 6    | 2    | 766  | 44   | 115  | 4    | 87   | 21   | 10   | 78   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 53   | 664  | 7    | 2    | 944  | 54   | 142  | 5    | 107  | 26   | 12   | 96   |
| Added Vol:   | 0    | 14   | 5    | 37   | 44   | 12   | 4    | 4    | 0    | 15   | 12   | 72   |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 53   | 678  | 12   | 39   | 988  | 66   | 146  | 9    | 107  | 41   | 24   | 168  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 56   | 714  | 13   | 42   | 1040 | 70   | 153  | 9    | 113  | 43   | 26   | 177  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 56   | 714  | 13   | 42   | 1040 | 70   | 153  | 9    | 113  | 43   | 26   | 177  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 56   | 714  | 13   | 42   | 1040 | 70   | 153  | 9    | 113  | 43   | 26   | 177  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.91 | 0.91 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 2.81 | 0.19 | 1.00 | 1.00 | 1.00 | 1.00 | 0.13 | 0.87 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 4605 | 309  | 1800 | 1800 | 1800 | 1800 | 228  | 1572 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.03 | 0.21 | 0.01 | 0.02 | 0.23 | 0.23 | 0.09 | 0.01 | 0.06 | 0.02 | 0.11 | 0.11 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.08 | 0.59 | 0.59 | 0.07 | 0.57 | 0.57 | 0.29 | 0.29 | 0.29 | 0.29 | 0.29 | 0.29 |
| Volume/Cap:  | 0.39 | 0.35 | 0.01 | 0.35 | 0.39 | 0.39 | 0.30 | 0.02 | 0.22 | 0.08 | 0.39 | 0.39 |
| Delay/Veh:   | 45.6 | 10.8 | 8.5  | 46.6 | 11.8 | 11.8 | 28.2 | 25.6 | 27.4 | 26.2 | 29.2 | 29.2 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 45.6 | 10.8 | 8.5  | 46.6 | 11.8 | 11.8 | 28.2 | 25.6 | 27.4 | 26.2 | 29.2 | 29.2 |
| LOS by Move: | D    | B    | A    | D    | B    | B    | C    | C    | C    | C    | C    | C    |
| HCM2kAvgQ:   | 2    | 6    | 0    | 2    | 7    | 7    | 4    | 0    | 3    | 1    | 5    | 5    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #10 Etiwanda Ave/SR-60 WB Ramp

Cycle (sec): 100 Critical Vol./Cap.(X): 0.674  
Loss Time (sec): 4 (Y+R=4.0 sec) Average Delay (sec/veh): 13.7  
Optimal Cycle: 33 Level Of Service: B

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound  |   |   | West Bound  |   |   |
|-------------|-------------|---|---|-------------|---|---|-------------|---|---|-------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L           | T | R | L           | T | R |
| Control:    | Permitted   |   |   | Permitted   |   |   | Split Phase |   |   | Split Phase |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include     |   |   | Include     |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 |
| Lanes:      | 0           | 0 | 2 | 0           | 0 | 2 | 0           | 0 | 0 | 1           | 0 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 0    | 453  | 0    | 0    | 1174 | 0    | 0    | 0    | 0    | 255  | 0    | 149  |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 0    | 558  | 0    | 0    | 1446 | 0    | 0    | 0    | 0    | 314  | 0    | 184  |
| Added Vol:   | 0    | 18   | 0    | 0    | 58   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 0    | 576  | 0    | 0    | 1504 | 0    | 0    | 0    | 0    | 314  | 0    | 184  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 0    | 606  | 0    | 0    | 1584 | 0    | 0    | 0    | 0    | 331  | 0    | 193  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 0    | 606  | 0    | 0    | 1584 | 0    | 0    | 0    | 0    | 331  | 0    | 193  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 0    | 606  | 0    | 0    | 1584 | 0    | 0    | 0    | 0    | 331  | 0    | 193  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 0.00 | 2.00 | 0.00 | 0.00 | 2.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.00 | 0.00 | 1.00 |
| Final Sat.: | 0    | 3420 | 0    | 0    | 3420 | 0    | 0    | 0    | 0    | 1800 | 0    | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.00 | 0.18 | 0.00 | 0.00 | 0.46 | 0.00 | 0.00 | 0.00 | 0.00 | 0.18 | 0.00 | 0.11 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.00 | 0.69 | 0.00 | 0.00 | 0.69 | 0.00 | 0.00 | 0.00 | 0.00 | 0.27 | 0.00 | 0.27 |
| Volume/Cap:  | 0.00 | 0.26 | 0.00 | 0.00 | 0.67 | 0.00 | 0.00 | 0.00 | 0.00 | 0.67 | 0.00 | 0.39 |
| Delay/Veh:   | 0.0  | 6.0  | 0.0  | 0.0  | 9.9  | 0.0  | 0.0  | 0.0  | 0.0  | 36.1 | 0.0  | 30.2 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 0.0  | 6.0  | 0.0  | 0.0  | 9.9  | 0.0  | 0.0  | 0.0  | 0.0  | 36.1 | 0.0  | 30.2 |
| LOS by Move: | A    | A    | A    | A    | A    | A    | A    | A    | A    | D    | A    | C    |
| HCM2kAvgQ:   | 0    | 4    | 0    | 0    | 15   | 0    | 0    | 0    | 0    | 10   | 0    | 5    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

## Level Of Service Computation Report

## 2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #11 Etiwanda Ave/SR-60 EB Ramp

Average Delay (sec/veh): 2.4 Worst Case Level Of Service: C [ 17.0]

| Approach: | North Bound  |   |   |   | South Bound  |   |   |   | East Bound |   |   |   | West Bound |   |   |   |
|-----------|--------------|---|---|---|--------------|---|---|---|------------|---|---|---|------------|---|---|---|
| Movement: | L            | T | R |   | L            | T | R |   | L          | T | R |   | L          | T | R |   |
| Control:  | Uncontrolled |   |   |   | Uncontrolled |   |   |   | Stop Sign  |   |   |   | Stop Sign  |   |   |   |
| Rights:   | Include      |   |   |   | Include      |   |   |   | Include    |   |   |   | Include    |   |   |   |
| Lanes:    | 0            | 0 | 1 | 1 | 0            | 1 | 0 | 2 | 0          | 0 | 0 | 0 | 0          | 0 | 0 | 0 |

## Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 0    | 447  | 316  | 310  | 1090 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 0    | 551  | 389  | 382  | 1343 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Added Vol:   | 0    | 18   | 0    | 0    | 58   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 0    | 569  | 389  | 382  | 1401 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 0    | 599  | 410  | 402  | 1475 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| FinalVolume: | 0    | 599  | 410  | 402  | 1475 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |

## Critical Gap Module:

|                              |     |      |       |       |      |       |       |      |       |       |      |       |       |      |       |       |
|------------------------------|-----|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|
| Critical Gp:xxxxx xxxx xxxxx | 4.1 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx |
| FollowUpTim:xxxxx xxxx xxxxx | 2.2 | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx | xxxx | xxxxx | xxxxx |

## Capacity Module:

|                              |      |      |       |      |      |       |      |      |       |      |      |       |      |      |       |       |
|------------------------------|------|------|-------|------|------|-------|------|------|-------|------|------|-------|------|------|-------|-------|
| Cnflct Vol: xxxx xxxx xxxxx  | 1008 | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxxx |
| Potent Cap.: xxxx xxxx xxxxx | 695  | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxxx |
| Move Cap.: xxxx xxxx xxxxx   | 695  | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxxx |
| Volume/Cap: xxxx xxxx xxxxx  | 0.58 | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxx | xxxx | xxxxx | xxxxx |

## Level Of Service Module:

|                              |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |
|------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| 2Way95thQ: xxxx xxxx xxxxx   | 3.7           | xxxx          | xxxxx         | xxxx          | xxxx          | xxxxx         | xxxx          | xxxx          | xxxxx         | xxxx          | xxxx          | xxxxx         | xxxx          | xxxx          | xxxxx         | xxxxx         |
| Control Del:xxxxx xxxx xxxxx | 17.0          | xxxx          | xxxxx         | xxxxx         | xxxx          | xxxxx         | xxxxx         | xxxx          | xxxxx         | xxxxx         | xxxx          | xxxxx         | xxxxx         | xxxx          | xxxxx         | xxxxx         |
| LOS by Move: * * * C         |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |
| Movement: LT - LTR - RT      | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT |
| Shared Cap.: xxxx xxxx xxxxx | xxxx          | xxxx          | xxxxx         | xxxx          | xxxx          | xxxxx         | xxxx          | xxxx          | xxxxx         | xxxx          | xxxx          | xxxxx         | xxxx          | xxxx          | xxxxx         | xxxxx         |
| SharedQueue:xxxxx xxxx xxxxx | xxxxx         | xxxx          | xxxxx         | xxxxx         | xxxx          | xxxxx         | xxxx          | xxxxx         | xxxxx         | xxxx          | xxxxx         | xxxxx         | xxxx          | xxxxx         | xxxxx         | xxxxx         |
| Shrd ConDel:xxxxx xxxx xxxxx | xxxxx         | xxxx          | xxxxx         | xxxxx         | xxxx          | xxxxx         | xxxx          | xxxxx         | xxxxx         | xxxx          | xxxxx         | xxxxx         | xxxx          | xxxxx         | xxxxx         | xxxxx         |
| Shared LOS: * * *            |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |
| ApproachDel: xxxxxx          | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        |
| ApproachLOS: *               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

## Level Of Service Computation Report

## 2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 Commerce Way/Ontario Mills Pkwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.938

Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 42.2

Optimal Cycle: 125 Level Of Service: D

| Approach:   | North Bound |   |   |   | South Bound |   |   |  | East Bound |   |   |   | West Bound |   |   |   |
|-------------|-------------|---|---|---|-------------|---|---|--|------------|---|---|---|------------|---|---|---|
| Movement:   | L           | T | R |   | L           | T | R |  | L          | T | R |   | L          | T | R |   |
| Control:    | Protected   |   |   |   | Protected   |   |   |  | Protected  |   |   |   | Protected  |   |   |   |
| Rights:     | Include     |   |   |   | Include     |   |   |  | Include    |   |   |   | Include    |   |   |   |
| Min. Green: | 0           | 0 | 0 |   | 0           | 0 | 0 |  | 0          | 0 | 0 |   | 0          | 0 | 0 |   |
| Lanes:      | 2           | 0 | 1 | 0 | 1           | 1 | 0 |  | 1          | 0 | 2 | 0 | 1          | 2 | 0 | 1 |

## Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |  |  |  |  |  |
|--------------|------|------|------|------|------|------|------|------|------|------|------|--|--|--|--|--|
| Base Vol:    | 16   | 159  | 798  | 24   | 121  | 16   | 232  | 11   | 446  | 301  | 18   |  |  |  |  |  |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |  |  |  |  |  |
| Initial Bse: | 20   | 196  | 983  | 30   | 149  | 20   | 286  | 14   | 549  | 371  | 22   |  |  |  |  |  |
| Added Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 55   | 0    | 0    | 165  | 0    |  |  |  |  |  |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |  |  |  |  |  |
| Initial Fut: | 20   | 196  | 983  | 30   | 149  | 20   | 341  | 14   | 549  | 536  | 22   |  |  |  |  |  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |  |  |  |  |  |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |  |  |  |  |  |
| PHF Volume:  | 21   | 206  | 1035 | 31   | 157  | 21   | 359  | 14   | 578  | 564  | 23   |  |  |  |  |  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |  |  |  |  |  |
| Reduced Vol: | 21   | 206  | 1035 | 31   | 157  | 21   | 359  | 14   | 578  | 564  | 23   |  |  |  |  |  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |  |  |  |  |  |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |  |  |  |  |  |
| FinalVolume: | 21   | 206  | 1035 | 31   | 157  | 21   | 359  | 14   | 578  | 564  | 23   |  |  |  |  |  |

## Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |  |  |  |  |  |
|-------------|------|------|------|------|------|------|------|------|------|------|------|--|--|--|--|--|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |  |  |  |  |  |
| Adjustment: | 0.97 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 1.00 | 0.95 | 1.00 |  |  |  |  |  |
| Lanes:      | 2.00 | 1.00 | 1.00 | 1.00 | 1.77 | 0.23 | 1.00 | 2.00 | 1.00 | 2.00 | 1.00 |  |  |  |  |  |
| Final Sat.: | 3492 | 1800 | 1800 | 1800 | 3021 | 399  | 1800 | 3420 | 1800 | 3492 | 3420 |  |  |  |  |  |

## Capacity Analysis Module:

|              |      |      |      |       |      |      |      |      |      |      |      |      |  |  |  |  |
|--------------|------|------|------|-------|------|------|------|------|------|------|------|------|--|--|--|--|
| Vol/Sat:     | 0.01 | 0.11 | 0.57 | 0.02  | 0.05 | 0.05 | 0.01 | 0.10 | 0.01 | 0.17 | 0.16 | 0.01 |  |  |  |  |
| Crit Moves:  |      |      | **** | ****  |      |      |      | **** |      |      |      | **** |  |  |  |  |
| Green/Cycle: | 0.06 | 0.61 | 0.61 | 0.02  | 0.57 | 0.57 | 0.02 | 0.11 | 0.11 | 0.18 | 0.27 | 0.27 |  |  |  |  |
| Volume/Cap:  | 0.09 | 0.19 | 0.94 | 0.94  | 0.09 | 0.09 | 0.61 | 0.94 | 0.07 | 0.94 | 0.61 | 0.05 |  |  |  |  |
| Delay/Veh:   | 44.2 | 8.5  | 32.2 | 179.3 | 9.9  | 9.9  | 77.3 | 74.6 | 39.9 | 62.8 | 33.2 | 27.1 |  |  |  |  |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |  |  |  |  |
| AdjDel/Veh:  | 44.2 | 8.5  | 32.2 | 179.3 | 9.9  | 9.9  | 77.3 | 74.6 | 39.9 | 62.8 | 33.2 | 27.1 |  |  |  |  |
| LOS by Move: | D    | A    | C    | F     | A    | A    | E    | E    | D    | E    | C    | C    |  |  |  |  |
| HCM2kAvgQ:   | 0    | 3    | 34   | 3     | 1    | 1    | 2    | 9    | 0    | 13   | 9    | 1    |  |  |  |  |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #13 Mulberry Ave/Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.828  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 22.8  
Optimal Cycle: 65 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Split Phase |   |   | Split Phase |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 2 | 1          | 0 | 2 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 145  | 0    | 107  | 0    | 0    | 0    | 0    | 258  | 81   | 136  | 404  | 0    |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 179  | 0    | 132  | 0    | 0    | 0    | 0    | 318  | 100  | 168  | 498  | 0    |
| Added Vol:   | 180  | 0    | 67   | 0    | 0    | 0    | 0    | 417  | 41   | 165  | 1351 | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 359  | 0    | 199  | 0    | 0    | 0    | 0    | 735  | 141  | 333  | 1849 | 0    |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 378  | 0    | 209  | 0    | 0    | 0    | 0    | 774  | 148  | 350  | 1946 | 0    |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 378  | 0    | 209  | 0    | 0    | 0    | 0    | 774  | 148  | 350  | 1946 | 0    |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 378  | 0    | 209  | 0    | 0    | 0    | 0    | 774  | 148  | 350  | 1946 | 0    |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.91 | 0.91 | 1.00 | 0.95 | 1.00 |
| Lanes:      | 1.00 | 0.00 | 1.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.52 | 0.48 | 1.00 | 2.00 | 0.00 |
| Final Sat.: | 1800 | 0    | 1800 | 0    | 0    | 0    | 0    | 4124 | 790  | 1800 | 3420 | 0    |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.21 | 0.00 | 0.12 | 0.00 | 0.00 | 0.00 | 0.00 | 0.19 | 0.19 | 0.19 | 0.57 | 0.00 |
| Crit Moves:  | **** |      |      |      |      |      | **** |      |      |      | **** |      |
| Green/Cycle: | 0.25 | 0.00 | 0.25 | 0.00 | 0.00 | 0.00 | 0.00 | 0.34 | 0.34 | 0.35 | 0.69 | 0.00 |
| Volume/Cap:  | 0.83 | 0.00 | 0.46 | 0.00 | 0.00 | 0.00 | 0.00 | 0.56 | 0.56 | 0.56 | 0.83 | 0.00 |
| Delay/Veh:   | 47.3 | 0.0  | 32.3 | 0.0  | 0.0  | 0.0  | 0.0  | 27.5 | 27.5 | 27.4 | 14.0 | 0.0  |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 47.3 | 0.0  | 32.3 | 0.0  | 0.0  | 0.0  | 0.0  | 27.5 | 27.5 | 27.4 | 14.0 | 0.0  |
| LOS by Move: | D    | A    | C    | A    | A    | A    | A    | C    | C    | C    | B    | A    |
| HCM2kAvgQ:   | 13   | 0    | 6    | 0    | 0    | 0    | 0    | 9    | 9    | 9    | 25   | 0    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #14 Mulberry Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.639  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 23.5  
Optimal Cycle: 36 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Permitted  |   |   | Permitted  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 0           | 0 | 1 | 0          | 1 | 0 | 0          | 1 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 8    | 180  | 44   | 29   | 226  | 7    | 8    | 13   | 66   | 62   | 13   | 84   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 10   | 222  | 54   | 36   | 278  | 9    | 10   | 16   | 81   | 76   | 16   | 103  |
| Added Vol:   | 0    | 196  | 174  | 12   | 194  | 0    | 0    | 0    | 0    | 289  | 0    | 51   |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 10   | 418  | 228  | 48   | 472  | 9    | 10   | 16   | 81   | 365  | 16   | 154  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 10   | 440  | 240  | 50   | 497  | 9    | 10   | 17   | 86   | 385  | 17   | 163  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 10   | 440  | 240  | 50   | 497  | 9    | 10   | 17   | 86   | 385  | 17   | 163  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 10   | 440  | 240  | 50   | 497  | 9    | 10   | 17   | 86   | 385  | 17   | 163  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 1.00 | 1.00 | 1.00 | 0.98 | 0.02 | 0.38 | 0.62 | 1.00 | 0.68 | 0.03 | 0.29 |
| Final Sat.: | 1800 | 1800 | 1800 | 1800 | 1768 | 32   | 686  | 1114 | 1800 | 1227 | 54   | 519  |

Capacity Analysis Module:

|              |       |      |      |      |      |      |      |      |      |      |      |      |
|--------------|-------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.01  | 0.24 | 0.13 | 0.03 | 0.28 | 0.28 | 0.02 | 0.02 | 0.05 | 0.31 | 0.31 | 0.31 |
| Crit Moves:  | ****  |      |      |      | **** |      |      |      |      | **** |      |      |
| Green/Cycle: | 0.01  | 0.40 | 0.40 | 0.05 | 0.44 | 0.44 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 |
| Volume/Cap:  | 0.64  | 0.61 | 0.33 | 0.61 | 0.64 | 0.64 | 0.03 | 0.03 | 0.10 | 0.64 | 0.64 | 0.64 |
| Delay/Veh:   | 112.0 | 25.0 | 20.8 | 58.9 | 23.5 | 23.5 | 13.2 | 13.2 | 13.7 | 20.5 | 20.5 | 20.5 |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 112.0 | 25.0 | 20.8 | 58.9 | 23.5 | 23.5 | 13.2 | 13.2 | 13.7 | 20.5 | 20.5 | 20.5 |
| LOS by Move: | F     | C    | C    | E    | C    | C    | B    | B    | B    | C    | C    | C    |
| HCM2kAvgQ:   | 1     | 11   | 5    | 3    | 13   | 13   | 0    | 0    | 1    | 13   | 13   | 13   |

Note: Queue reported is the number of cars per lane.



FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #15 Mulberry Ave/Jurupa St  
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 1.517  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 216.6  
Optimal Cycle: 180 Level Of Service: F  
\*\*\*\*\*

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 2 | 0           | 1 | 0 | 2          | 0 | 1 | 1          | 0 | 2 |

Volume Module:  
Base Vol: 129 278 338 55 427 188 149 1232 417 387 758 49  
Growth Adj: 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23  
Initial Bse: 159 342 416 68 526 232 184 1518 514 477 934 60  
Added Vol: 22 113 92 0 178 301 216 307 34 265 1651 43  
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0  
Initial Fut: 181 455 508 68 704 533 400 1825 548 742 2585 103  
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95  
PHF Volume: 190 479 535 71 741 561 421 1921 577 781 2721 109  
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
Reduced Vol: 190 479 535 71 741 561 421 1921 577 781 2721 109  
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
FinalVolume: 190 479 535 71 741 561 421 1921 577 781 2721 109  
-----

Saturation Flow Module:  
Sat/Lane: 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800  
Adjustment: 0.97 0.95 1.00 1.00 0.95 1.00 1.00 0.95 1.00 1.00 0.95 1.00  
Lanes: 2.00 2.00 1.00 1.00 2.00 1.00 1.00 2.00 1.00 1.00 2.00 1.00  
Final Sat.: 3492 3420 1800 1800 3420 1800 1800 3420 1800 1800 3420 1800  
-----

Capacity Analysis Module:  
Vol/Sat: 0.05 0.14 0.30 0.04 0.22 0.31 0.23 0.56 0.32 0.43 0.80 0.06  
Crit Moves: \*\*\*\*  
Green/Cycle: 0.04 0.21 0.21 0.03 0.21 0.21 0.15 0.38 0.38 0.30 0.52 0.52  
Volume/Cap: 1.52 0.66 1.40 1.40 1.06 1.52 1.52 1.47 0.84 1.47 1.52 0.12  
Delay/Veh: 317.1 38.2 232.9 311.2 89.2 285.7 292.5 245 36.8 255.4 259 12.1  
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
AdjDel/Veh: 317.1 38.2 232.9 311.2 89.2 285.7 292.5 245 36.8 255.4 259 12.1  
LOS by Move: F D F F F F F D F F B  
HCM2kAvgQ: 9 8 37 6 19 42 32 71 19 56 104 2  
\*\*\*\*\*

Note: Queue reported is the number of cars per lane.  
\*\*\*\*\*

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #16 Mulberry Ave/Marlay Ave  
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.646  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 20.2  
Optimal Cycle: 42 Level Of Service: C  
\*\*\*\*\*

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 1 | 0 | 1          | 0 | 1 | 1          | 0 | 1 |

Volume Module:  
Base Vol: 40 377 70 47 688 37 93 125 142 65 21 25  
Growth Adj: 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23  
Initial Bse: 49 464 86 58 848 46 115 154 175 80 26 31  
Added Vol: 5 190 0 0 466 11 36 0 16 0 0 0  
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0  
Initial Fut: 54 654 86 58 1314 57 151 154 191 80 26 31  
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95  
PHF Volume: 57 689 91 61 1383 60 159 162 201 84 27 32  
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
Reduced Vol: 57 689 91 61 1383 60 159 162 201 84 27 32  
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
FinalVolume: 57 689 91 61 1383 60 159 162 201 84 27 32  
-----

Saturation Flow Module:  
Sat/Lane: 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800  
Adjustment: 1.00 0.95 1.00 1.00 0.95 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
Lanes: 1.00 2.00 1.00 1.00 2.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
Final Sat.: 1800 3420 1800 1800 3420 1800 1800 3420 1800 1800 3420 1800  
-----

Capacity Analysis Module:  
Vol/Sat: 0.03 0.20 0.05 0.03 0.40 0.03 0.09 0.09 0.11 0.05 0.02 0.02  
Crit Moves: \*\*\*\*  
Green/Cycle: 0.05 0.58 0.58 0.10 0.63 0.63 0.20 0.17 0.17 0.07 0.04 0.04  
Volume/Cap: 0.65 0.35 0.09 0.35 0.65 0.05 0.43 0.52 0.65 0.65 0.36 0.43  
Delay/Veh: 62.1 11.3 9.4 43.4 12.5 7.3 35.6 39.2 43.2 55.9 49.6 50.7  
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
AdjDel/Veh: 62.1 11.3 9.4 43.4 12.5 7.3 35.6 39.2 43.2 55.9 49.6 50.7  
LOS by Move: E B A D B A D D D E D D  
HCM2kAvgQ: 3 6 1 2 14 1 5 5 7 4 1 2  
\*\*\*\*\*

Note: Queue reported is the number of cars per lane.  
\*\*\*\*\*

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #17 Mulberry Ave/Philadelphia Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.682  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 10.6  
Optimal Cycle: 40 Level Of Service: B

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Permitted  |   |   | Permitted  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 1 | 0 | 1          | 0 | 1 | 0          | 1 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 30   | 1023 | 74   | 18   | 1026 | 42   | 63   | 18   | 83   | 48   | 15   | 9    |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 37   | 1260 | 91   | 22   | 1264 | 52   | 78   | 22   | 102  | 59   | 18   | 11   |
| Added Vol:   | 10   | 123  | 0    | 0    | 446  | 35   | 71   | 0    | 32   | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 47   | 1383 | 91   | 22   | 1710 | 87   | 149  | 22   | 134  | 59   | 18   | 11   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 49   | 1456 | 96   | 23   | 1800 | 91   | 156  | 23   | 141  | 62   | 19   | 12   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 49   | 1456 | 96   | 23   | 1800 | 91   | 156  | 23   | 141  | 62   | 19   | 12   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 49   | 1456 | 96   | 23   | 1800 | 91   | 156  | 23   | 141  | 62   | 19   | 12   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.62 | 0.38 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 | 1800 | 1800 | 1800 | 1800 | 1125 | 675  |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.03 | 0.43 | 0.05 | 0.01 | 0.53 | 0.05 | 0.09 | 0.01 | 0.08 | 0.03 | 0.02 | 0.02 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      |      |      |      |
| Green/Cycle: | 0.04 | 0.79 | 0.79 | 0.02 | 0.77 | 0.77 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 |
| Volume/Cap:  | 0.68 | 0.54 | 0.07 | 0.54 | 0.68 | 0.07 | 0.68 | 0.10 | 0.62 | 0.27 | 0.14 | 0.14 |
| Delay/Veh:   | 70.7 | 4.1  | 2.4  | 61.3 | 6.2  | 2.8  | 49.8 | 38.8 | 46.3 | 40.1 | 39.0 | 39.0 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 70.7 | 4.1  | 2.4  | 61.3 | 6.2  | 2.8  | 49.8 | 38.8 | 46.3 | 40.1 | 39.0 | 39.0 |
| LOS by Move: | E    | A    | A    | E    | A    | A    | D    | D    | D    | D    | D    | D    |
| HCM2kAvgQ:   | 3    | 9    | 1    | 2    | 15   | 1    | 6    | 1    | 5    | 2    | 1    | 1    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #18 Mulberry Ave/SR-60 WB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 1.084  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 54.4  
Optimal Cycle: 180 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound  |   |   | West Bound  |   |   |
|-------------|-------------|---|---|-------------|---|---|-------------|---|---|-------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L           | T | R | L           | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Split Phase |   |   | Split Phase |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include     |   |   | Include     |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 0 | 1 | 0           | 0 | 0 | 0           | 1 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 341  | 1046 | 0    | 0    | 605  | 565  | 0    | 0    | 0    | 123  | 1    | 253  |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 420  | 1289 | 0    | 0    | 745  | 696  | 0    | 0    | 0    | 152  | 1    | 312  |
| Added Vol:   | 0    | 133  | 0    | 0    | 478  | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 420  | 1422 | 0    | 0    | 1223 | 696  | 0    | 0    | 0    | 152  | 1    | 312  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 442  | 1496 | 0    | 0    | 1288 | 733  | 0    | 0    | 0    | 160  | 1    | 328  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 442  | 1496 | 0    | 0    | 1288 | 733  | 0    | 0    | 0    | 160  | 1    | 328  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 442  | 1496 | 0    | 0    | 1288 | 733  | 0    | 0    | 0    | 160  | 1    | 328  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 0.00 | 0.00 | 1.27 | 0.73 | 0.00 | 0.00 | 0.00 | 0.99 | 0.01 | 1.00 |
| Final Sat.: | 1800 | 3420 | 0    | 0    | 2180 | 1240 | 0    | 0    | 0    | 1785 | 15   | 1800 |

Capacity Analysis Module:

|              |       |      |      |      |      |      |      |      |      |      |      |       |
|--------------|-------|------|------|------|------|------|------|------|------|------|------|-------|
| Vol/Sat:     | 0.25  | 0.44 | 0.00 | 0.00 | 0.59 | 0.59 | 0.00 | 0.00 | 0.00 | 0.09 | 0.09 | 0.18  |
| Crit Moves:  | ****  |      |      | **** |      |      |      |      |      |      |      |       |
| Green/Cycle: | 0.23  | 0.77 | 0.00 | 0.00 | 0.55 | 0.55 | 0.00 | 0.00 | 0.00 | 0.17 | 0.17 | 0.17  |
| Volume/Cap:  | 1.08  | 0.57 | 0.00 | 0.00 | 1.08 | 1.08 | 0.00 | 0.00 | 0.00 | 0.53 | 0.53 | 1.08  |
| Delay/Veh:   | 107.6 | 4.9  | 0.0  | 0.0  | 70.3 | 70.3 | 0.0  | 0.0  | 0.0  | 39.8 | 39.8 | 117.5 |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  |
| AdjDel/Veh:  | 107.6 | 4.9  | 0.0  | 0.0  | 70.3 | 70.3 | 0.0  | 0.0  | 0.0  | 39.8 | 39.8 | 117.5 |
| LOS by Move: | F     | A    | A    | A    | E    | E    | A    | A    | A    | D    | D    | F     |
| HCM2kAvgQ:   | 22    | 10   | 0    | 0    | 47   | 47   | 0    | 0    | 0    | 5    | 5    | 17    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #19 Mulberry Ave/SR-60 EB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 1.071  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 52.6  
Optimal Cycle: 180 Level Of Service: D

| Approach:   | North Bound | South Bound | East Bound  | West Bound  |
|-------------|-------------|-------------|-------------|-------------|
| Movement:   | L - T - R   | L - T - R   | L - T - R   | L - T - R   |
| Control:    | Protected   | Protected   | Split Phase | Split Phase |
| Rights:     | Include     | Include     | Include     | Include     |
| Min. Green: | 0 0 0       | 0 0 0       | 0 0 0       | 0 0 0       |
| Lanes:      | 0 0 1 1 0   | 1 0 2 0 0   | 1 0 1 0 0   | 0 0 0 0 0   |

| Volume Module: | Base Vol:                             | Growth Adj:                                                                | Initial Bse:                          | Added Vol:                    | PasserByVol:              | Initial Fut:                           | User Adj:                                                             | PHF Adj:                                                                   | PHF Volume:                            | Reduct Vol:               | Reduced Vol:                           | PCE Adj:                                                              | MLF Adj:                                                              | FinalVolume:                           |
|----------------|---------------------------------------|----------------------------------------------------------------------------|---------------------------------------|-------------------------------|---------------------------|----------------------------------------|-----------------------------------------------------------------------|----------------------------------------------------------------------------|----------------------------------------|---------------------------|----------------------------------------|-----------------------------------------------------------------------|-----------------------------------------------------------------------|----------------------------------------|
|                | 0 634 157 235 496 0 745 0 317 0 0 0 0 | 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 | 0 781 193 290 611 0 918 0 391 0 0 0 0 | 0 133 0 0 478 0 0 0 0 0 0 0 0 | 0 0 0 0 0 0 0 0 0 0 0 0 0 | 0 914 193 290 1089 0 918 0 391 0 0 0 0 | 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 | 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 | 0 962 204 305 1146 0 966 0 411 0 0 0 0 | 0 0 0 0 0 0 0 0 0 0 0 0 0 | 0 962 204 305 1146 0 966 0 411 0 0 0 0 | 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 | 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 | 0 962 204 305 1146 0 966 0 411 0 0 0 0 |

| Saturation Flow Module: | Sat/Lane:                                                   | Adjustment:                                                 | Lanes:                                                      | Final Sat.:                               |
|-------------------------|-------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------|
|                         | 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 | 1.00 0.95 0.95 1.00 0.95 1.00 1.00 1.00 1.00 1.00 1.00 1.00 | 0.00 1.65 0.35 1.00 2.00 0.00 1.54 0.00 0.46 0.00 0.00 0.00 | 0 2823 597 1800 3420 0 2772 0 828 0 0 0 0 |

| Capacity Analysis Module: | Vol/Sat:                                                    | Crit Moves: | Green/Cycle:                                                | Volume/Cap:                                                 | Delay/Veh:                                             | User DelAdj:                                                | AdjDel/Veh:                                            | LOS by Move:            | HCM2kAvgQ:                    |
|---------------------------|-------------------------------------------------------------|-------------|-------------------------------------------------------------|-------------------------------------------------------------|--------------------------------------------------------|-------------------------------------------------------------|--------------------------------------------------------|-------------------------|-------------------------------|
|                           | 0.00 0.34 0.34 0.17 0.34 0.00 0.35 0.00 0.50 0.00 0.00 0.00 | ****        | 0.00 0.32 0.32 0.16 0.48 0.00 0.46 0.00 0.46 0.00 0.00 0.00 | 0.00 1.07 1.07 1.07 0.70 0.00 0.75 0.00 1.07 0.00 0.00 0.00 | 0.0 82.6 82.6 115.6 22.0 0.0 23.9 0.0 73.4 0.0 0.0 0.0 | 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 | 0.0 82.6 82.6 115.6 22.0 0.0 23.9 0.0 73.4 0.0 0.0 0.0 | A F F F C A C A E A A A | 0 29 29 16 15 0 17 0 40 0 0 0 |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #20 Banana Ave/San Bernardino Ave

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: B[ 13.8]

| Approach: | North Bound | South Bound | East Bound   | West Bound   |
|-----------|-------------|-------------|--------------|--------------|
| Movement: | L - T - R   | L - T - R   | L - T - R    | L - T - R    |
| Control:  | Stop Sign   | Stop Sign   | Uncontrolled | Uncontrolled |
| Rights:   | Include     | Include     | Include      | Include      |
| Lanes:    | 0 0 1! 0 0  | 0 0 0 0 0   | 0 0 2 0 1    | 1 0 2 0 0    |

| Volume Module: | Base Vol:                     | Growth Adj:                                                 | Initial Bse:                   | Added Vol:               | PasserByVol:            | Initial Fut:                   | User Adj:                                                   | PHF Adj:                                                    | PHF Volume:                    | Reduct Vol:             | FinalVolume:                   |
|----------------|-------------------------------|-------------------------------------------------------------|--------------------------------|--------------------------|-------------------------|--------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|--------------------------------|-------------------------|--------------------------------|
|                | 6 0 42 0 0 0 0 652 12 9 331 0 | 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 | 7 0 52 0 0 0 0 803 15 11 408 0 | 0 0 0 0 0 0 0 9 0 0 54 0 | 0 0 0 0 0 0 0 0 0 0 0 0 | 7 0 52 0 0 0 0 812 15 11 462 0 | 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 | 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 | 8 0 54 0 0 0 0 855 16 12 486 0 | 0 0 0 0 0 0 0 0 0 0 0 0 | 8 0 54 0 0 0 0 855 16 12 486 0 |

| Critical Gap Module: | Critical Gap:                                             | FollowUpTim:                                              |
|----------------------|-----------------------------------------------------------|-----------------------------------------------------------|
|                      | 6.8 6.5 6.9 xxxxx xxxxx xxxxx xxxxx xxxxx 4.1 xxxxx xxxxx | 3.5 4.0 3.3 xxxxx xxxxx xxxxx xxxxx xxxxx 2.2 xxxxx xxxxx |

| Capacity Module: | Cnflct Vol:                                                 | Potent Cap.:                                              | Move Cap.:                                                | Volume/Cap:                                                   |
|------------------|-------------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------|---------------------------------------------------------------|
|                  | 1121 1364 428 xxxxx xxxxx xxxxx xxxxx xxxxx 871 xxxxx xxxxx | 203 149 581 xxxxx xxxxx xxxxx xxxxx xxxxx 783 xxxxx xxxxx | 201 147 581 xxxxx xxxxx xxxxx xxxxx xxxxx 783 xxxxx xxxxx | 0.04 0.00 0.09 xxxxx xxxxx xxxxx xxxxx xxxxx 0.01 xxxxx xxxxx |

| Level Of Service Module: | 2Way95thQ:                                                     | Control Del:                                                     | LOS by Move:                            | Movement:                                               | Shared Cap.:                                                         | SharedQueue:                                                          | Shrd ConDel:                                                           | Shared LOS:                       | ApproachDel:              | ApproachLOS: |
|--------------------------|----------------------------------------------------------------|------------------------------------------------------------------|-----------------------------------------|---------------------------------------------------------|----------------------------------------------------------------------|-----------------------------------------------------------------------|------------------------------------------------------------------------|-----------------------------------|---------------------------|--------------|
|                          | xxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.0 xxxxx xxxxx | xxxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 9.7 xxxxx xxxxx | * * * * * * * * * * * * * * * * A * * * | LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT | xxxx 470 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx | 0.5 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx | 13.8 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx | * B * * * * * * * * * * * * * * * | 13.8 xxxxxx xxxxxx xxxxxx | B * * *      |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Unsignalized Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #21 Banana Ave/Valley Blvd  
\*\*\*\*\*

Average Delay (sec/veh): 6.9 Worst Case Level Of Service: F[154.1]  
\*\*\*\*\*

| Approach: | North Bound |   |        | South Bound |   |        | East Bound   |   |       | West Bound   |   |       |
|-----------|-------------|---|--------|-------------|---|--------|--------------|---|-------|--------------|---|-------|
| Movement: | L           | T | R      | L           | T | R      | L            | T | R     | L            | T | R     |
| Control:  | Stop Sign   |   |        | Stop Sign   |   |        | Uncontrolled |   |       | Uncontrolled |   |       |
| Rights:   | Include     |   |        | Include     |   |        | Include      |   |       | Include      |   |       |
| Lanes:    | 0           | 0 | 1! 0 0 | 0           | 0 | 1! 0 0 | 1            | 0 | 2 0 1 | 1            | 0 | 1 1 0 |

Volume Module:  
Base Vol: 15 0 15 27 0 34 50 1023 12 8 577 36  
Growth Adj: 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23  
Initial Bse: 18 0 18 33 0 42 62 1260 15 10 711 44  
Added Vol: 0 0 0 0 0 0 0 55 0 0 165 0  
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0  
Initial Fut: 18 0 18 33 0 42 62 1315 15 10 876 44  
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95  
PHF Volume: 19 0 19 35 0 44 65 1385 16 10 922 47  
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
FinalVolume: 19 0 19 35 0 44 65 1385 16 10 922 47

Critical Gap Module:  
Critical Gap: 7.5 6.5 6.9 7.5 6.5 6.9 4.1 xxxx xxxxx 4.1 xxxx xxxxx  
FollowUpTim: 3.5 4.0 3.3 3.5 4.0 3.3 2.2 xxxx xxxxx 2.2 xxxx xxxxx

Capacity Module:  
Conflict Vol: 1996 2504 692 1788 2496 484 969 xxxx xxxxx 1400 xxxx xxxxx  
Potent Cap.: 36 29 391 52 29 534 719 xxxx xxxxx 494 xxxx xxxxx  
Move Cap.: 31 26 391 46 26 534 719 xxxx xxxxx 494 xxxx xxxxx  
Volume/Cap: 0.64 0.00 0.05 0.77 0.00 0.08 0.09 xxxx xxxxx 0.02 xxxx xxxxx

Level Of Service Module:  
2Way95thQ: xxxx xxxx xxxxx xxxx xxxx xxxxx 0.3 xxxx xxxxx 0.1 xxxx xxxxx  
Control Del:xxxxx xxxx xxxxx xxxx xxxx xxxxx 10.5 xxxx xxxxx 12.4 xxxx xxxxx  
LOS by Move: \* \* \* \* \* B \* \* \* B \* \* \*  
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT  
Shared Cap.: xxxx 57 xxxxx xxxx 93 xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx  
SharedQueue:xxxxx 2.9 xxxxx xxxxx 4.7 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx  
Shrd ConDel:xxxxx 154 xxxxx xxxxx 137 xxxxx xxxxx xxxx xxxxx xxxx xxxx xxxxx  
Shared LOS: \* F \* \* F \* \* \* \*  
ApproachDel: 154.1 136.6 xxxxxx xxxxxx  
ApproachLOS: F F \* \*

Note: Queue reported is the number of cars per lane.  
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FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #22 Cherry Ave/San Bernardino Ave  
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 1.529  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 191.4  
Optimal Cycle: 180 Level Of Service: F  
\*\*\*\*\*

| Approach:   | North Bound |   |       | South Bound |   |       | East Bound |   |       | West Bound |   |       |
|-------------|-------------|---|-------|-------------|---|-------|------------|---|-------|------------|---|-------|
| Movement:   | L           | T | R     | L           | T | R     | L          | T | R     | L          | T | R     |
| Control:    | Protected   |   |       | Protected   |   |       | Protected  |   |       | Protected  |   |       |
| Rights:     | Include     |   |       | Ignore      |   |       | Ignore     |   |       | Include    |   |       |
| Min. Green: | 0           | 0 | 0     | 0           | 0 | 0     | 0          | 0 | 0     | 0          | 0 | 0     |
| Lanes:      | 1           | 0 | 2 1 0 | 1           | 0 | 3 0 1 | 1          | 0 | 2 0 1 | 1          | 0 | 1 1 0 |

Volume Module:  
Base Vol: 19 834 87 58 731 143 315 426 88 119 157 48  
Growth Adj: 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23  
Initial Bse: 23 1027 107 71 901 176 388 525 108 147 193 59  
Added Vol: 0 3477 16 0 964 18 113 47 0 3 8 0  
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0  
Initial Fut: 23 4504 123 71 1865 194 501 572 108 150 201 59  
User Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 0.00 1.00 1.00 1.00  
PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.00 0.95 0.95 0.00 0.95 0.95 0.95  
PHF Volume: 25 4742 130 75 1963 0 527 602 0 157 212 62  
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
Reduced Vol: 25 4742 130 75 1963 0 527 602 0 157 212 62  
PCE Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 0.00 1.00 1.00 1.00  
MLF Adj: 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 0.00 1.00 1.00 1.00  
FinalVolume: 25 4742 130 75 1963 0 527 602 0 157 212 62

Saturation Flow Module:  
Sat/Lane: 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800  
Adjustment: 1.00 0.91 0.91 1.00 0.91 1.00 1.00 0.95 1.00 1.00 0.95 0.95  
Lanes: 1.00 2.92 0.08 1.00 3.00 1.00 1.00 2.00 1.00 1.00 1.55 0.45  
Final Sat.: 1800 4783 131 1800 4914 1800 1800 3420 1800 1800 2644 776

Capacity Analysis Module:  
Vol/Sat: 0.01 0.99 0.99 0.04 0.40 0.00 0.29 0.18 0.00 0.09 0.08 0.08  
Crit Moves: \*\*\*\* \* \* \* \*  
Green/Cycle: 0.02 0.65 0.65 0.03 0.65 0.00 0.19 0.16 0.00 0.08 0.05 0.05  
Volume/Cap: 0.61 1.53 1.53 1.53 0.61 0.00 1.53 1.08 0.00 1.08 1.53 1.53  
Delay/Veh: 73.0 257 257.1 365.8 10.3 0.0 292.5 103 0.0 143.2 311 311.4  
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
AdjDel/Veh: 73.0 257 257.1 365.8 10.3 0.0 292.5 103 0.0 143.2 311 311.4  
LOS by Move: E F F F B A F F A F F F  
HCM2kAvgQ: 2 129 129 7 13 0 40 17 0 10 12 12

Note: Queue reported is the number of cars per lane.  
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FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

## Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

## Intersection #23 Cherry Ave/Valley Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 2.075  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 341.0  
Optimal Cycle: 180 Level Of Service: F

| Approach:   | North Bound | South Bound | East Bound | West Bound |
|-------------|-------------|-------------|------------|------------|
| Movement:   | L - T - R   | L - T - R   | L - T - R  | L - T - R  |
| Control:    | Protected   | Protected   | Protected  | Protected  |
| Rights:     | Include     | Include     | Include    | Include    |
| Min. Green: | 0 0 0       | 0 0 0       | 0 0 0      | 0 0 0      |
| Lanes:      | 1 0 2 0 1   | 1 0 2 0 1   | 1 0 2 0 1  | 1 0 2 0 1  |

## Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 118  | 531  | 306  | 139  | 632  | 127  | 124  | 699  | 197  | 275  | 408  | 63   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 145  | 654  | 377  | 171  | 779  | 156  | 153  | 861  | 243  | 339  | 503  | 78   |
| Added Vol:   | 59   | 3425 | 54   | 18   | 1320 | 0    | 0    | 91   | 69   | 89   | 70   | 3    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 204  | 4079 | 431  | 189  | 2099 | 156  | 153  | 952  | 312  | 428  | 573  | 81   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 215  | 4294 | 454  | 199  | 2209 | 165  | 161  | 1002 | 328  | 450  | 603  | 85   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 215  | 4294 | 454  | 199  | 2209 | 165  | 161  | 1002 | 328  | 450  | 603  | 85   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 215  | 4294 | 454  | 199  | 2209 | 165  | 161  | 1002 | 328  | 450  | 603  | 85   |

## Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 |

## Capacity Analysis Module:

|              |       |      |      |       |      |      |       |      |       |       |      |      |
|--------------|-------|------|------|-------|------|------|-------|------|-------|-------|------|------|
| Vol/Sat:     | 0.12  | 1.26 | 0.25 | 0.11  | 0.65 | 0.09 | 0.09  | 0.29 | 0.18  | 0.25  | 0.18 | 0.05 |
| Crit Moves:  | ****  | **** | **** | ****  | **** | **** | ****  | **** | ****  | ****  | **** | **** |
| Green/Cycle: | 0.10  | 0.60 | 0.60 | 0.05  | 0.56 | 0.56 | 0.09  | 0.14 | 0.14  | 0.12  | 0.17 | 0.17 |
| Volume/Cap:  | 1.16  | 2.08 | 0.42 | 2.08  | 1.16 | 0.16 | 1.01  | 2.08 | 1.29  | 2.08  | 1.01 | 0.27 |
| Delay/Veh:   | 161.7 | 505  | 10.7 | 565.1 | 102  | 11.0 | 121.0 | 534  | 200.0 | 543.4 | 82.0 | 36.3 |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00  | 1.00 | 1.00  | 1.00  | 1.00 | 1.00 |
| AdjDel/Veh:  | 161.7 | 505  | 10.7 | 565.1 | 102  | 11.0 | 121.0 | 534  | 200.0 | 543.4 | 82.0 | 36.3 |
| LOS by Move: | F     | F    | B    | F     | B    | B    | F     | F    | F     | F     | F    | D    |
| HCM2kAvgQ:   | 13    | 211  | 7    | 20    | 58   | 2    | 9     | 51   | 22    | 43    | 15   | 2    |

Note: Queue reported is the number of cars per lane.

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FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

## Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

## Intersection #26 Cherry Ave/Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 3.281  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 693.0  
Optimal Cycle: 180 Level Of Service: F

| Approach:   | North Bound | South Bound | East Bound | West Bound |
|-------------|-------------|-------------|------------|------------|
| Movement:   | L - T - R   | L - T - R   | L - T - R  | L - T - R  |
| Control:    | Protected   | Protected   | Protected  | Protected  |
| Rights:     | Include     | Include     | Include    | Include    |
| Min. Green: | 0 0 0       | 0 0 0       | 0 0 0      | 0 0 0      |
| Lanes:      | 1 0 2 0 1   | 1 0 1 1 0   | 1 0 2 0 1  | 1 0 2 0 1  |

## Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 34   | 405  | 23   | 245  | 392  | 304  | 307  | 724  | 52   | 44   | 280  | 294  |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 42   | 499  | 28   | 302  | 483  | 375  | 378  | 892  | 64   | 54   | 345  | 362  |
| Added Vol:   | 382  | 3281 | 366  | 540  | 885  | 309  | 694  | 610  | 267  | 156  | 759  | 1008 |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 424  | 3780 | 394  | 842  | 1368 | 684  | 1072 | 1502 | 331  | 210  | 1104 | 1370 |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 446  | 3979 | 415  | 886  | 1440 | 720  | 1129 | 1581 | 348  | 221  | 1162 | 1442 |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 446  | 3979 | 415  | 886  | 1440 | 720  | 1129 | 1581 | 348  | 221  | 1162 | 1442 |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 446  | 3979 | 415  | 886  | 1440 | 720  | 1129 | 1581 | 348  | 221  | 1162 | 1442 |

## Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 1.33 | 0.67 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 2280 | 1140 | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 |

## Capacity Analysis Module:

|              |       |      |      |      |      |       |      |      |      |       |      |      |
|--------------|-------|------|------|------|------|-------|------|------|------|-------|------|------|
| Vol/Sat:     | 0.25  | 1.16 | 0.23 | 0.49 | 0.63 | 0.63  | 0.63 | 0.46 | 0.19 | 0.12  | 0.34 | 0.80 |
| Crit Moves:  | ****  | **** | **** | **** | **** | ****  | **** | **** | **** | ****  | **** | **** |
| Green/Cycle: | 0.14  | 0.35 | 0.35 | 0.15 | 0.36 | 0.36  | 0.19 | 0.34 | 0.34 | 0.09  | 0.24 | 0.24 |
| Volume/Cap:  | 1.74  | 3.28 | 0.65 | 3.28 | 1.74 | 1.74  | 3.28 | 1.34 | 0.56 | 1.34  | 1.39 | 3.28 |
| Delay/Veh:   | 392.7 | 1061 | 29.4 | 1078 | 369  | 369.3 | 1074 | 193  | 27.9 | 235.2 | 221  | 1070 |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 |
| AdjDel/Veh:  | 392.7 | 1061 | 29.4 | 1078 | 369  | 369.3 | 1074 | 193  | 27.9 | 235.2 | 221  | 1070 |
| LOS by Move: | F     | F    | C    | F    | F    | F     | F    | F    | C    | F     | F    | F    |
| HCM2kAvgQ:   | 38    | 242  | 11   | 103  | 94   | 94    | 131  | 53   | 9    | 16    | 42   | 167  |

Note: Queue reported is the number of cars per lane.

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FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #27 Cherry Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 1.327  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 120.4  
Optimal Cycle: 180 Level Of Service: F

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Permitted  |   |   | Permitted  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 1           | 0 | 2 | 0          | 1 | 0 | 0          | 1 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 12   | 399  | 6    | 17   | 575  | 59   | 117  | 29   | 8    | 7    | 20   | 34   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 15   | 492  | 7    | 21   | 708  | 73   | 144  | 36   | 10   | 9    | 25   | 42   |
| Added Vol:   | 74   | 2119 | 11   | 62   | 846  | 154  | 888  | 0    | 461  | 26   | 0    | 178  |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 89   | 2611 | 18   | 83   | 1554 | 227  | 1032 | 36   | 471  | 35   | 25   | 220  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 93   | 2748 | 19   | 87   | 1636 | 239  | 1086 | 38   | 496  | 36   | 26   | 231  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 93   | 2748 | 19   | 87   | 1636 | 239  | 1086 | 38   | 496  | 36   | 26   | 231  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 93   | 2748 | 19   | 87   | 1636 | 239  | 1086 | 38   | 496  | 36   | 26   | 231  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 0.91 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 2.98 | 0.02 | 1.00 | 2.62 | 0.38 | 1.00 | 0.07 | 0.93 | 0.58 | 0.42 | 1.00 |
| Final Sat.: | 1800 | 4880 | 34   | 1800 | 4289 | 625  | 1710 | 121  | 1589 | 1052 | 748  | 1800 |

Capacity Analysis Module:

|              |       |      |       |       |      |      |       |      |      |      |      |      |
|--------------|-------|------|-------|-------|------|------|-------|------|------|------|------|------|
| Vol/Sat:     | 0.05  | 0.56 | 0.56  | 0.05  | 0.38 | 0.38 | 0.64  | 0.31 | 0.31 | 0.03 | 0.03 | 0.13 |
| Crit Moves:  | ****  | **** | ****  | ****  | **** | **** | ****  | **** | **** | **** | **** | **** |
| Green/Cycle: | 0.06  | 0.42 | 0.42  | 0.04  | 0.41 | 0.41 | 0.48  | 0.48 | 0.48 | 0.48 | 0.48 | 0.48 |
| Volume/Cap:  | 0.94  | 1.33 | 1.33  | 1.33  | 0.94 | 0.94 | 1.33  | 0.65 | 0.65 | 0.07 | 0.07 | 0.27 |
| Delay/Veh:   | 117.9 | 179  | 179.2 | 269.1 | 38.0 | 38.0 | 178.8 | 20.3 | 20.3 | 14.1 | 14.1 | 15.7 |
| User DelAdj: | 1.00  | 1.00 | 1.00  | 1.00  | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 117.9 | 179  | 179.2 | 269.1 | 38.0 | 38.0 | 178.8 | 20.3 | 20.3 | 14.1 | 14.1 | 15.7 |
| LOS by Move: | F     | F    | F     | F     | D    | D    | F     | C    | C    | B    | B    | B    |
| HCM2kAvgQ:   | 6     | 63   | 63    | 7     | 25   | 25   | 71    | 14   | 14   | 1    | 1    | 4    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #28 Cherry Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 1.393  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 132.6  
Optimal Cycle: 180 Level Of Service: F

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 2 | 0           | 2 | 0 | 2          | 0 | 2 | 1          | 0 | 2 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 183  | 260  | 40   | 123  | 423  | 105  | 138  | 813  | 213  | 87   | 734  | 69   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 225  | 320  | 49   | 152  | 521  | 129  | 170  | 1002 | 262  | 107  | 904  | 85   |
| Added Vol:   | 14   | 202  | 25   | 413  | 641  | 550  | 568  | 418  | 77   | 135  | 1011 | 482  |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 239  | 522  | 74   | 565  | 1162 | 679  | 738  | 1420 | 339  | 242  | 1915 | 567  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 252  | 550  | 78   | 594  | 1223 | 715  | 777  | 1494 | 357  | 255  | 2016 | 597  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 252  | 550  | 78   | 594  | 1223 | 715  | 777  | 1494 | 357  | 255  | 2016 | 597  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 252  | 550  | 78   | 594  | 1223 | 715  | 777  | 1494 | 357  | 255  | 2016 | 597  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.91 | 0.91 | 0.97 | 0.95 | 1.00 |
| Lanes:      | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 2.42 | 0.58 | 2.00 | 2.00 | 1.00 |
| Final Sat.: | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 | 3492 | 3966 | 948  | 3492 | 3420 | 1800 |

Capacity Analysis Module:

|              |       |      |      |      |      |       |       |      |      |      |      |      |
|--------------|-------|------|------|------|------|-------|-------|------|------|------|------|------|
| Vol/Sat:     | 0.07  | 0.16 | 0.04 | 0.17 | 0.36 | 0.40  | 0.22  | 0.38 | 0.38 | 0.07 | 0.59 | 0.33 |
| Crit Moves:  | ****  | **** | **** | **** | **** | ****  | ****  | **** | **** | **** | **** | **** |
| Green/Cycle: | 0.05  | 0.16 | 0.16 | 0.17 | 0.29 | 0.29  | 0.16  | 0.49 | 0.49 | 0.09 | 0.42 | 0.42 |
| Volume/Cap:  | 1.39  | 0.98 | 0.27 | 0.98 | 1.25 | 1.39  | 1.39  | 0.77 | 0.77 | 0.77 | 1.39 | 0.78 |
| Delay/Veh:   | 254.3 | 74.9 | 37.0 | 73.0 | 159  | 224.2 | 229.6 | 22.6 | 22.6 | 54.9 | 210  | 30.2 |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 254.3 | 74.9 | 37.0 | 73.0 | 159  | 224.2 | 229.6 | 22.6 | 22.6 | 54.9 | 210  | 30.2 |
| LOS by Move: | F     | E    | D    | E    | F    | F     | F     | C    | C    | D    | F    | C    |
| HCM2kAvgQ:   | 11    | 14   | 2    | 14   | 38   | 48    | 28    | 18   | 18   | 6    | 70   | 17   |

Note: Queue reported is the number of cars per lane.

Lanes, Volumes, Timings  
3: VALLEY BLVD & HEMLOCK

FY2030 WITH PROJECT - PM PEAK HOUR

6/25/2009

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL2                                                                              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                                | WBR2                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | NBR2                                                                                |
| Lane Configurations     |                                                                                   |  |  |  |  |  |                                                                                    |  |                                                                                     |  |                                                                                     |  |
| Volume (vph)            | 68                                                                                | 330                                                                               | 736                                                                               | 30                                                                                | 28                                                                                | 821                                                                               | 79                                                                                 | 23                                                                                  | 6                                                                                   | 6                                                                                   | 5                                                                                   | 13                                                                                  |
| Ideal Flow (vphpl)      | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Lane Util. Factor       | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              | 0.91                                                                              | 0.91                                                                               | 0.91                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Frt                     |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   | 0.987                                                                             |                                                                                    | 0.850                                                                               |                                                                                     | 0.956                                                                               |                                                                                     | 0.850                                                                               |
| Flt Protected           |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                    |                                                                                     |                                                                                     | 0.983                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)       | 0                                                                                 | 1710                                                                              | 3420                                                                              | 1530                                                                              | 1710                                                                              | 3233                                                                              | 0                                                                                  | 1392                                                                                | 0                                                                                   | 1692                                                                                | 0                                                                                   | 1530                                                                                |
| Flt Permitted           |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                    |                                                                                     |                                                                                     | 0.899                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)       | 0                                                                                 | 1710                                                                              | 3420                                                                              | 1530                                                                              | 1710                                                                              | 3233                                                                              | 0                                                                                  | 1392                                                                                | 0                                                                                   | 1547                                                                                | 0                                                                                   | 1530                                                                                |
| Right Turn on Red       |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                    | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)       |                                                                                   |                                                                                   |                                                                                   | 32                                                                                |                                                                                   |                                                                                   |                                                                                    | 22                                                                                  |                                                                                     |                                                                                     |                                                                                     | 14                                                                                  |
| Link Speed (mph)        |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                    |                                                                                     |                                                                                     | 30                                                                                  |                                                                                     |                                                                                     |
| Link Distance (ft)      |                                                                                   |                                                                                   | 807                                                                               |                                                                                   |                                                                                   | 830                                                                               |                                                                                    |                                                                                     |                                                                                     | 743                                                                                 |                                                                                     |                                                                                     |
| Travel Time (s)         |                                                                                   |                                                                                   | 18.3                                                                              |                                                                                   |                                                                                   | 18.9                                                                              |                                                                                    |                                                                                     |                                                                                     | 16.9                                                                                |                                                                                     |                                                                                     |
| Peak Hour Factor        | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                               | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                |
| Heavy Vehicles (%)      | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                 | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  | 0%                                                                                  |
| Shared Lane Traffic (%) |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 10%                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)   | 0                                                                                 | 419                                                                               | 775                                                                               | 32                                                                                | 29                                                                                | 949                                                                               | 0                                                                                  | 22                                                                                  | 0                                                                                   | 17                                                                                  | 0                                                                                   | 14                                                                                  |
| Turn Type               | Prot                                                                              | Prot                                                                              |                                                                                   | Perm                                                                              | Prot                                                                              |                                                                                   |                                                                                    | Perm                                                                                | Perm                                                                                |                                                                                     |                                                                                     | Perm                                                                                |
| Protected Phases        | 7                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 3                                                                                 | 8                                                                                 |                                                                                    |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |                                                                                     |
| Permitted Phases        |                                                                                   |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   |                                                                                    | 8                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |
| Detector Phase          | 7                                                                                 | 7                                                                                 | 4                                                                                 | 4                                                                                 | 3                                                                                 | 8                                                                                 |                                                                                    | 8                                                                                   | 2                                                                                   | 2                                                                                   |                                                                                     | 2                                                                                   |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |                                                                                    | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 |                                                                                     | 4.0                                                                                 |
| Minimum Split (s)       | 8.0                                                                               | 8.0                                                                               | 20.0                                                                              | 20.0                                                                              | 8.0                                                                               | 20.0                                                                              |                                                                                    | 20.0                                                                                | 20.0                                                                                | 20.0                                                                                |                                                                                     | 20.0                                                                                |
| Total Split (s)         | 28.0                                                                              | 28.0                                                                              | 50.0                                                                              | 50.0                                                                              | 10.0                                                                              | 32.0                                                                              | 0.0                                                                                | 32.0                                                                                | 20.0                                                                                | 20.0                                                                                | 0.0                                                                                 | 20.0                                                                                |
| Total Split (%)         | 28.0%                                                                             | 28.0%                                                                             | 50.0%                                                                             | 50.0%                                                                             | 10.0%                                                                             | 32.0%                                                                             | 0.0%                                                                               | 32.0%                                                                               | 20.0%                                                                               | 20.0%                                                                               | 0.0%                                                                                | 20.0%                                                                               |
| Maximum Green (s)       | 24.0                                                                              | 24.0                                                                              | 46.0                                                                              | 46.0                                                                              | 6.0                                                                               | 28.0                                                                              |                                                                                    | 28.0                                                                                | 16.0                                                                                | 16.0                                                                                |                                                                                     | 16.0                                                                                |
| Yellow Time (s)         | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               |                                                                                    | 3.5                                                                                 | 3.5                                                                                 | 3.5                                                                                 |                                                                                     | 3.5                                                                                 |
| All-Red Time (s)        | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               |                                                                                    | 0.5                                                                                 | 0.5                                                                                 | 0.5                                                                                 |                                                                                     | 0.5                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 | 4.0                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               | Lag                                                                               | Lead                                                                              | Lag                                                                               |                                                                                    | Lag                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               | Yes                                                                               |                                                                                    | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                    | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |                                                                                     | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              |                                                                                    | None                                                                                | None                                                                                | None                                                                                |                                                                                     | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   | 5.0                                                                               |                                                                                    | 5.0                                                                                 | 5.0                                                                                 | 5.0                                                                                 |                                                                                     | 5.0                                                                                 |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 11.0                                                                              | 11.0                                                                              |                                                                                   | 11.0                                                                              |                                                                                    | 11.0                                                                                | 11.0                                                                                | 11.0                                                                                |                                                                                     | 11.0                                                                                |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                    | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |
| Act Effect Green (s)    |                                                                                   | 24.1                                                                              | 50.6                                                                              | 50.6                                                                              | 5.9                                                                               | 28.2                                                                              |                                                                                    | 28.2                                                                                |                                                                                     | 9.7                                                                                 |                                                                                     | 9.7                                                                                 |
| Actuated g/C Ratio      |                                                                                   | 0.26                                                                              | 0.55                                                                              | 0.55                                                                              | 0.06                                                                              | 0.31                                                                              |                                                                                    | 0.31                                                                                |                                                                                     | 0.11                                                                                |                                                                                     | 0.11                                                                                |
| v/c Ratio               |                                                                                   | 0.93                                                                              | 0.41                                                                              | 0.04                                                                              | 0.26                                                                              | 0.96                                                                              |                                                                                    | 0.05                                                                                |                                                                                     | 0.10                                                                                |                                                                                     | 0.08                                                                                |
| Control Delay           |                                                                                   | 64.2                                                                              | 14.9                                                                              | 5.1                                                                               | 49.4                                                                              | 53.0                                                                              |                                                                                    | 10.6                                                                                |                                                                                     | 38.6                                                                                |                                                                                     | 18.6                                                                                |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                    | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |
| Total Delay             |                                                                                   | 64.2                                                                              | 14.9                                                                              | 5.1                                                                               | 49.4                                                                              | 53.0                                                                              |                                                                                    | 10.6                                                                                |                                                                                     | 38.6                                                                                |                                                                                     | 18.6                                                                                |
| LOS                     |                                                                                   | E                                                                                 | B                                                                                 | A                                                                                 | D                                                                                 | D                                                                                 |                                                                                    | B                                                                                   |                                                                                     | D                                                                                   |                                                                                     | B                                                                                   |
| Approach Delay          |                                                                                   |                                                                                   | 31.5                                                                              |                                                                                   |                                                                                   | 51.9                                                                              |                                                                                    |                                                                                     |                                                                                     | 29.6                                                                                |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                    |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |                                                                                     |
| Queue Length 50th (ft)  |                                                                                   | 246                                                                               | 153                                                                               | 0                                                                                 | 17                                                                                | 306                                                                               |                                                                                    | 0                                                                                   |                                                                                     | 9                                                                                   |                                                                                     | 0                                                                                   |

Lanes, Volumes, Timings  
3: VALLEY BLVD & HEMLOCK

FY2030 WITH PROJECT - PM PEAK HOUR

6/25/2009

|                         |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| Lane Group              | SBL                                                                               | SBT                                                                               | SBR                                                                               | SWL2                                                                              | SWL                                                                               | SWR                                                                               | SWR2                                                                               |
| Lane Configurations     |                                                                                   |  |  |                                                                                   |  |                                                                                   |                                                                                    |
| Volume (vph)            | 59                                                                                | 1                                                                                 | 49                                                                                | 7                                                                                 | 14                                                                                | 201                                                                               | 1                                                                                  |
| Ideal Flow (vphpl)      | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               |
| Lane Util. Factor       | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               |
| Frt                     |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   | 0.878                                                                             |                                                                                   |                                                                                    |
| Flt Protected           |                                                                                   | 0.953                                                                             |                                                                                   |                                                                                   | 0.995                                                                             |                                                                                   |                                                                                    |
| Satd. Flow (prot)       | 0                                                                                 | 1715                                                                              | 1530                                                                              | 0                                                                                 | 1572                                                                              | 0                                                                                 | 0                                                                                  |
| Flt Permitted           |                                                                                   | 0.717                                                                             |                                                                                   |                                                                                   | 0.995                                                                             |                                                                                   |                                                                                    |
| Satd. Flow (perm)       | 0                                                                                 | 1291                                                                              | 1530                                                                              | 0                                                                                 | 1572                                                                              | 0                                                                                 | 0                                                                                  |
| Right Turn on Red       |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                   | No                                                                                 |
| Satd. Flow (RTOR)       |                                                                                   |                                                                                   | 52                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                    |
| Link Speed (mph)        |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                    |
| Link Distance (ft)      |                                                                                   | 792                                                                               |                                                                                   |                                                                                   | 998                                                                               |                                                                                   |                                                                                    |
| Travel Time (s)         |                                                                                   | 18.0                                                                              |                                                                                   |                                                                                   | 22.7                                                                              |                                                                                   |                                                                                    |
| Peak Hour Factor        | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                               |
| Heavy Vehicles (%)      | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                | 0%                                                                                 |
| Shared Lane Traffic (%) |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |
| Lane Group Flow (vph)   | 0                                                                                 | 63                                                                                | 52                                                                                | 0                                                                                 | 235                                                                               | 0                                                                                 | 0                                                                                  |
| Turn Type               | Perm                                                                              |                                                                                   | Perm                                                                              | Perm                                                                              |                                                                                   |                                                                                   |                                                                                    |
| Protected Phases        |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                    |
| Permitted Phases        | 2                                                                                 |                                                                                   | 2                                                                                 | 6                                                                                 |                                                                                   |                                                                                   |                                                                                    |
| Detector Phase          | 2                                                                                 | 2                                                                                 | 2                                                                                 | 6                                                                                 | 6                                                                                 |                                                                                   |                                                                                    |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |
| Minimum Initial (s)     | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               |                                                                                   |                                                                                    |
| Minimum Split (s)       | 20.0                                                                              | 20.0                                                                              | 20.0                                                                              | 20.0                                                                              | 20.0                                                                              |                                                                                   |                                                                                    |
| Total Split (s)         | 20.0                                                                              | 20.0                                                                              | 20.0                                                                              | 20.0                                                                              | 20.0                                                                              | 0.0                                                                               | 0.0                                                                                |
| Total Split (%)         | 20.0%                                                                             | 20.0%                                                                             | 20.0%                                                                             | 20.0%                                                                             | 20.0%                                                                             | 0.0%                                                                              | 0.0%                                                                               |
| Maximum Green (s)       | 16.0                                                                              | 16.0                                                                              | 16.0                                                                              | 16.0                                                                              | 16.0                                                                              |                                                                                   |                                                                                    |
| Yellow Time (s)         | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               | 3.5                                                                               |                                                                                   |                                                                                    |
| All-Red Time (s)        | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               | 0.5                                                                               |                                                                                   |                                                                                    |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                |
| Total Lost Time (s)     | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                                |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   |                                                                                    |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              |                                                                                   |                                                                                    |
| Walk Time (s)           | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               | 5.0                                                                               |                                                                                   |                                                                                    |
| Flash Dont Walk (s)     | 11.0                                                                              | 11.0                                                                              | 11.0                                                                              | 11.0                                                                              | 11.0                                                                              |                                                                                   |                                                                                    |
| Pedestrian Calls (#/hr) | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    |
| Act Effect Green (s)    |                                                                                   | 9.7                                                                               | 9.7                                                                               |                                                                                   | 15.8                                                                              |                                                                                   |                                                                                    |
| Actuated g/C Ratio      |                                                                                   | 0.11                                                                              | 0.11                                                                              |                                                                                   | 0.17                                                                              |                                                                                   |                                                                                    |
| v/c Ratio               |                                                                                   | 0.46                                                                              | 0.25                                                                              |                                                                                   | 0.87                                                                              |                                                                                   |                                                                                    |
| Control Delay           |                                                                                   | 50.3                                                                              | 14.1                                                                              |                                                                                   | 69.3                                                                              |                                                                                   |                                                                                    |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    |
| Total Delay             |                                                                                   | 50.3                                                                              | 14.1                                                                              |                                                                                   | 69.3                                                                              |                                                                                   |                                                                                    |
| LOS                     |                                                                                   | D                                                                                 | B                                                                                 |                                                                                   | E                                                                                 |                                                                                   |                                                                                    |
| Approach Delay          |                                                                                   | 33.9                                                                              |                                                                                   |                                                                                   | 69.3                                                                              |                                                                                   |                                                                                    |
| Approach LOS            |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | E                                                                                 |                                                                                   |                                                                                    |
| Queue Length 50th (ft)  |                                                                                   | 36                                                                                | 0                                                                                 |                                                                                   | 138                                                                               |                                                                                   |                                                                                    |



Lanes, Volumes, Timings  
3: VALLEY BLVD & HEMLOCK

FY2030 WITH PROJECT - PM PEAK HOUR

6/25/2009

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL2                                                                              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                                | WBR2                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | NBR2                                                                                |
| Queue Length 95th (ft)  |                                                                                   | #462                                                                              | 222                                                                               | 16                                                                                | 47                                                                                | #482                                                                              |                                                                                    | 19                                                                                  |                                                                                     | 29                                                                                  |                                                                                     | 18                                                                                  |
| Internal Link Dist (ft) |                                                                                   |                                                                                   | 727                                                                               |                                                                                   |                                                                                   | 750                                                                               |                                                                                    |                                                                                     |                                                                                     | 663                                                                                 |                                                                                     |                                                                                     |
| Turn Bay Length (ft)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 450                                                                               | 1888                                                                              | 859                                                                               | 112                                                                               | 993                                                                               |                                                                                    | 443                                                                                 |                                                                                     | 272                                                                                 |                                                                                     | 280                                                                                 |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 0                                                                                   |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                    | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.93                                                                              | 0.41                                                                              | 0.04                                                                              | 0.26                                                                              | 0.96                                                                              |                                                                                    | 0.05                                                                                |                                                                                     | 0.06                                                                                |                                                                                     | 0.05                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 91.7

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.96

Intersection Signal Delay: 42.8

Intersection LOS: D

Intersection Capacity Utilization 88.1%

ICU Level of Service E

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 3: VALLEY BLVD & HEMLOCK

|                                                                                                                                                                            |                                                                                        |                                                                                        |                                                                                        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
|   ø2 |  ø6 |  ø3 |  ø4 |
| 20 s                                                                                                                                                                       | 20 s                                                                                   | 10 s                                                                                   | 50 s                                                                                   |
|                                                                                                                                                                            |                                                                                        |  ø7 |  ø8 |
|                                                                                                                                                                            |                                                                                        | 28 s                                                                                   | 32 s                                                                                   |

Lanes, Volumes, Timings  
3: VALLEY BLVD & HEMLOCK

FY2030 WITH PROJECT - PM PEAK HOUR

6/25/2009

|                         |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| Lane Group              | SBL                                                                               | SBT                                                                               | SBR                                                                               | SWL2                                                                              | SWL                                                                               | SWR                                                                               | SWR2                                                                               |
| Queue Length 95th (ft)  |                                                                                   | 77                                                                                | 34                                                                                |                                                                                   | #290                                                                              |                                                                                   |                                                                                    |
| Internal Link Dist (ft) |                                                                                   | 712                                                                               |                                                                                   |                                                                                   | 918                                                                               |                                                                                   |                                                                                    |
| Turn Bay Length (ft)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |
| Base Capacity (vph)     |                                                                                   | 227                                                                               | 311                                                                               |                                                                                   | 276                                                                               |                                                                                   |                                                                                    |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   |                                                                                    |
| Reduced v/c Ratio       |                                                                                   | 0.28                                                                              | 0.17                                                                              |                                                                                   | 0.85                                                                              |                                                                                   |                                                                                    |
| Intersection Summary    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

## Level Of Service Computation Report

## 2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #30 Beech Ave/Valley Blvd

Average Delay (sec/veh): OVERFLOW

Worst Case Level Of Service: F[xxxxx]

Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Stop Sign Stop Sign Uncontrolled Uncontrolled  
Rights: Include Include Include Include  
Lanes: 0 1 0 0 1 0 1 0 0 1 1 0 1 0 2 0 1

## Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 12   | 9    | 25   | 53   | 5    | 19   | 47   | 748  | 9    | 10   | 504  | 76   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 15   | 11   | 31   | 65   | 6    | 23   | 58   | 922  | 11   | 12   | 621  | 94   |
| Added Vol:   | 0    | 70   | 35   | 0    | 42   | 42   | 70   | 215  | 0    | 42   | 76   | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 15   | 81   | 66   | 65   | 48   | 65   | 128  | 1137 | 11   | 54   | 697  | 94   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 16   | 85   | 69   | 69   | 51   | 69   | 135  | 1196 | 12   | 57   | 734  | 99   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| FinalVolume: | 16   | 85   | 69   | 69   | 51   | 69   | 135  | 1196 | 12   | 57   | 734  | 99   |

## Critical Gap Module:

Critical Gap: 7.5 6.5 6.9 7.5 6.5 6.9 4.1 xxxx xxxxx 4.1 xxxx xxxxx  
FollowUpTim: 3.5 4.0 3.3 3.5 4.0 3.3 2.2 xxxx xxxxx 2.2 xxxx xxxxx

## Capacity Module:

Cnflct Vol: 1978 2418 604 1758 2325 367 832 xxxx xxxxx 1208 xxxx xxxxx  
Potent Cap.: 38 33 446 55 38 636 809 xxxx xxxxx 585 xxxx xxxxx  
Move Cap.: 0 25 446 0 28 636 809 xxxx xxxxx 585 xxxx xxxxx  
Volume/Cap: xxxx 3.44 0.16 xxxx 1.78 0.11 0.17 xxxx xxxxx 0.10 xxxx xxxxx

## Level Of Service Module:

2Way95thQ: xxxx xxxx 0.5 xxxx xxxx 0.4 0.6 xxxx xxxxx 0.3 xxxx xxxxx  
Control Del:xxxxx xxxx 14.5 xxxxx xxxx 11.3 10.3 xxxx xxxxx 11.8 xxxx xxxxx  
LOS by Move: \* \* B \* \* B \* \* B \* \*  
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT  
Shared Cap.: 0 xxxx xxxxx 0 xxxx xxxxx xxxx xxxx xxxxx xxxx xxxx xxxxx  
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx  
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx  
Shared LOS: \* \* \* \* \* \* \* \* \* \*  
ApproachDel: xxxxxx xxxxxx xxxxxx xxxxxx  
ApproachLOS: F F \* \*

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

## Level Of Service Computation Report

## 2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #31 Beech Ave/Slover Ave

Cycle (sec): 100

Critical Vol./Cap.(X): 2.556

Loss Time (sec): 10 (Y+R=4.0 sec)

Average Delay (sec/veh): 470.9

Optimal Cycle: 0

Level Of Service: F

Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R

Control: Stop Sign Stop Sign Stop Sign Stop Sign  
Rights: Include Include Include Include  
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0

Lanes: 0 0 1! 0 0 0 0 1! 0 0 1 0 1 1 0 1 0 1 1 0

## Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 84   | 0    | 123  | 48   | 20   | 2    | 8    | 462  | 83   | 104  | 400  | 19   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 103  | 0    | 152  | 59   | 25   | 2    | 10   | 569  | 102  | 128  | 493  | 23   |
| Added Vol:   | 74   | 0    | 256  | 0    | 0    | 0    | 0    | 1274 | 74   | 151  | 986  | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 177  | 0    | 408  | 59   | 25   | 2    | 10   | 1843 | 176  | 279  | 1479 | 23   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 187  | 0    | 429  | 62   | 26   | 3    | 10   | 1940 | 186  | 294  | 1557 | 25   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 187  | 0    | 429  | 62   | 26   | 3    | 10   | 1940 | 186  | 294  | 1557 | 25   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 187  | 0    | 429  | 62   | 26   | 3    | 10   | 1940 | 186  | 294  | 1557 | 25   |

## Saturation Flow Module:

Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
Lanes: 0.30 0.00 0.70 0.68 0.29 0.03 1.00 1.83 0.17 1.00 1.97 0.03  
Final Sat.: 156 0 357 267 111 11 388 759 73 421 882 14

## Capacity Analysis Module:

Vol/Sat: 1.20 xxxx 1.20 0.23 0.23 0.23 0.03 2.56 2.54 0.70 1.77 1.76  
Crit Moves: \*\*\*\*  
Delay/Veh: 131.7 0.0 131.7 15.0 15.0 15.0 12.2 726 716.7 28.7 373 371.8  
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
AdjDel/Veh: 131.7 0.0 131.7 15.0 15.0 15.0 12.2 726 716.7 28.7 373 371.8  
LOS by Move: F \* F C C C B F F D F F  
ApproachDel: 131.7 15.0 721.5 318.9  
Delay Adj: 1.00 1.00 1.00 1.00  
ApprAdjDel: 131.7 15.0 721.5 318.9  
LOS by Appr: F C F F  
AllWayAvgQ: 17.3 17.3 17.3 0.3 0.3 0.3 0.0 82.8 82.1 2.0 45.1 45.0

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #32 Beech Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.822  
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 25.8  
Optimal Cycle: 0 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Stop Sign   |   |   | Stop Sign   |   |   | Stop Sign  |   |   | Stop Sign  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 0           | 1 | 0 | 0          | 1 | 0 | 0          | 1 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 9    | 79   | 59   | 52   | 115  | 50   | 36   | 195  | 24   | 50   | 99   | 38   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 11   | 97   | 73   | 64   | 142  | 62   | 44   | 240  | 30   | 62   | 122  | 47   |
| Added Vol:   | 16   | 217  | 0    | 0    | 175  | 50   | 112  | 0    | 56   | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 27   | 314  | 73   | 64   | 317  | 112  | 156  | 240  | 86   | 62   | 122  | 47   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 29   | 331  | 77   | 67   | 333  | 117  | 165  | 253  | 90   | 65   | 128  | 49   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 29   | 331  | 77   | 67   | 333  | 117  | 165  | 253  | 90   | 65   | 128  | 49   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 29   | 331  | 77   | 67   | 333  | 117  | 165  | 253  | 90   | 65   | 128  | 49   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.65 | 1.00 | 0.35 | 0.53 | 1.06 | 0.41 |
| Final Sat.: | 371  | 403  | 425  | 380  | 411  | 437  | 271  | 435  | 158  | 204  | 418  | 165  |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.08 | 0.82 | 0.18 | 0.18 | 0.81 | 0.27 | 0.61 | 0.58 | 0.57 | 0.32 | 0.31 | 0.30 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Delay/Veh:   | 12.7 | 39.6 | 12.5 | 13.7 | 38.0 | 13.4 | 22.7 | 20.9 | 19.9 | 15.4 | 14.8 | 14.3 |
| Delay Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 12.7 | 39.6 | 12.5 | 13.7 | 38.0 | 13.4 | 22.7 | 20.9 | 19.9 | 15.4 | 14.8 | 14.3 |
| LOS by Move: | B    | E    | B    | B    | E    | B    | C    | C    | C    | C    | B    | B    |
| ApproachDel: | 33.1 |      | 29.3 |      |      | 21.3 |      |      | 14.9 |      |      |      |
| Delay Adj:   | 1.00 |      | 1.00 |      |      | 1.00 |      |      | 1.00 |      |      |      |
| ApprAdjDel:  | 33.1 |      | 29.3 |      |      | 21.3 |      |      | 14.9 |      |      |      |
| LOS by Appr: | D    |      | D    |      |      | C    |      |      | B    |      |      |      |
| AllWayAvgQ:  | 0.1  | 3.1  | 0.2  | 0.2  | 3.0  | 0.3  | 1.3  | 1.2  | 1.2  | 0.4  | 0.4  | 0.4  |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #33 Beech Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 3.328  
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): 862.1  
Optimal Cycle: 0 Level Of Service: F

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Stop Sign   |   |   | Stop Sign   |   |   | Stop Sign  |   |   | Stop Sign  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 0           | 1 | 0 | 0          | 1 | 0 | 0          | 0 | 1 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 180  | 21   | 11   | 10   | 39   | 125  | 78   | 584  | 266  | 8    | 332  | 7    |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 222  | 26   | 14   | 12   | 48   | 154  | 96   | 719  | 328  | 10   | 409  | 9    |
| Added Vol:   | 21   | 118  | 18   | 0    | 247  | 0    | 0    | 1267 | 87   | 116  | 668  | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 243  | 144  | 32   | 12   | 295  | 154  | 96   | 1986 | 415  | 126  | 1077 | 9    |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 256  | 151  | 33   | 13   | 311  | 162  | 101  | 2091 | 437  | 132  | 1134 | 9    |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 256  | 151  | 33   | 13   | 311  | 162  | 101  | 2091 | 437  | 132  | 1134 | 9    |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 256  | 151  | 33   | 13   | 311  | 162  | 101  | 2091 | 437  | 132  | 1134 | 9    |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.08 | 1.59 | 0.33 | 0.10 | 0.89 | 0.01 |
| Final Sat.: | 321  | 336  | 357  | 322  | 340  | 363  | 30   | 637  | 135  | 40   | 341  | 3    |

Capacity Analysis Module:

|              |      |      |      |      |      |        |      |      |        |      |      |       |
|--------------|------|------|------|------|------|--------|------|------|--------|------|------|-------|
| Vol/Sat:     | 0.79 | 0.45 | 0.09 | 0.04 | 0.91 | 0.45   | 3.33 | 3.28 | 3.23   | 3.33 | 3.33 | 3.33  |
| Crit Moves:  | **** |      |      | **** |      |        | **** |      |        | **** |      |       |
| Delay/Veh:   | 45.7 | 21.8 | 13.7 | 14.2 | 62.2 | 20.2   | 1071 | 1052 | 1026   | 1073 | 1073 | 1073  |
| Delay Adj:   | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00   | 1.00 | 1.00 | 1.00   | 1.00 | 1.00 | 1.00  |
| AdjDel/Veh:  | 45.7 | 21.8 | 13.7 | 14.2 | 62.2 | 20.2   | 1071 | 1052 | 1026   | 1073 | 1073 | 1073  |
| LOS by Move: | E    | C    | B    | B    | F    | C      | F    | F    | F      | F    | F    | F     |
| ApproachDel: | 35.0 |      | 46.9 |      |      | 1048.6 |      |      | 1073.5 |      |      |       |
| Delay Adj:   | 1.00 |      | 1.00 |      |      | 1.00   |      |      | 1.00   |      |      |       |
| ApprAdjDel:  | 35.0 |      | 46.9 |      |      | 1048.6 |      |      | 1073.5 |      |      |       |
| LOS by Appr: | E    |      | E    |      |      | F      |      |      | F      |      |      |       |
| AllWayAvgQ:  | 2.8  | 0.8  | 0.1  | 0.0  | 4.6  | 0.8    | 116  | 115  | 114.8  | 113  | 113  | 112.9 |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

## Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #34 Citrus Ave/Valley Blvd  
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 1.821  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 296.1  
Optimal Cycle: 180 Level Of Service: F

| Approach:   | North Bound | South Bound | East Bound | West Bound |
|-------------|-------------|-------------|------------|------------|
| Movement:   | L - T - R   | L - T - R   | L - T - R  | L - T - R  |
| Control:    | Protected   | Protected   | Protected  | Protected  |
| Rights:     | Include     | Include     | Include    | Include    |
| Min. Green: | 0 0 0       | 0 0 0       | 0 0 0      | 0 0 0      |
| Lanes:      | 1 0 1 1 0   | 1 0 1 1 0   | 2 0 1 1 0  | 2 0 1 1 0  |

## Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 290  | 836  | 216  | 122  | 763  | 43   | 108  | 578  | 358  | 346  | 452  | 133  |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 357  | 1030 | 266  | 150  | 940  | 53   | 133  | 712  | 441  | 426  | 557  | 164  |
| Added Vol:   | 65   | 2040 | 0    | 0    | 494  | 0    | 0    | 142  | 108  | 0    | 54   | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 422  | 3070 | 266  | 150  | 1434 | 53   | 133  | 854  | 549  | 426  | 611  | 164  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 445  | 3232 | 280  | 158  | 1509 | 56   | 140  | 899  | 578  | 449  | 643  | 172  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 445  | 3232 | 280  | 158  | 1509 | 56   | 140  | 899  | 578  | 449  | 643  | 172  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 445  | 3232 | 280  | 158  | 1509 | 56   | 140  | 899  | 578  | 449  | 643  | 172  |

## Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 | 0.97 | 0.95 | 0.95 | 0.97 | 0.95 | 0.95 |
| Lanes:      | 1.00 | 1.84 | 0.16 | 1.00 | 1.93 | 0.07 | 2.00 | 1.22 | 0.78 | 2.00 | 1.58 | 0.42 |
| Final Sat.: | 1800 | 3147 | 273  | 1800 | 3298 | 122  | 3492 | 2082 | 1338 | 3492 | 2697 | 723  |

## Capacity Analysis Module:

|              |       |      |       |       |      |       |      |      |       |       |      |      |
|--------------|-------|------|-------|-------|------|-------|------|------|-------|-------|------|------|
| Vol/Sat:     | 0.25  | 1.03 | 1.03  | 0.09  | 0.46 | 0.46  | 0.04 | 0.43 | 0.43  | 0.13  | 0.24 | 0.24 |
| Crit Moves:  | ****  | **** | ****  | ****  | **** | ****  | **** | **** | ****  | ****  | **** | **** |
| Green/Cycle: | 0.21  | 0.56 | 0.56  | 0.05  | 0.40 | 0.40  | 0.04 | 0.24 | 0.24  | 0.07  | 0.26 | 0.26 |
| Volume/Cap:  | 1.15  | 1.82 | 1.82  | 1.82  | 1.15 | 1.15  | 0.91 | 1.82 | 1.82  | 1.82  | 0.91 | 0.91 |
| Delay/Veh:   | 133.0 | 393  | 393.2 | 458.2 | 107  | 107.0 | 93.1 | 412  | 412.3 | 431.3 | 48.1 | 48.1 |
| User DelAdj: | 1.00  | 1.00 | 1.00  | 1.00  | 1.00 | 1.00  | 1.00 | 1.00 | 1.00  | 1.00  | 1.00 | 1.00 |
| AdjDel/Veh:  | 133.0 | 393  | 393.2 | 458.2 | 107  | 107.0 | 93.1 | 412  | 412.3 | 431.3 | 48.1 | 48.1 |
| LOS by Move: | F     | F    | F     | F     | F    | F     | F    | F    | F     | F     | D    | D    |
| HCM2kAvgQ:   | 24    | 158  | 158   | 15    | 42   | 42    | 5    | 68   | 68    | 21    | 17   | 17   |

Note: Queue reported is the number of cars per lane.

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FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

## Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #37 Citrus Ave/Slover Ave  
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 2.621  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 522.3  
Optimal Cycle: 180 Level Of Service: F

| Approach:   | North Bound | South Bound | East Bound | West Bound |
|-------------|-------------|-------------|------------|------------|
| Movement:   | L - T - R   | L - T - R   | L - T - R  | L - T - R  |
| Control:    | Protected   | Protected   | Protected  | Protected  |
| Rights:     | Include     | Include     | Include    | Include    |
| Min. Green: | 0 0 0       | 0 0 0       | 0 0 0      | 0 0 0      |
| Lanes:      | 1 0 0 1 0   | 1 0 1 0 1   | 1 0 2 0 1  | 1 0 1 1 0  |

## Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 25   | 249  | 72   | 155  | 302  | 296  | 302  | 862  | 50   | 75   | 267  | 95   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 31   | 307  | 89   | 191  | 372  | 365  | 372  | 1062 | 62   | 92   | 329  | 117  |
| Added Vol:   | 65   | 1326 | 163  | 0    | 269  | 442  | 1174 | 1304 | 108  | 29   | 507  | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 96   | 1633 | 252  | 191  | 641  | 807  | 1546 | 2366 | 170  | 121  | 836  | 117  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 101  | 1719 | 265  | 201  | 675  | 849  | 1627 | 2491 | 179  | 128  | 880  | 123  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 101  | 1719 | 265  | 201  | 675  | 849  | 1627 | 2491 | 179  | 128  | 880  | 123  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 101  | 1719 | 265  | 201  | 675  | 849  | 1627 | 2491 | 179  | 128  | 880  | 123  |

## Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 |
| Lanes:      | 1.00 | 0.87 | 0.13 | 1.00 | 1.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 1.75 | 0.25 |
| Final Sat.: | 1800 | 1560 | 240  | 1800 | 1800 | 1800 | 1800 | 3420 | 1800 | 1800 | 3000 | 420  |

## Capacity Analysis Module:

|              |       |      |       |       |      |       |       |      |      |       |      |       |
|--------------|-------|------|-------|-------|------|-------|-------|------|------|-------|------|-------|
| Vol/Sat:     | 0.06  | 1.10 | 1.10  | 0.11  | 0.37 | 0.47  | 0.90  | 0.73 | 0.10 | 0.07  | 0.29 | 0.29  |
| Crit Moves:  | ****  | **** | ****  | ****  | **** | ****  | ****  | **** | **** | ****  | **** | ****  |
| Green/Cycle: | 0.05  | 0.42 | 0.42  | 0.04  | 0.41 | 0.41  | 0.34  | 0.42 | 0.42 | 0.04  | 0.11 | 0.11  |
| Volume/Cap:  | 1.14  | 2.62 | 2.62  | 2.62  | 0.91 | 1.14  | 2.62  | 1.75 | 0.24 | 1.75  | 2.62 | 2.62  |
| Delay/Veh:   | 185.8 | 762  | 762.2 | 813.4 | 42.1 | 107.9 | 766.8 | 369  | 19.1 | 435.2 | 781  | 781.3 |
| User DelAdj: | 1.00  | 1.00 | 1.00  | 1.00  | 1.00 | 1.00  | 1.00  | 1.00 | 1.00 | 1.00  | 1.00 | 1.00  |
| AdjDel/Veh:  | 185.8 | 762  | 762.2 | 813.4 | 42.1 | 107.9 | 766.8 | 369  | 19.1 | 435.2 | 781  | 781.3 |
| LOS by Move: | F     | F    | F     | F     | D    | F     | F     | F    | B    | F     | F    | F     |
| HCM2kAvgQ:   | 7     | 210  | 210   | 23    | 23   | 42    | 173   | 109  | 4    | 12    | 57   | 57    |

Note: Queue reported is the number of cars per lane.

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FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM 4-Way Stop Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #38 Citrus Ave/Santa Ana Ave  
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 2.846  
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): 683.6  
Optimal Cycle: 0 Level Of Service: F  
\*\*\*\*\*

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Stop Sign   |   |   | Stop Sign   |   |   | Stop Sign  |   |   | Stop Sign  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 0           | 0 | 1 | 0           | 0 | 1 | 0          | 0 | 1 | 0          | 1 | 0 |

Volume Module:  
Base Vol: 4 169 37 41 284 18 64 267 5 50 117 35  
Growth Adj: 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23  
Initial Bse: 5 208 46 51 350 22 79 329 6 62 144 43  
Added Vol: 13 898 0 0 339 77 492 116 81 0 18 0  
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0  
Initial Fut: 18 1106 46 51 689 99 571 445 87 62 162 43  
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95  
PHF Volume: 19 1164 48 53 725 104 601 468 92 65 171 45  
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
Reduced Vol: 19 1164 48 53 725 104 601 468 92 65 171 45  
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
FinalVolume: 19 1164 48 53 725 104 601 468 92 65 171 45

Saturation Flow Module:  
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
Lanes: 0.01 0.95 0.04 0.06 0.82 0.12 0.52 0.40 0.08 0.28 0.72 1.00  
Final Sat.: 7 409 17 26 357 51 219 171 33 105 277 420

Capacity Analysis Module:  
Vol/Sat: 2.85 2.85 2.85 2.03 2.03 2.03 2.74 2.74 2.74 0.62 0.62 0.11  
Crit Moves: \*\*\*\*  
Delay/Veh: 854.8 855 854.8 491.0 491 491.0 808.0 808 808.0 26.0 26.0 12.3  
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
AdjDel/Veh: 854.8 855 854.8 491.0 491 491.0 808.0 808 808.0 26.0 26.0 12.3  
LOS by Move: F F F F F F F F F D D B  
ApproachDel: 854.8 491.0 808.0 23.8  
Delay Adj: 1.00 1.00 1.00  
ApprAdjDel: 854.8 491.0 808.0 23.8  
LOS by Appr: F F F C  
AllWayAvgQ: 101 101 101.4 57.9 57.9 57.9 93.7 93.7 93.7 1.5 1.5 0.1

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM 4-Way Stop Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #39 Citrus Ave/Jurupa St  
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 3.111  
Loss Time (sec): 10 (Y+R=4.0 sec) Average Delay (sec/veh): 624.2  
Optimal Cycle: 0 Level Of Service: F  
\*\*\*\*\*

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Stop Sign   |   |   | Stop Sign   |   |   | Stop Sign  |   |   | Stop Sign  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 0           | 0 | 1 | 1          | 0 | 2 | 1          | 0 | 1 |

Volume Module:  
Base Vol: 37 109 123 90 139 141 91 684 83 140 366 35  
Growth Adj: 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23  
Initial Bse: 46 134 152 111 171 174 112 843 102 172 451 43  
Added Vol: 14 105 0 172 282 123 334 1552 87 0 260 35  
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0  
Initial Fut: 60 239 152 283 453 297 446 2395 189 172 711 78  
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95  
PHF Volume: 63 252 160 298 477 312 470 2521 199 182 748 82  
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
Reduced Vol: 63 252 160 298 477 312 470 2521 199 182 748 82  
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
FinalVolume: 63 252 160 298 477 312 470 2521 199 182 748 82

Saturation Flow Module:  
Adjustment: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
Lanes: 1.00 1.00 1.00 1.00 0.60 0.40 1.00 2.78 0.22 1.00 1.80 0.20  
Final Sat.: 272 283 300 315 204 134 279 810 65 273 512 57

Capacity Analysis Module:  
Vol/Sat: 0.23 0.89 0.53 0.94 2.33 2.33 1.68 3.11 3.08 0.67 1.46 1.45  
Crit Moves: \*\*\*\*  
Delay/Veh: 19.8 66.1 27.6 72.4 631 631.5 351.6 983 970.1 38.7 256 251.8  
Delay Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
AdjDel/Veh: 19.8 66.1 27.6 72.4 631 631.5 351.6 983 970.1 38.7 256 251.8  
LOS by Move: C F D F F F F F F E F F  
ApproachDel: 47.0 478.3 889.1 216.5  
Delay Adj: 1.00 1.00 1.00  
ApprAdjDel: 47.0 478.3 889.1 216.5  
LOS by Appr: E F F F  
AllWayAvgQ: 0.3 4.0 1.1 5.1 58.1 58.1 26.1 78.5 78.0 1.7 19.1 18.8

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #40 Sierra Ave/Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 1.211  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 87.9  
Optimal Cycle: 180 Level Of Service: F

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Ovl        |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 3 | 0           | 2 | 1 | 2          | 0 | 2 | 0          | 2 | 2 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 51   | 945  | 97   | 500  | 770  | 173  | 586  | 471  | 71   | 132  | 213  | 637  |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 63   | 1164 | 120  | 616  | 949  | 213  | 722  | 580  | 87   | 163  | 262  | 785  |
| Added Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1468 | 0    | 0    | 536  | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 63   | 1164 | 120  | 616  | 949  | 213  | 722  | 2048 | 87   | 163  | 798  | 785  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 66   | 1226 | 126  | 648  | 999  | 224  | 760  | 2156 | 92   | 171  | 840  | 826  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 66   | 1226 | 126  | 648  | 999  | 224  | 760  | 2156 | 92   | 171  | 840  | 826  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 66   | 1226 | 126  | 648  | 999  | 224  | 760  | 2156 | 92   | 171  | 840  | 826  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.91 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 0.88 |
| Lanes:      | 2.00 | 3.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 2.00 |
| Final Sat.: | 3492 | 4914 | 1800 | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 | 3492 | 3420 | 3168 |

Capacity Analysis Module:

|              |       |      |      |       |      |      |      |      |      |       |      |      |
|--------------|-------|------|------|-------|------|------|------|------|------|-------|------|------|
| Vol/Sat:     | 0.02  | 0.25 | 0.07 | 0.19  | 0.29 | 0.12 | 0.22 | 0.63 | 0.05 | 0.05  | 0.25 | 0.26 |
| Crit Moves:  | ****  | **** | **** | ****  | **** | **** | **** | **** | **** | ****  | **** | **** |
| Green/Cycle: | 0.02  | 0.21 | 0.21 | 0.15  | 0.34 | 0.34 | 0.26 | 0.52 | 0.52 | 0.04  | 0.30 | 0.45 |
| Volume/Cap:  | 0.87  | 1.21 | 0.34 | 1.21  | 0.87 | 0.37 | 0.83 | 1.21 | 0.10 | 1.21  | 0.83 | 0.58 |
| Delay/Veh:   | 108.7 | 144  | 34.5 | 153.9 | 38.1 | 25.5 | 40.9 | 125  | 12.2 | 191.5 | 38.4 | 21.0 |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 |
| AdjDel/Veh:  | 108.7 | 144  | 34.5 | 153.9 | 38.1 | 25.5 | 40.9 | 125  | 12.2 | 191.5 | 38.4 | 21.0 |
| LOS by Move: | F     | F    | C    | F     | D    | C    | D    | F    | B    | F     | D    | C    |
| HCM2kAvgQ:   | 3     | 26   | 3    | 20    | 18   | 5    | 14   | 61   | 1    | 7     | 15   | 11   |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #41 Sierra Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.687  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 27.8  
Optimal Cycle: 47 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 3 | 0           | 2 | 1 | 1          | 0 | 2 | 0          | 2 | 1 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 118  | 856  | 20   | 83   | 1010 | 122  | 286  | 148  | 145  | 57   | 92   | 116  |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 145  | 1055 | 25   | 102  | 1244 | 150  | 352  | 182  | 179  | 70   | 113  | 143  |
| Added Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 145  | 1055 | 25   | 102  | 1244 | 150  | 352  | 182  | 179  | 70   | 113  | 143  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 153  | 1110 | 26   | 108  | 1310 | 158  | 371  | 192  | 188  | 74   | 119  | 150  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 153  | 1110 | 26   | 108  | 1310 | 158  | 371  | 192  | 188  | 74   | 119  | 150  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 153  | 1110 | 26   | 108  | 1310 | 158  | 371  | 192  | 188  | 74   | 119  | 150  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.91 | 1.00 | 0.97 | 0.91 | 0.91 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 |
| Lanes:      | 2.00 | 3.00 | 1.00 | 2.00 | 2.68 | 0.32 | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 3492 | 4914 | 1800 | 3492 | 4384 | 530  | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.04 | 0.23 | 0.01 | 0.03 | 0.30 | 0.30 | 0.21 | 0.06 | 0.10 | 0.04 | 0.03 | 0.08 |
| Crit Moves:  | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Green/Cycle: | 0.06 | 0.44 | 0.44 | 0.06 | 0.43 | 0.43 | 0.30 | 0.30 | 0.30 | 0.12 | 0.12 | 0.12 |
| Volume/Cap:  | 0.69 | 0.51 | 0.03 | 0.51 | 0.69 | 0.69 | 0.69 | 0.19 | 0.35 | 0.35 | 0.29 | 0.69 |
| Delay/Veh:   | 54.5 | 20.6 | 16.0 | 47.8 | 23.7 | 23.7 | 34.6 | 25.9 | 27.5 | 41.4 | 40.4 | 50.9 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 54.5 | 20.6 | 16.0 | 47.8 | 23.7 | 23.7 | 34.6 | 25.9 | 27.5 | 41.4 | 40.4 | 50.9 |
| LOS by Move: | D    | C    | B    | D    | C    | C    | C    | C    | C    | D    | D    | D    |
| HCM2kAvgQ:   | 4    | 9    | 0    | 2    | 14   | 14   | 11   | 2    | 5    | 2    | 2    | 6    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #42 Sierra Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 1.116  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 79.4  
Optimal Cycle: 180 Level Of Service: E

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound  |   |   | West Bound  |   |   |
|-------------|-------------|---|---|-------------|---|---|-------------|---|---|-------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L           | T | R | L           | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Split Phase |   |   | Split Phase |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include     |   |   | Include     |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 | 0           | 0 | 0 |
| Lanes:      | 2           | 0 | 2 | 0           | 2 | 0 | 2           | 0 | 2 | 0           | 2 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 99   | 469  | 107  | 109  | 488  | 273  | 424  | 235  | 184  | 83   | 196  | 60   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 122  | 578  | 132  | 134  | 601  | 336  | 522  | 290  | 227  | 102  | 241  | 74   |
| Added Vol:   | 21   | 0    | 0    | 0    | 0    | 0    | 0    | 1735 | 105  | 0    | 292  | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 143  | 578  | 132  | 134  | 601  | 336  | 522  | 2025 | 332  | 102  | 533  | 74   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 150  | 608  | 139  | 141  | 633  | 354  | 550  | 2131 | 349  | 108  | 562  | 78   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 150  | 608  | 139  | 141  | 633  | 354  | 550  | 2131 | 349  | 108  | 562  | 78   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 150  | 608  | 139  | 141  | 633  | 354  | 550  | 2131 | 349  | 108  | 562  | 78   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 |
| Lanes:      | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 |
| Final Sat.: | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 |

Capacity Analysis Module:

|              |       |      |      |       |      |       |      |      |      |      |      |      |
|--------------|-------|------|------|-------|------|-------|------|------|------|------|------|------|
| Vol/Sat:     | 0.04  | 0.18 | 0.08 | 0.04  | 0.19 | 0.20  | 0.16 | 0.62 | 0.19 | 0.03 | 0.16 | 0.04 |
| Crit Moves:  | ****  |      |      | ****  |      |       | **** |      |      | **** |      |      |
| Green/Cycle: | 0.04  | 0.17 | 0.17 | 0.04  | 0.18 | 0.18  | 0.56 | 0.56 | 0.56 | 0.15 | 0.15 | 0.15 |
| Volume/Cap:  | 1.12  | 1.02 | 0.44 | 1.02  | 1.05 | 1.12  | 0.28 | 1.12 | 0.35 | 0.21 | 1.12 | 0.29 |
| Delay/Veh:   | 160.3 | 82.2 | 37.9 | 128.8 | 91.8 | 126.9 | 11.7 | 82.3 | 12.3 | 37.7 | 119  | 38.6 |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00  | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 160.3 | 82.2 | 37.9 | 128.8 | 91.8 | 126.9 | 11.7 | 82.3 | 12.3 | 37.7 | 119  | 38.6 |
| LOS by Move: | F     | F    | D    | F     | F    | F     | B    | F    | B    | D    | F    | D    |
| HCM2kAvgQ:   | 6     | 16   | 4    | 5     | 17   | 19    | 5    | 52   | 6    | 2    | 17   | 2    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #43 Armstrong Rd/Sierra Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.466  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 17.5  
Optimal Cycle: 30 Level Of Service: B

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Ignore     |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 0 | 1           | 0 | 0 | 1          | 0 | 2 | 1          | 0 | 1 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 665  | 261  | 22   | 18   | 170  | 24   | 32   | 34   | 677  | 15   | 25   | 9    |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 819  | 322  | 27   | 22   | 209  | 30   | 39   | 42   | 834  | 18   | 31   | 11   |
| Added Vol:   | 21   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 105  | 0    | 0    | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 840  | 322  | 27   | 22   | 209  | 30   | 39   | 42   | 939  | 18   | 31   | 11   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.00 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 885  | 338  | 29   | 23   | 220  | 31   | 41   | 44   | 0    | 19   | 32   | 12   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 885  | 338  | 29   | 23   | 220  | 31   | 41   | 44   | 0    | 19   | 32   | 12   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 885  | 338  | 29   | 23   | 220  | 31   | 41   | 44   | 0    | 19   | 32   | 12   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 |
| Lanes:      | 2.00 | 0.92 | 0.08 | 1.00 | 0.88 | 0.12 | 1.00 | 2.00 | 1.00 | 1.00 | 1.47 | 0.53 |
| Final Sat.: | 3492 | 1660 | 140  | 1800 | 1577 | 223  | 1800 | 3420 | 1800 | 1800 | 2515 | 905  |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.25 | 0.20 | 0.20 | 0.01 | 0.14 | 0.14 | 0.02 | 0.01 | 0.00 | 0.01 | 0.01 | 0.01 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.54 | 0.79 | 0.79 | 0.05 | 0.30 | 0.30 | 0.05 | 0.04 | 0.00 | 0.04 | 0.03 | 0.03 |
| Volume/Cap:  | 0.47 | 0.26 | 0.26 | 0.26 | 0.47 | 0.47 | 0.47 | 0.31 | 0.00 | 0.31 | 0.47 | 0.47 |
| Delay/Veh:   | 14.2 | 2.8  | 2.8  | 47.2 | 29.1 | 29.1 | 50.1 | 47.7 | 0.0  | 49.8 | 51.5 | 51.5 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 14.2 | 2.8  | 2.8  | 47.2 | 29.1 | 29.1 | 50.1 | 47.7 | 0.0  | 49.8 | 51.5 | 51.5 |
| LOS by Move: | B    | A    | A    | D    | C    | C    | D    | D    | A    | D    | D    | D    |
| HCM2kAvgQ:   | 9    | 3    | 3    | 1    | 7    | 7    | 2    | 1    | 0    | 1    | 1    | 1    |

Note: Queue reported is the number of cars per lane.



FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #44 Armstrong Rd/SR-60 WB Ramps

Cycle (sec): 100 Critical Vol./Cap.(X): 0.868  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 29.0  
Optimal Cycle: 78 Level Of Service: C

| Approach:   | North Bound | South Bound | East Bound  | West Bound  |
|-------------|-------------|-------------|-------------|-------------|
| Movement:   | L - T - R   | L - T - R   | L - T - R   | L - T - R   |
| Control:    | Protected   | Protected   | Split Phase | Split Phase |
| Rights:     | Include     | Include     | Include     | Include     |
| Min. Green: | 0 0 0       | 0 0 0       | 0 0 0       | 0 0 0       |
| Lanes:      | 1 0 2 0 0   | 0 0 1 1 0   | 0 0 0 0 0   | 1 0 0 1 0   |

| Volume Module: | Base Vol: | 203  | 700  | 0    | 0    | 835  | 196  | 0    | 0    | 290  | 1    | 341  |
|----------------|-----------|------|------|------|------|------|------|------|------|------|------|------|
| Growth Adj:    | 1.23      | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse:   | 250       | 862  | 0    | 0    | 1029 | 241  | 0    | 0    | 0    | 357  | 1    | 420  |
| Added Vol:     | 0         | 21   | 0    | 0    | 105  | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol:   | 0         | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:   | 250       | 883  | 0    | 0    | 1134 | 241  | 0    | 0    | 0    | 357  | 1    | 420  |
| User Adj:      | 1.00      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:       | 0.95      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:    | 263       | 930  | 0    | 0    | 1193 | 254  | 0    | 0    | 0    | 376  | 1    | 442  |
| Reduct Vol:    | 0         | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:   | 263       | 930  | 0    | 0    | 1193 | 254  | 0    | 0    | 0    | 376  | 1    | 442  |
| PCE Adj:       | 1.00      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:       | 1.00      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume:   | 263       | 930  | 0    | 0    | 1193 | 254  | 0    | 0    | 0    | 376  | 1    | 442  |

| Saturation Flow Module: | Sat/Lane: | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
|-------------------------|-----------|------|------|------|------|------|------|------|------|------|------|
| Adjustment:             | 1.00      | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:                  | 1.00      | 2.00 | 0.00 | 0.00 | 1.65 | 0.35 | 0.00 | 0.00 | 0.00 | 1.00 | 0.01 |
| Final Sat.:             | 1800      | 3420 | 0    | 0    | 2819 | 601  | 0    | 0    | 0    | 1800 | 5    |

| Capacity Analysis Module: | Vol/Sat: | 0.15 | 0.27 | 0.00 | 0.00 | 0.42 | 0.42 | 0.00 | 0.00 | 0.00 | 0.21 | 0.25 |
|---------------------------|----------|------|------|------|------|------|------|------|------|------|------|------|
| Crit Moves:               | ****     |      |      |      |      | **** |      |      |      |      | **** |      |
| Green/Cycle:              | 0.17     | 0.66 | 0.00 | 0.00 | 0.49 | 0.49 | 0.00 | 0.00 | 0.00 | 0.28 | 0.28 | 0.28 |
| Volume/Cap:               | 0.87     | 0.41 | 0.00 | 0.00 | 0.87 | 0.87 | 0.00 | 0.00 | 0.00 | 0.74 | 0.87 | 0.87 |
| Delay/Veh:                | 62.9     | 8.2  | 0.0  | 0.0  | 27.9 | 27.9 | 0.0  | 0.0  | 0.0  | 38.0 | 48.7 | 48.7 |
| User DelAdj:              | 1.00     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:               | 62.9     | 8.2  | 0.0  | 0.0  | 27.9 | 27.9 | 0.0  | 0.0  | 0.0  | 38.0 | 48.7 | 48.7 |
| LOS by Move:              | E        | A    | A    | A    | C    | C    | A    | A    | A    | D    | D    | D    |
| HCM2kAvgQ:                | 11       | 7    | 0    | 0    | 24   | 24   | 0    | 0    | 0    | 12   | 16   | 16   |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #45 Armstrong Rd/SR-60 EB Ramps

Average Delay (sec/veh): 742.0 Worst Case Level Of Service: F[4894.4]

| Approach: | North Bound  | South Bound  | East Bound | West Bound |
|-----------|--------------|--------------|------------|------------|
| Movement: | L - T - R    | L - T - R    | L - T - R  | L - T - R  |
| Control:  | Uncontrolled | Uncontrolled | Stop Sign  | Stop Sign  |
| Rights:   | Include      | Include      | Include    | Include    |
| Lanes:    | 0 0 1 1 0    | 1 0 2 0 0    | 0 1 0 1 0  | 0 0 0 0 0  |

| Volume Module: | Base Vol: | 0    | 696  | 153  | 296  | 804  | 0    | 212  | 1    | 152  | 0    | 0    |
|----------------|-----------|------|------|------|------|------|------|------|------|------|------|------|
| Growth Adj:    | 1.23      | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse:   | 0         | 857  | 188  | 365  | 991  | 0    | 261  | 1    | 187  | 0    | 0    | 0    |
| Added Vol:     | 0         | 21   | 0    | 0    | 105  | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PasserByVol:   | 0         | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:   | 0         | 878  | 188  | 365  | 1096 | 0    | 261  | 1    | 187  | 0    | 0    | 0    |
| User Adj:      | 1.00      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:       | 0.95      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:    | 0         | 925  | 198  | 384  | 1153 | 0    | 275  | 1    | 197  | 0    | 0    | 0    |
| Reduct Vol:    | 0         | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| FinalVolume:   | 0         | 925  | 198  | 384  | 1153 | 0    | 275  | 1    | 197  | 0    | 0    | 0    |

| Critical Gap Module: | Critical Gp: | xxxxx | xxxx  | xxxxx | 4.1  | xxxx  | xxxxx | 6.8 | 6.5 | 6.9   | xxxxx | xxxx  | xxxxx |
|----------------------|--------------|-------|-------|-------|------|-------|-------|-----|-----|-------|-------|-------|-------|
| FollowUpTim:         | xxxxx        | xxxx  | xxxxx | 2.2   | xxxx | xxxxx | 3.5   | 4.0 | 3.3 | xxxxx | xxxx  | xxxxx |       |

| Capacity Module: | Cnflct Vol: | xxxx | xxxx  | xxxxx | 1123 | xxxx  | xxxxx | 2383 | 3044 | 577  | xxxx | xxxx  | xxxxx |
|------------------|-------------|------|-------|-------|------|-------|-------|------|------|------|------|-------|-------|
| Potent Cap.:     | xxxx        | xxxx | xxxxx | 629   | xxxx | xxxxx | 29    | 13   | 465  | xxxx | xxxx | xxxxx |       |
| Move Cap.:       | xxxx        | xxxx | xxxxx | 629   | xxxx | xxxxx | 15    | 5    | 465  | xxxx | xxxx | xxxxx |       |
| Volume/Cap:      | xxxx        | xxxx | xxxx  | 0.61  | xxxx | xxxx  | 18.27 | 0.26 | 0.42 | xxxx | xxxx | xxxx  |       |

| Level Of Service Module: | 2Way95thQ:    | xxxx          | xxxx          | xxxxx         | 4.1           | xxxx          | xxxxx         | xxxx          | xxxx          | xxxxx         | xxxx          | xxxx          | xxxxx |
|--------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-------|
| Control Del:             | xxxxx         | xxxx          | xxxxx         | 19.2          | xxxx          | xxxxx         | xxxxx         | xxxx          | xxxxx         | xxxxx         | xxxx          | xxxxx         |       |
| LOS by Move:             | *             | *             | *             | C             | *             | *             | *             | *             | *             | *             | *             | *             |       |
| Movement:                | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT | LT - LTR - RT |       |
| Shared Cap.:             | xxxx          | xxxx          | xxxxx         | xxxx          | xxxx          | xxxxx         | 15            | xxxx          | 291           | xxxx          | xxxx          | xxxxx         |       |
| SharedQueue:             | xxxxx         | xxxx          | xxxxx         | xxxxx         | xxxx          | xxxxx         | 35.6          | xxxx          | 4.6           | xxxxx         | xxxx          | xxxxx         |       |
| Shrd ConDel:             | xxxxx         | xxxx          | xxxxx         | xxxxx         | xxxx          | xxxxx         | 8381          | xxxx          | 40.1          | xxxxx         | xxxx          | xxxxx         |       |
| Shared LOS:              | *             | *             | *             | *             | *             | *             | F             | *             | E             | *             | *             | *             |       |
| ApproachDel:             | xxxxxx        | xxxxxx        | xxxxxx        | 4894.4        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        | xxxxxx        |       |
| ApproachLOS:             | *             | *             | *             | F             | *             | *             | F             | *             | F             | *             | *             | *             |       |

Note: Queue reported is the number of cars per lane.

**Improved Forecast Year 2030  
With Project Conditions**

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FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 I-15 SB Ramps/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 1.053  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 42.5  
Optimal Cycle: 180 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |   |
| Control:    | Split Phase |   |   | Split Phase |   |   | Protected  |   |   | Protected  |   |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |   |
| Lanes:      | 0           | 0 | 0 | 2           | 0 | 1 | 0          | 1 | 0 | 0          | 3 | 0 | 1 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 0    | 0    | 0    | 790  | 1    | 647  | 0    | 302  | 139  | 244  | 639  | 0    |
| Growth Adj:   | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse:  | 0    | 0    | 0    | 973  | 1    | 797  | 0    | 372  | 171  | 301  | 787  | 0    |
| Added Vol:    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1823 | 0    | 0    | 259  | 0    |
| PasserByVol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:  | 0    | 0    | 0    | 973  | 1    | 797  | 0    | 2195 | 171  | 301  | 1046 | 0    |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 0    | 0    | 0    | 1025 | 1    | 839  | 0    | 2311 | 180  | 316  | 1101 | 0    |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 0    | 0    | 0    | 1025 | 1    | 839  | 0    | 2311 | 180  | 316  | 1101 | 0    |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 0    | 0    | 0    | 1025 | 1    | 839  | 0    | 2311 | 180  | 316  | 1101 | 0    |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 0.97 | 1.00 | 1.00 | 1.00 | 0.91 | 1.00 | 0.97 | 0.91 | 1.00 |
| Lanes:      | 0.00 | 0.00 | 0.00 | 2.45 | 0.01 | 1.54 | 0.00 | 3.00 | 1.00 | 2.00 | 3.00 | 0.00 |
| Final Sat.: | 0    | 0    | 0    | 4287 | 3    | 2777 | 0    | 4914 | 1800 | 3492 | 4914 | 0    |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |       |      |      |
|--------------|------|------|------|------|------|------|------|------|------|-------|------|------|
| Vol/Sat:     | 0.00 | 0.00 | 0.00 | 0.24 | 0.43 | 0.30 | 0.00 | 0.47 | 0.10 | 0.09  | 0.22 | 0.00 |
| Crit Moves:  |      |      |      | **** |      |      | **** |      |      | ****  |      |      |
| Green/Cycle: | 0.00 | 0.00 | 0.00 | 0.41 | 0.41 | 0.41 | 0.00 | 0.45 | 0.45 | 0.09  | 0.53 | 0.00 |
| Volume/Cap:  | 0.00 | 0.00 | 0.00 | 0.59 | 1.05 | 0.74 | 0.00 | 1.05 | 0.22 | 1.05  | 0.42 | 0.00 |
| Delay/Veh:   | 0.0  | 0.0  | 0.0  | 23.3 | 66.7 | 26.4 | 0.0  | 62.8 | 17.2 | 112.4 | 14.2 | 0.0  |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 |
| AdjDel/Veh:  | 0.0  | 0.0  | 0.0  | 23.3 | 66.7 | 26.4 | 0.0  | 62.8 | 17.2 | 112.4 | 14.2 | 0.0  |
| LOS by Move: | A    | A    | A    | C    | E    | C    | A    | E    | B    | F     | B    | A    |
| HCM2kAvgQ:   | 0    | 0    | 0    | 11   | 34   | 15   | 0    | 37   | 3    | 10    | 7    | 0    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Etiwanda Ave/San Bernardino Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.719  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 27.2  
Optimal Cycle: 51 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Ovl        |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 3 | 0           | 1 | 0 | 2          | 0 | 1 | 1          | 0 | 2 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 270  | 466  | 81   | 27   | 536  | 102  | 88   | 189  | 118  | 67   | 188  | 27   |
| Growth Adj:   | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse:  | 333  | 574  | 100  | 33   | 660  | 126  | 108  | 233  | 145  | 83   | 232  | 33   |
| Added Vol:    | 0    | 118  | 0    | 876  | 673  | 0    | 0    | 52   | 0    | 0    | 8    | 151  |
| PasserByVol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:  | 333  | 692  | 100  | 909  | 1333 | 126  | 108  | 285  | 145  | 83   | 240  | 184  |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 350  | 729  | 105  | 957  | 1404 | 132  | 114  | 300  | 153  | 87   | 252  | 194  |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 350  | 729  | 105  | 957  | 1404 | 132  | 114  | 300  | 153  | 87   | 252  | 194  |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 350  | 729  | 105  | 957  | 1404 | 132  | 114  | 300  | 153  | 87   | 252  | 194  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.91 | 1.00 | 0.97 | 0.95 | 0.95 | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 0.88 |
| Lanes:      | 2.00 | 3.00 | 1.00 | 2.00 | 1.83 | 0.17 | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 2.00 |
| Final Sat.: | 3492 | 4914 | 1800 | 3492 | 3125 | 295  | 3492 | 3420 | 1800 | 3492 | 3420 | 3168 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.10 | 0.15 | 0.06 | 0.27 | 0.45 | 0.45 | 0.03 | 0.09 | 0.09 | 0.02 | 0.07 | 0.06 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.14 | 0.27 | 0.27 | 0.50 | 0.62 | 0.62 | 0.05 | 0.12 | 0.12 | 0.03 | 0.11 | 0.60 |
| Volume/Cap:  | 0.72 | 0.55 | 0.22 | 0.55 | 0.72 | 0.72 | 0.68 | 0.72 | 0.70 | 0.72 | 0.68 | 0.10 |
| Delay/Veh:   | 46.3 | 32.0 | 28.7 | 17.9 | 14.0 | 14.0 | 57.6 | 48.3 | 51.6 | 66.7 | 48.0 | 8.4  |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 46.3 | 32.0 | 28.7 | 17.9 | 14.0 | 14.0 | 57.6 | 48.3 | 51.6 | 66.7 | 48.0 | 8.4  |
| LOS by Move: | D    | C    | C    | B    | B    | B    | E    | D    | D    | E    | D    | A    |
| HCM2kAvgQ:   | 7    | 8    | 3    | 11   | 18   | 18   | 3    | 6    | 6    | 3    | 5    | 1    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #6 Etiwanda Ave/ East Airport Dr-Slover Ave  
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 1.041  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 54.3  
Optimal Cycle: 180 Level Of Service: D  
\*\*\*\*\*

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 2 | 1           | 0 | 1 | 0          | 2 | 0 | 1          | 0 | 2 |

Volume Module:  
Base Vol: 44 599 183 338 846 256 91 63 36 46 91 345  
Growth Adj: 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23  
Initial Bse: 54 738 225 416 1042 315 112 78 44 57 112 425  
Added Vol: 66 20 0 175 85 0 0 1095 227 0 217 59  
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0  
Initial Fut: 120 758 225 591 1127 315 112 1173 271 57 329 484  
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95  
PHF Volume: 127 798 237 623 1187 332 118 1234 286 60 346 510  
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
Reduced Vol: 127 798 237 623 1187 332 118 1234 286 60 346 510  
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
FinalVolume: 127 798 237 623 1187 332 118 1234 286 60 346 510  
-----

Saturation Flow Module:  
Sat/Lane: 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800  
Adjustment: 0.97 0.91 0.91 0.97 0.95 0.95 0.97 0.95 0.95 1.00 0.95 0.88  
Lanes: 2.00 2.31 0.69 2.00 1.56 0.44 2.00 1.62 0.38 1.00 2.00 2.00  
Final Sat.: 3492 3787 1127 3492 2672 748 3492 2777 643 1800 3420 3168  
-----

Capacity Analysis Module:  
Vol/Sat: 0.04 0.21 0.21 0.18 0.44 0.44 0.03 0.44 0.44 0.03 0.10 0.16  
Crit Moves: \*\*\*\*  
Green/Cycle: 0.03 0.25 0.25 0.21 0.43 0.43 0.08 0.43 0.43 0.03 0.38 0.38  
Volume/Cap: 1.04 0.84 0.84 0.84 1.04 1.04 0.42 1.04 1.04 1.04 0.27 0.42  
Delay/Veh: 141.3 41.1 41.1 46.6 63.7 63.7 44.9 63.7 63.7 179.3 21.6 23.2  
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
AdjDel/Veh: 141.3 41.1 41.1 46.6 63.7 63.7 44.9 63.7 63.7 179.3 21.6 23.2  
LOS by Move: F D D D E E D E E F C C  
HCM2kAvgQ: 5 14 14 12 34 34 2 34 34 5 4 7  
\*\*\*\*\*

Note: Queue reported is the number of cars per lane.  
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FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

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Intersection #7 Etiwanda Ave/Jurupa St  
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.927  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 38.3  
Optimal Cycle: 117 Level Of Service: D  
\*\*\*\*\*

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 2 | 0           | 2 | 0 | 2          | 0 | 3 | 2          | 0 | 4 |

Volume Module:  
Base Vol: 208 559 52 115 640 159 145 358 218 75 677 126  
Growth Adj: 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23  
Initial Bse: 256 689 64 142 788 196 179 441 269 92 834 155  
Added Vol: 6 10 50 269 42 0 0 1799 24 35 253 76  
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0  
Initial Fut: 262 699 114 411 830 196 179 2240 293 127 1087 231  
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95  
PHF Volume: 276 735 120 432 874 206 188 2358 308 134 1144 243  
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
Reduced Vol: 276 735 120 432 874 206 188 2358 308 134 1144 243  
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
FinalVolume: 276 735 120 432 874 206 188 2358 308 134 1144 243  
-----

Saturation Flow Module:  
Sat/Lane: 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800  
Adjustment: 0.97 0.95 1.00 0.97 0.95 1.00 0.97 0.91 1.00 0.97 0.91 1.00  
Lanes: 2.00 2.00 1.00 2.00 2.00 1.00 2.00 3.00 1.00 2.00 4.00 1.00  
Final Sat.: 3492 3420 1800 3492 3420 1800 3492 4914 1800 3492 6552 1800  
-----

Capacity Analysis Module:  
Vol/Sat: 0.08 0.22 0.07 0.12 0.26 0.11 0.05 0.48 0.17 0.04 0.17 0.14  
Crit Moves: \*\*\*\*  
Green/Cycle: 0.09 0.23 0.23 0.13 0.28 0.28 0.13 0.52 0.52 0.04 0.43 0.43  
Volume/Cap: 0.93 0.94 0.29 0.94 0.93 0.42 0.41 0.93 0.33 0.93 0.41 0.32  
Delay/Veh: 79.0 56.7 32.2 70.2 50.0 30.2 40.4 29.0 14.2 101.0 20.0 19.2  
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
AdjDel/Veh: 79.0 56.7 32.2 70.2 50.0 30.2 40.4 29.0 14.2 101.0 20.0 19.2  
LOS by Move: E E C E D C D C B F B B  
HCM2kAvgQ: 8 16 3 11 18 5 3 29 5 5 7 5  
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Note: Queue reported is the number of cars per lane.  
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FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 Commerce Way/Ontario Mills Pkwy

Cycle (sec): 100 Critical Vol./Cap.(X): 0.678  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 28.7  
Optimal Cycle: 46 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 1 | 0           | 2 | 1 | 1          | 0 | 2 | 0          | 1 | 2 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 32   | 102  | 490  | 15   | 65   | 10   | 5    | 114  | 5    | 329  | 251  | 10   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 39   | 126  | 604  | 18   | 80   | 12   | 6    | 140  | 6    | 405  | 309  | 12   |
| Added Vol:   | 0    | 0    | 190  | 0    | 0    | 0    | 0    | 563  | 0    | 35   | 88   | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 39   | 126  | 794  | 18   | 80   | 12   | 6    | 703  | 6    | 440  | 397  | 12   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 41   | 132  | 835  | 19   | 84   | 13   | 6    | 740  | 6    | 464  | 418  | 13   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 41   | 132  | 835  | 19   | 84   | 13   | 6    | 740  | 6    | 464  | 418  | 13   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 41   | 132  | 835  | 19   | 84   | 13   | 6    | 740  | 6    | 464  | 418  | 13   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 1.00 | 0.88 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 |
| Lanes:      | 2.00 | 1.00 | 2.00 | 1.00 | 1.73 | 0.27 | 1.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 |
| Final Sat.: | 3492 | 1800 | 3168 | 1800 | 2964 | 456  | 1800 | 3420 | 1800 | 3492 | 3420 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.01 | 0.07 | 0.26 | 0.01 | 0.03 | 0.03 | 0.00 | 0.22 | 0.00 | 0.13 | 0.12 | 0.01 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.12 | 0.39 | 0.39 | 0.02 | 0.29 | 0.29 | 0.01 | 0.32 | 0.32 | 0.20 | 0.50 | 0.50 |
| Volume/Cap:  | 0.10 | 0.19 | 0.68 | 0.68 | 0.10 | 0.10 | 0.24 | 0.68 | 0.01 | 0.68 | 0.24 | 0.01 |
| Delay/Veh:   | 39.4 | 20.3 | 26.9 | 98.6 | 26.3 | 26.3 | 53.5 | 31.3 | 23.3 | 40.0 | 14.3 | 12.6 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 39.4 | 20.3 | 26.9 | 98.6 | 26.3 | 26.3 | 53.5 | 31.3 | 23.3 | 40.0 | 14.3 | 12.6 |
| LOS by Move: | D    | C    | C    | F    | C    | C    | D    | C    | C    | D    | B    | B    |
| HCM2kAvgQ:   | 1    | 3    | 13   | 2    | 1    | 1    | 0    | 11   | 0    | 8    | 4    | 0    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #13 Mulberry Ave/Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.939  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 44.1  
Optimal Cycle: 126 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 3 | 0 | 1          | 0 | 3 | 0          | 1 | 3 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 158  | 0    | 131  | 0    | 0    | 0    | 0    | 203  | 81   | 161  | 367  | 0    |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 195  | 0    | 161  | 0    | 0    | 0    | 0    | 250  | 100  | 198  | 452  | 0    |
| Added Vol:   | 30   | 185  | 145  | 414  | 1260 | 0    | 0    | 1184 | 86   | 33   | 246  | 91   |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 225  | 185  | 306  | 414  | 1260 | 0    | 0    | 1434 | 186  | 231  | 698  | 91   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 236  | 195  | 323  | 436  | 1326 | 0    | 0    | 1510 | 196  | 244  | 735  | 96   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 236  | 195  | 323  | 436  | 1326 | 0    | 0    | 1510 | 196  | 244  | 735  | 96   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 236  | 195  | 323  | 436  | 1326 | 0    | 0    | 1510 | 196  | 244  | 735  | 96   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 3.00 | 1.00 | 1.00 | 3.00 | 1.00 | 1.00 | 3.00 | 1.00 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 4914 | 1800 | 1800 | 4914 | 1800 | 1800 | 4914 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.13 | 0.06 | 0.18 | 0.24 | 0.27 | 0.00 | 0.00 | 0.31 | 0.11 | 0.14 | 0.15 | 0.05 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.15 | 0.19 | 0.19 | 0.26 | 0.30 | 0.00 | 0.00 | 0.33 | 0.33 | 0.14 | 0.47 | 0.47 |
| Volume/Cap:  | 0.89 | 0.30 | 0.94 | 0.94 | 0.89 | 0.00 | 0.00 | 0.94 | 0.33 | 0.94 | 0.32 | 0.11 |
| Delay/Veh:   | 71.4 | 35.0 | 72.9 | 63.4 | 40.8 | 0.0  | 0.0  | 43.7 | 25.7 | 81.8 | 16.5 | 14.8 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 71.4 | 35.0 | 72.9 | 63.4 | 40.8 | 0.0  | 0.0  | 43.7 | 25.7 | 81.8 | 16.5 | 14.8 |
| LOS by Move: | E    | C    | E    | E    | D    | A    | A    | D    | C    | F    | B    | B    |
| HCM2kAvgQ:   | 10   | 3    | 14   | 18   | 18   | 0    | 0    | 21   | 5    | 11   | 5    | 2    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #14 Mulberry Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.894  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 31.3  
Optimal Cycle: 97 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 1 | 0 | 1          | 0 | 0 | 1          | 0 | 1 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 80   | 240  | 51   | 25   | 171  | 17   | 2    | 10   | 24   | 52   | 14   | 43   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 99   | 296  | 63   | 31   | 211  | 21   | 2    | 12   | 30   | 64   | 17   | 53   |
| Added Vol:   | 0    | 284  | 227  | 474  | 904  | 0    | 0    | 0    | 0    | 67   | 0    | 76   |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 99   | 580  | 290  | 505  | 1115 | 21   | 2    | 12   | 30   | 131  | 17   | 129  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 104  | 610  | 305  | 531  | 1173 | 22   | 3    | 13   | 31   | 138  | 18   | 136  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 104  | 610  | 305  | 531  | 1173 | 22   | 3    | 13   | 31   | 138  | 18   | 136  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 104  | 610  | 305  | 531  | 1173 | 22   | 3    | 13   | 31   | 138  | 18   | 136  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 0.95 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 0.98 | 0.02 | 1.00 | 0.29 | 0.71 | 1.00 | 1.00 | 1.00 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 1767 | 33   | 1800 | 529  | 1271 | 1800 | 1710 | 1710 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |       |      |       |      |      |      |
|--------------|------|------|------|------|------|------|-------|------|-------|------|------|------|
| Vol/Sat:     | 0.06 | 0.18 | 0.17 | 0.30 | 0.66 | 0.66 | 0.00  | 0.02 | 0.02  | 0.08 | 0.01 | 0.08 |
| Crit Moves:  | **** |      |      | **** |      | **** |       |      | ****  |      |      |      |
| Green/Cycle: | 0.06 | 0.30 | 0.30 | 0.50 | 0.74 | 0.74 | 0.00  | 0.03 | 0.03  | 0.09 | 0.11 | 0.11 |
| Volume/Cap:  | 0.89 | 0.59 | 0.56 | 0.59 | 0.89 | 0.89 | 0.71  | 0.89 | 0.89  | 0.89 | 0.10 | 0.71 |
| Delay/Veh:   | 98.6 | 30.4 | 30.5 | 18.5 | 18.0 | 18.0 | 291.7 | 138  | 137.8 | 88.4 | 40.0 | 53.8 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 98.6 | 30.4 | 30.5 | 18.5 | 18.0 | 18.0 | 291.7 | 138  | 137.8 | 88.4 | 40.0 | 53.8 |
| LOS by Move: | F    | C    | C    | B    | B    | B    | F     | F    | F     | F    | D    | D    |
| HCM2kAvgQ:   | 6    | 9    | 8    | 12   | 32   | 32   | 1     | 3    | 3     | 7    | 1    | 6    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #15 Mulberry Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.984  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 45.4  
Optimal Cycle: 180 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Ovl         |   |   | Ovl         |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 2 | 0           | 2 | 0 | 2          | 0 | 3 | 0          | 3 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 417  | 378  | 222  | 8    | 217  | 61   | 84   | 227  | 72   | 205  | 723  | 35   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 514  | 466  | 274  | 10   | 267  | 75   | 103  | 280  | 89   | 253  | 891  | 43   |
| Added Vol:   | 33   | 154  | 274  | 462  | 78   | 108  | 237  | 1786 | 19   | 87   | 296  | 71   |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 547  | 620  | 548  | 472  | 345  | 183  | 340  | 2066 | 108  | 340  | 1187 | 114  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 576  | 652  | 576  | 497  | 364  | 193  | 358  | 2174 | 113  | 357  | 1249 | 120  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 576  | 652  | 576  | 497  | 364  | 193  | 358  | 2174 | 113  | 357  | 1249 | 120  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 576  | 652  | 576  | 497  | 364  | 193  | 358  | 2174 | 113  | 357  | 1249 | 120  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.91 | 1.00 | 0.97 | 0.91 | 1.00 |
| Lanes:      | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 3.00 | 1.00 | 2.00 | 3.00 | 1.00 |
| Final Sat.: | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 | 3492 | 4914 | 1800 | 3492 | 4914 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.16 | 0.19 | 0.32 | 0.14 | 0.11 | 0.11 | 0.10 | 0.44 | 0.06 | 0.10 | 0.25 | 0.07 |
| Crit Moves:  | **** |      |      | **** |      | **** |      |      | **** |      |      |      |
| Green/Cycle: | 0.22 | 0.22 | 0.33 | 0.14 | 0.14 | 0.30 | 0.16 | 0.45 | 0.45 | 0.10 | 0.39 | 0.39 |
| Volume/Cap:  | 0.74 | 0.86 | 0.98 | 0.98 | 0.74 | 0.35 | 0.64 | 0.98 | 0.14 | 0.98 | 0.64 | 0.17 |
| Delay/Veh:   | 40.0 | 47.4 | 66.3 | 78.3 | 47.0 | 27.6 | 42.0 | 42.5 | 16.2 | 87.4 | 25.3 | 19.7 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 40.0 | 47.4 | 66.3 | 78.3 | 47.0 | 27.6 | 42.0 | 42.5 | 16.2 | 87.4 | 25.3 | 19.7 |
| LOS by Move: | D    | D    | E    | E    | D    | C    | D    | D    | B    | F    | C    | B    |
| HCM2kAvgQ:   | 10   | 13   | 24   | 12   | 7    | 5    | 6    | 31   | 2    | 10   | 12   | 2    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #21 Banana Ave/Valley Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.320  
Loss Time (sec): 6 Average Delay (sec/veh): 2.6  
Optimal Cycle: 21 Level Of Service: A

| Approach:   | North Bound |     |     | South Bound |     |     | East Bound |     |     | West Bound |     |     |
|-------------|-------------|-----|-----|-------------|-----|-----|------------|-----|-----|------------|-----|-----|
| Movement:   | L           | T   | R   | L           | T   | R   | L          | T   | R   | L          | T   | R   |
| Control:    | Permitted   |     |     | Permitted   |     |     | Permitted  |     |     | Permitted  |     |     |
| Rights:     | Include     |     |     | Include     |     |     | Include    |     |     | Include    |     |     |
| Min. Green: | 0           | 0   | 0   | 0           | 0   | 0   | 0          | 0   | 0   | 0          | 0   | 0   |
| Y+R:        | 4.0         | 4.0 | 4.0 | 4.0         | 4.0 | 4.0 | 4.0        | 4.0 | 4.0 | 4.0        | 4.0 | 4.0 |
| Lanes:      | 0           | 0   | 0   | 0           | 0   | 0   | 1          | 0   | 2   | 0          | 1   | 1   |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 0    | 0    | 5    | 0    | 0    | 36   | 50   | 424  | 18   | 12   | 609  | 40   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 0    | 0    | 6    | 0    | 0    | 44   | 62   | 522  | 22   | 15   | 750  | 49   |
| Added Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 112  | 0    | 0    | 94   | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 0    | 0    | 6    | 0    | 0    | 44   | 62   | 634  | 22   | 15   | 844  | 49   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 0    | 0    | 6    | 0    | 0    | 47   | 65   | 668  | 23   | 16   | 889  | 52   |
| Reduced Vol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 0    | 0    | 6    | 0    | 0    | 47   | 65   | 668  | 23   | 16   | 889  | 52   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 0    | 0    | 6    | 0    | 0    | 47   | 65   | 668  | 23   | 16   | 889  | 52   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 |
| Lanes:      | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 1.89 | 0.11 |
| Final Sat.: | 0    | 0    | 1800 | 0    | 0    | 1800 | 1800 | 3420 | 1800 | 1800 | 3231 | 189  |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.04 | 0.20 | 0.01 | 0.01 | 0.28 | 0.28 |
| Crit Moves:  | **** |      |      |      |      |      |      |      |      |      |      |      |
| Green/Cycle: | 0.00 | 0.00 | 0.08 | 0.00 | 0.00 | 0.08 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 |
| Volume/Cap:  | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 0.32 | 0.04 | 0.23 | 0.02 | 0.01 | 0.32 | 0.32 |
| Delay/Veh:   | 0.0  | 0.0  | 42.5 | 0.0  | 0.0  | 44.6 | 1.0  | 1.3  | 1.0  | 1.0  | 1.4  | 1.4  |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 0.0  | 0.0  | 42.5 | 0.0  | 0.0  | 44.6 | 1.0  | 1.3  | 1.0  | 1.0  | 1.4  | 1.4  |
| LOS by Move: | A    | A    | D    | A    | A    | D    | A    | A    | A    | A    | A    | A    |
| HCM2kAvgQ:   | 0    | 0    | 0    | 0    | 0    | 2    | 0    | 2    | 0    | 0    | 3    | 3    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #22 Cherry Ave/San Bernardino Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.763  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 23.1  
Optimal Cycle: 58 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Ignore      |   |   | Ignore     |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 1           | 0 | 3 | 2          | 0 | 2 | 1          | 0 | 1 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 45   | 595  | 68   | 63   | 753  | 142  | 137  | 60   | 60   | 173  | 129  | 65   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 55   | 733  | 84   | 78   | 928  | 175  | 169  | 74   | 74   | 213  | 159  | 80   |
| Added Vol:   | 0    | 254  | 2    | 142  | 1458 | 180  | 28   | 7    | 0    | 15   | 45   | 23   |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 55   | 987  | 86   | 220  | 2386 | 355  | 197  | 81   | 74   | 228  | 204  | 103  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.00 | 0.95 | 0.95 | 0.00 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 58   | 1039 | 90   | 231  | 2511 | 0    | 207  | 85   | 0    | 240  | 215  | 109  |
| Reduced Vol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 58   | 1039 | 90   | 231  | 2511 | 0    | 207  | 85   | 0    | 240  | 215  | 109  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 58   | 1039 | 90   | 231  | 2511 | 0    | 207  | 85   | 0    | 240  | 215  | 109  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 1.00 | 0.97 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 |
| Lanes:      | 1.00 | 2.76 | 0.24 | 1.00 | 3.00 | 1.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.33 | 0.67 |
| Final Sat.: | 1800 | 4521 | 393  | 1800 | 4914 | 1800 | 3492 | 3420 | 1800 | 1800 | 2272 | 1148 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.03 | 0.23 | 0.23 | 0.13 | 0.51 | 0.00 | 0.06 | 0.02 | 0.00 | 0.13 | 0.09 | 0.09 |
| Crit Moves:  | **** |      |      |      |      |      |      |      |      |      |      |      |
| Green/Cycle: | 0.04 | 0.46 | 0.46 | 0.26 | 0.67 | 0.00 | 0.08 | 0.03 | 0.00 | 0.17 | 0.13 | 0.13 |
| Volume/Cap:  | 0.76 | 0.50 | 0.50 | 0.50 | 0.76 | 0.00 | 0.74 | 0.76 | 0.00 | 0.76 | 0.74 | 0.74 |
| Delay/Veh:   | 83.0 | 19.3 | 19.3 | 32.7 | 12.2 | 0.0  | 55.1 | 74.1 | 0.0  | 49.8 | 48.7 | 48.7 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 83.0 | 19.3 | 19.3 | 32.7 | 12.2 | 0.0  | 55.1 | 74.1 | 0.0  | 49.8 | 48.7 | 48.7 |
| LOS by Move: | F    | B    | B    | C    | B    | A    | E    | E    | A    | D    | D    | D    |
| HCM2kAvgQ:   | 3    | 9    | 9    | 6    | 20   | 0    | 5    | 3    | 0    | 9    | 7    | 7    |

Note: Queue reported is the number of cars per lane.



FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #23 Cherry Ave/Valley Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 1.057  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 53.4  
Optimal Cycle: 180 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |   |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |   |
| Lanes:      | 1           | 0 | 3 | 0           | 1 | 1 | 0          | 3 | 0 | 1          | 2 | 0 | 2 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 152  | 614  | 232  | 93   | 702  | 127  | 86   | 195  | 151  | 368  | 715  | 107  |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 187  | 756  | 286  | 115  | 865  | 156  | 106  | 240  | 186  | 453  | 881  | 132  |
| Added Vol:   | 56   | 584  | 70   | 3    | 1330 | 73   | 12   | 56   | 8    | 20   | 66   | 17   |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 243  | 1340 | 356  | 118  | 2195 | 229  | 118  | 296  | 194  | 473  | 947  | 149  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 256  | 1411 | 375  | 124  | 2310 | 242  | 124  | 312  | 204  | 498  | 997  | 157  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 256  | 1411 | 375  | 124  | 2310 | 242  | 124  | 312  | 204  | 498  | 997  | 157  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 256  | 1411 | 375  | 124  | 2310 | 242  | 124  | 312  | 204  | 498  | 997  | 157  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 |
| Lanes:      | 1.00 | 3.00 | 1.00 | 1.00 | 3.00 | 1.00 | 1.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 |
| Final Sat.: | 1800 | 4914 | 1800 | 1800 | 4914 | 1800 | 1800 | 3420 | 1800 | 3492 | 3420 | 1800 |

Capacity Analysis Module:

|              |       |      |      |      |      |      |       |      |      |      |      |      |
|--------------|-------|------|------|------|------|------|-------|------|------|------|------|------|
| Vol/Sat:     | 0.14  | 0.29 | 0.21 | 0.07 | 0.47 | 0.13 | 0.07  | 0.09 | 0.11 | 0.14 | 0.29 | 0.09 |
| Crit Moves:  | ****  | **** | **** | **** | **** | **** | ****  | **** | **** | **** | **** | **** |
| Green/Cycle: | 0.13  | 0.47 | 0.47 | 0.11 | 0.44 | 0.44 | 0.07  | 0.15 | 0.15 | 0.19 | 0.28 | 0.28 |
| Volume/Cap:  | 1.06  | 0.61 | 0.45 | 0.61 | 1.06 | 0.30 | 1.06  | 0.60 | 0.75 | 0.75 | 1.06 | 0.32 |
| Delay/Veh:   | 117.1 | 20.4 | 18.3 | 47.9 | 64.3 | 18.0 | 146.0 | 41.7 | 51.8 | 43.1 | 81.9 | 29.1 |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 117.1 | 20.4 | 18.3 | 47.9 | 64.3 | 18.0 | 146.0 | 41.7 | 51.8 | 43.1 | 81.9 | 29.1 |
| LOS by Move: | F     | C    | B    | D    | E    | B    | F     | D    | D    | D    | F    | C    |
| HCM2kAvgQ:   | 14    | 12   | 8    | 5    | 37   | 5    | 8     | 6    | 8    | 9    | 25   | 4    |

Note: Queue reported is the number of cars per lane.

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FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #26 Cherry Ave/Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 1.069  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 49.8  
Optimal Cycle: 180 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |   |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |   |
| Rights:     | Include     |   |   | Ovl         |   |   | Include    |   |   | Ovl        |   |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |   |
| Lanes:      | 2           | 0 | 5 | 0           | 1 | 2 | 0          | 3 | 0 | 2          | 2 | 0 | 3 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 28   | 474  | 16   | 420  | 347  | 557  | 211  | 148  | 13   | 33   | 321  | 232  |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 34   | 584  | 20   | 517  | 428  | 686  | 260  | 182  | 16   | 41   | 395  | 286  |
| Added Vol:   | 211  | 465  | 117  | 446  | 1992 | 230  | 79   | 652  | 376  | 236  | 455  | 145  |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 245  | 1049 | 137  | 963  | 2420 | 916  | 339  | 834  | 392  | 277  | 850  | 431  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 258  | 1104 | 144  | 1014 | 2547 | 964  | 357  | 878  | 413  | 291  | 895  | 453  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 258  | 1104 | 144  | 1014 | 2547 | 964  | 357  | 878  | 413  | 291  | 895  | 453  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 258  | 1104 | 144  | 1014 | 2547 | 964  | 357  | 878  | 413  | 291  | 895  | 453  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.91 | 1.00 | 0.97 | 0.91 | 0.88 | 0.97 | 0.91 | 1.00 | 1.00 | 0.91 | 0.88 |
| Lanes:      | 2.00 | 5.00 | 1.00 | 2.00 | 3.00 | 2.00 | 2.00 | 3.00 | 1.00 | 1.00 | 3.00 | 2.00 |
| Final Sat.: | 3492 | 8190 | 1800 | 3492 | 4914 | 3168 | 3492 | 4914 | 1800 | 1800 | 4914 | 3168 |

Capacity Analysis Module:

|              |       |      |      |      |      |      |      |      |       |       |      |      |
|--------------|-------|------|------|------|------|------|------|------|-------|-------|------|------|
| Vol/Sat:     | 0.07  | 0.13 | 0.08 | 0.29 | 0.52 | 0.30 | 0.10 | 0.18 | 0.23  | 0.16  | 0.18 | 0.14 |
| Crit Moves:  | ****  | **** | **** | **** | **** | **** | **** | **** | ****  | ****  | **** | **** |
| Green/Cycle: | 0.07  | 0.18 | 0.18 | 0.38 | 0.48 | 0.62 | 0.13 | 0.21 | 0.21  | 0.15  | 0.23 | 0.61 |
| Volume/Cap:  | 1.07  | 0.77 | 0.46 | 0.77 | 1.07 | 0.49 | 0.78 | 0.83 | 1.07  | 1.07  | 0.78 | 0.23 |
| Delay/Veh:   | 123.8 | 41.8 | 38.0 | 30.0 | 65.8 | 10.8 | 50.2 | 43.4 | 104.6 | 116.4 | 39.3 | 8.8  |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00  | 1.00 | 1.00 |
| AdjDel/Veh:  | 123.8 | 41.8 | 38.0 | 30.0 | 65.8 | 10.8 | 50.2 | 43.4 | 104.6 | 116.4 | 39.3 | 8.8  |
| LOS by Move: | F     | D    | D    | C    | E    | B    | D    | D    | F     | F     | D    | A    |
| HCM2kAvgQ:   | 8     | 9    | 4    | 16   | 41   | 9    | 7    | 12   | 20    | 15    | 11   | 4    |

Note: Queue reported is the number of cars per lane.

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FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #27 Cherry Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.927  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 37.3  
Optimal Cycle: 112 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Permitted  |   |   | Permitted  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 1           | 0 | 3 | 0          | 1 | 0 | 0          | 1 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 17   | 454  | 10   | 41   | 358  | 162  | 222  | 43   | 67   | 8    | 91   | 19   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 21   | 559  | 12   | 51   | 441  | 200  | 274  | 53   | 83   | 10   | 112  | 23   |
| Added Vol:   | 496  | 604  | 28   | 241  | 1238 | 404  | 67   | 0    | 70   | 7    | 0    | 35   |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 517  | 1163 | 40   | 292  | 1679 | 604  | 341  | 53   | 153  | 17   | 112  | 58   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 544  | 1225 | 42   | 307  | 1767 | 635  | 358  | 56   | 161  | 18   | 118  | 61   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 544  | 1225 | 42   | 307  | 1767 | 635  | 358  | 56   | 161  | 18   | 118  | 61   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 544  | 1225 | 42   | 307  | 1767 | 635  | 358  | 56   | 161  | 18   | 118  | 61   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 1.00 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 2.90 | 0.10 | 1.00 | 3.00 | 1.00 | 1.00 | 0.26 | 0.74 | 0.13 | 0.87 | 1.00 |
| Final Sat.: | 1800 | 4749 | 165  | 1800 | 4914 | 1800 | 1710 | 441  | 1269 | 235  | 1565 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.30 | 0.26 | 0.26 | 0.17 | 0.36 | 0.35 | 0.21 | 0.13 | 0.13 | 0.08 | 0.08 | 0.03 |
| Crit Moves:  | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Green/Cycle: | 0.33 | 0.43 | 0.43 | 0.28 | 0.39 | 0.39 | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 |
| Volume/Cap:  | 0.93 | 0.60 | 0.60 | 0.60 | 0.93 | 0.91 | 0.93 | 0.56 | 0.56 | 0.33 | 0.33 | 0.15 |
| Delay/Veh:   | 53.6 | 22.4 | 22.4 | 32.9 | 37.7 | 44.9 | 58.1 | 35.0 | 35.0 | 32.9 | 32.9 | 31.2 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 53.6 | 22.4 | 22.4 | 32.9 | 37.7 | 44.9 | 58.1 | 35.0 | 35.0 | 32.9 | 32.9 | 31.2 |
| LOS by Move: | D    | C    | C    | C    | D    | D    | E    | C    | C    | C    | C    | C    |
| HCM2kAvgQ:   | 21   | 11   | 11   | 9    | 24   | 23   | 16   | 7    | 7    | 4    | 4    | 2    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #28 Cherry Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 1.014  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 54.6  
Optimal Cycle: 180 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 3 | 0           | 2 | 2 | 2          | 0 | 2 | 2          | 0 | 3 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 387  | 402  | 69   | 151  | 402  | 174  | 161  | 496  | 224  | 85   | 920  | 121  |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 477  | 495  | 85   | 186  | 495  | 214  | 198  | 611  | 276  | 105  | 1133 | 149  |
| Added Vol:   | 80   | 605  | 147  | 355  | 116  | 346  | 533  | 1084 | 12   | 22   | 426  | 408  |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 557  | 1100 | 232  | 541  | 611  | 560  | 731  | 1695 | 288  | 127  | 1559 | 557  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 586  | 1158 | 244  | 570  | 643  | 590  | 770  | 1784 | 303  | 133  | 1642 | 586  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 586  | 1158 | 244  | 570  | 643  | 590  | 770  | 1784 | 303  | 133  | 1642 | 586  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 586  | 1158 | 244  | 570  | 643  | 590  | 770  | 1784 | 303  | 133  | 1642 | 586  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.91 | 1.00 | 0.97 | 0.95 | 0.88 | 0.97 | 0.91 | 0.91 | 0.97 | 0.91 | 1.00 |
| Lanes:      | 2.00 | 3.00 | 1.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.56 | 0.44 | 2.00 | 3.00 | 1.00 |
| Final Sat.: | 3492 | 4914 | 1800 | 3492 | 3420 | 3168 | 3492 | 4200 | 714  | 3492 | 4914 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.17 | 0.24 | 0.14 | 0.16 | 0.19 | 0.19 | 0.22 | 0.42 | 0.42 | 0.04 | 0.33 | 0.33 |
| Crit Moves:  | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Green/Cycle: | 0.19 | 0.23 | 0.23 | 0.16 | 0.21 | 0.21 | 0.22 | 0.50 | 0.50 | 0.05 | 0.33 | 0.33 |
| Volume/Cap:  | 0.91 | 1.01 | 0.58 | 1.01 | 0.91 | 0.90 | 1.01 | 0.85 | 0.85 | 0.85 | 1.01 | 0.99 |
| Delay/Veh:   | 56.2 | 68.6 | 36.2 | 83.5 | 53.8 | 53.4 | 75.4 | 24.5 | 24.5 | 79.8 | 59.5 | 67.4 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 56.2 | 68.6 | 36.2 | 83.5 | 53.8 | 53.4 | 75.4 | 24.5 | 24.5 | 79.8 | 59.5 | 67.4 |
| LOS by Move: | E    | E    | D    | F    | D    | D    | E    | C    | C    | E    | E    | E    |
| HCM2kAvgQ:   | 13   | 19   | 7    | 14   | 14   | 14   | 18   | 23   | 23   | 4    | 26   | 24   |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

| Level Of Service Computation Report                    |                 |      |      |   |             |                          |      |   |            |       |      |      |            |      |   |
|--------------------------------------------------------|-----------------|------|------|---|-------------|--------------------------|------|---|------------|-------|------|------|------------|------|---|
| 2000 HCM Operations Method (Future Volume Alternative) |                 |      |      |   |             |                          |      |   |            |       |      |      |            |      |   |
| *****                                                  |                 |      |      |   |             |                          |      |   |            |       |      |      |            |      |   |
| Intersection #30 Beech Ave/Valley Blvd                 |                 |      |      |   |             |                          |      |   |            |       |      |      |            |      |   |
| *****                                                  |                 |      |      |   |             |                          |      |   |            |       |      |      |            |      |   |
| Cycle (sec):                                           | 100             |      |      |   |             | Critical Vol./Cap.(X):   |      |   |            | 0.685 |      |      |            |      |   |
| Loss Time (sec):                                       | 6 (Y+R=4.0 sec) |      |      |   |             | Average Delay (sec/veh): |      |   |            | 22.9  |      |      |            |      |   |
| Optimal Cycle:                                         | 40              |      |      |   |             | Level of Service:        |      |   |            | C     |      |      |            |      |   |
| *****                                                  |                 |      |      |   |             |                          |      |   |            |       |      |      |            |      |   |
| Approach:                                              | North Bound     |      |      |   | South Bound |                          |      |   | East Bound |       |      |      | West Bound |      |   |
| Movement:                                              | L               | T    | R    |   | L           | T                        | R    |   | L          | T     | R    | L    | T          | R    |   |
| ----- ----- ----- ----- -----                          |                 |      |      |   |             |                          |      |   |            |       |      |      |            |      |   |
| Control:                                               | Permitted       |      |      |   | Permitted   |                          |      |   | Protected  |       |      |      | Protected  |      |   |
| Rights:                                                | Include         |      |      |   | Include     |                          |      |   | Include    |       |      |      | Include    |      |   |
| Min. Green:                                            | 0               | 0    | 0    |   | 0           | 0                        | 0    |   | 0          | 0     | 0    | 0    | 0          | 0    |   |
| Lanes:                                                 | 1               | 0    | 1    | 1 | 0           | 1                        | 0    | 2 | 0          | 1     | 1    | 0    | 1          | 0    | 1 |
| ----- ----- ----- ----- -----                          |                 |      |      |   |             |                          |      |   |            |       |      |      |            |      |   |
| Volume Module:                                         |                 |      |      |   |             |                          |      |   |            |       |      |      |            |      |   |
| Base Vol:                                              | 4               | 2    | 12   |   | 68          | 3                        | 20   |   | 8          | 376   | 9    | 20   | 348        | 50   |   |
| Growth Adj:                                            | 1.23            | 1.23 | 1.23 |   | 1.23        | 1.23                     | 1.23 |   | 1.23       | 1.23  | 1.23 | 1.23 | 1.23       | 1.23 |   |
| Initial Bse:                                           | 5               | 2    | 15   |   | 84          | 4                        | 25   |   | 10         | 463   | 11   | 25   | 429        | 62   |   |
| Added Vol:                                             | 0               | 250  | 21   |   | 97          | 1245                     | 55   |   | 16         | 43    | 0    | 147  | 154        | 28   |   |
| PasserByVol:                                           | 0               | 0    | 0    |   | 0           | 0                        | 0    |   | 0          | 0     | 0    | 0    | 0          | 0    |   |
| Initial Fut:                                           | 5               | 252  | 36   |   | 181         | 1249                     | 80   |   | 26         | 506   | 11   | 172  | 583        | 90   |   |
| User Adj:                                              | 1.00            | 1.00 | 1.00 |   | 1.00        | 1.00                     | 1.00 |   | 1.00       | 1.00  | 1.00 | 1.00 | 1.00       | 1.00 |   |
| PHF Adj:                                               | 0.95            | 0.95 | 0.95 |   | 0.95        | 0.95                     | 0.95 |   | 0.95       | 0.95  | 0.95 | 0.95 | 0.95       | 0.95 |   |
| PHF Volume:                                            | 5               | 266  | 38   |   | 190         | 1314                     | 84   |   | 27         | 533   | 12   | 181  | 613        | 94   |   |
| Reduct Vol:                                            | 0               | 0    | 0    |   | 0           | 0                        | 0    |   | 0          | 0     | 0    | 0    | 0          | 0    |   |
| Reduced Vol:                                           | 5               | 266  | 38   |   | 190         | 1314                     | 84   |   | 27         | 533   | 12   | 181  | 613        | 94   |   |
| PCE Adj:                                               | 1.00            | 1.00 | 1.00 |   | 1.00        | 1.00                     | 1.00 |   | 1.00       | 1.00  | 1.00 | 1.00 | 1.00       | 1.00 |   |
| MLF Adj:                                               | 1.00            | 1.00 | 1.00 |   | 1.00        | 1.00                     | 1.00 |   | 1.00       | 1.00  | 1.00 | 1.00 | 1.00       | 1.00 |   |
| FinalVolume:                                           | 5               | 266  | 38   |   | 190         | 1314                     | 84   |   | 27         | 533   | 12   | 181  | 613        | 94   |   |
| ----- ----- ----- ----- -----                          |                 |      |      |   |             |                          |      |   |            |       |      |      |            |      |   |
| Saturation Flow Module:                                |                 |      |      |   |             |                          |      |   |            |       |      |      |            |      |   |
| Sat/Lane:                                              | 1800            | 1800 | 1800 |   | 1800        | 1800                     | 1800 |   | 1800       | 1800  | 1800 | 1800 | 1800       | 1800 |   |
| Adjustment:                                            | 1.00            | 0.95 | 0.95 |   | 1.00        | 0.95                     | 1.00 |   | 1.00       | 0.95  | 0.95 | 1.00 | 0.95       | 1.00 |   |
| Lanes:                                                 | 1.00            | 1.75 | 0.25 |   | 1.00        | 2.00                     | 1.00 |   | 1.00       | 1.96  | 0.04 | 1.00 | 2.00       | 1.00 |   |
| Final Sat.:                                            | 1800            | 2995 | 425  |   | 1800        | 3420                     | 1800 |   | 1800       | 3347  | 73   | 1800 | 3420       | 1800 |   |
| ----- ----- ----- ----- -----                          |                 |      |      |   |             |                          |      |   |            |       |      |      |            |      |   |
| Capacity Analysis Module:                              |                 |      |      |   |             |                          |      |   |            |       |      |      |            |      |   |
| Vol/Sat:                                               | 0.00            | 0.09 | 0.09 |   | 0.11        | 0.38                     | 0.05 |   | 0.02       | 0.16  | 0.16 | 0.10 | 0.18       | 0.05 |   |
| Crit Moves:                                            |                 |      |      |   | ****        |                          |      |   | ****       |       |      |      | ****       |      |   |
| Green/Cycle:                                           | 0.56            | 0.56 | 0.56 |   | 0.56        | 0.56                     | 0.56 |   | 0.03       | 0.23  | 0.23 | 0.15 | 0.35       | 0.35 |   |
| Volume/Cap:                                            | 0.01            | 0.16 | 0.16 |   | 0.19        | 0.69                     | 0.08 |   | 0.51       | 0.69  | 0.69 | 0.69 | 0.51       | 0.15 |   |
| Delay/Veh:                                             | 9.7             | 10.6 | 10.6 |   | 10.9        | 16.7                     | 10.1 |   | 56.1       | 37.5  | 37.5 | 47.8 | 26.2       | 22.4 |   |
| User DeAdj:                                            | 1.00            | 1.00 | 1.00 |   | 1.00        | 1.00                     | 1.00 |   | 1.00       | 1.00  | 1.00 | 1.00 | 1.00       | 1.00 |   |
| AdjDel/Veh:                                            | 9.7             | 10.6 | 10.6 |   | 10.9        | 16.7                     | 10.1 |   | 56.1       | 37.5  | 37.5 | 47.8 | 26.2       | 22.4 |   |
| LOS by Move:                                           | A               | B    | B    |   | B           | B                        | B    |   | E          | D     | D    | D    | C          | C    |   |
| HCM2kAvgQ:                                             | 0               | 2    | 2    |   | 3           | 16                       | 1    |   | 2          | 9     | 9    | 7    | 8          | 2    |   |
| *****                                                  |                 |      |      |   |             |                          |      |   |            |       |      |      |            |      |   |
| Note: Queue reported is the number of cars per lane.   |                 |      |      |   |             |                          |      |   |            |       |      |      |            |      |   |
| *****                                                  |                 |      |      |   |             |                          |      |   |            |       |      |      |            |      |   |

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
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| Level Of Service Computation Report                    |                 |       |       |       |             |                          |       |       |            |       |       |            |       |       |   |
|--------------------------------------------------------|-----------------|-------|-------|-------|-------------|--------------------------|-------|-------|------------|-------|-------|------------|-------|-------|---|
| 2000 HCM Operations Method (Future Volume Alternative) |                 |       |       |       |             |                          |       |       |            |       |       |            |       |       |   |
| *****                                                  |                 |       |       |       |             |                          |       |       |            |       |       |            |       |       |   |
| Intersection #31 Beech Ave/Slover Ave                  |                 |       |       |       |             |                          |       |       |            |       |       |            |       |       |   |
| *****                                                  |                 |       |       |       |             |                          |       |       |            |       |       |            |       |       |   |
| Cycle (sec):                                           | 100             |       |       |       |             | Critical Vol./Cap.(X):   |       |       |            | 0.936 |       |            |       |       |   |
| Loss Time (sec):                                       | 8 (Y+R=4.0 sec) |       |       |       |             | Average Delay (sec/veh): |       |       |            | 38.7  |       |            |       |       |   |
| Optimal Cycle:                                         | 124             |       |       |       |             | Level Of Service:        |       |       |            | D     |       |            |       |       |   |
| *****                                                  |                 |       |       |       |             |                          |       |       |            |       |       |            |       |       |   |
| Approach:                                              | North Bound     |       |       |       | South Bound |                          |       |       | East Bound |       |       | West Bound |       |       |   |
| Movement:                                              | L               | T     | R     |       | L           | T                        | R     |       | L          | T     | R     | L          | T     | R     |   |
| -----                                                  | -----           | ----- | ----- | ----- | -----       | -----                    | ----- | ----- | -----      | ----- | ----- | -----      | ----- | ----- |   |
| Control:                                               | Protected       |       |       |       | Protected   |                          |       |       | Protected  |       |       | Protected  |       |       |   |
| Rights:                                                | Include         |       |       |       | Include     |                          |       |       | Include    |       |       | Include    |       |       |   |
| Min. Green:                                            | 0               | 0     | 0     |       | 0           | 0                        | 0     |       | 0          | 0     | 0     | 0          | 0     | 0     |   |
| Lanes:                                                 | 1               | 0     | 2     | 0     | 1           | 1                        | 0     | 2     | 0          | 1     | 2     | 0          | 3     | 0     | 1 |
| -----                                                  | -----           | ----- | ----- | ----- | -----       | -----                    | ----- | ----- | -----      | ----- | ----- | -----      | ----- | ----- |   |
| Volume Module:                                         |                 |       |       |       |             |                          |       |       |            |       |       |            |       |       |   |
| Base Vol:                                              | 72              | 8     | 73    |       | 8           | 0                        | 5     | 5     | 427        | 111   | 121   | 381        | 16    |       |   |
| Growth Adj:                                            | 1.23            | 1.23  | 1.23  |       | 1.23        | 1.23                     | 1.23  | 1.23  | 1.23       | 1.23  | 1.23  | 1.23       | 1.23  | 1.23  |   |
| Initial Bse:                                           | 89              | 10    | 90    |       | 10          | 0                        | 6     | 6     | 526        | 137   | 149   | 469        | 20    |       |   |
| Added Vol:                                             | 63              | 120   | 101   |       | 272         | 713                      | 482   | 115   | 768        | 17    | 145   | 907        | 55    |       |   |
| PasserByVol:                                           | 0               | 0     | 0     |       | 0           | 0                        | 0     | 0     | 0          | 0     | 0     | 0          | 0     | 0     |   |
| Initial Fut:                                           | 152             | 130   | 191   |       | 282         | 713                      | 488   | 121   | 1294       | 154   | 294   | 1376       | 75    |       |   |
| User Adj:                                              | 1.00            | 1.00  | 1.00  |       | 1.00        | 1.00                     | 1.00  | 1.00  | 1.00       | 1.00  | 1.00  | 1.00       | 1.00  | 1.00  |   |
| PHF Adj:                                               | 0.95            | 0.95  | 0.95  |       | 0.95        | 0.95                     | 0.95  | 0.95  | 0.95       | 0.95  | 0.95  | 0.95       | 0.95  | 0.95  |   |
| PHF Volume:                                            | 160             | 137   | 201   |       | 297         | 751                      | 514   | 128   | 1362       | 162   | 310   | 1449       | 79    |       |   |
| Reduct Vol:                                            | 0               | 0     | 0     |       | 0           | 0                        | 0     | 0     | 0          | 0     | 0     | 0          | 0     | 0     |   |
| Reduced Vol:                                           | 160             | 137   | 201   |       | 297         | 751                      | 514   | 128   | 1362       | 162   | 310   | 1449       | 79    |       |   |
| PCE Adj:                                               | 1.00            | 1.00  | 1.00  |       | 1.00        | 1.00                     | 1.00  | 1.00  | 1.00       | 1.00  | 1.00  | 1.00       | 1.00  | 1.00  |   |
| MLF Adj:                                               | 1.00            | 1.00  | 1.00  |       | 1.00        | 1.00                     | 1.00  | 1.00  | 1.00       | 1.00  | 1.00  | 1.00       | 1.00  | 1.00  |   |
| FinalVolume:                                           | 160             | 137   | 201   |       | 297         | 751                      | 514   | 128   | 1362       | 162   | 310   | 1449       | 79    |       |   |
| -----                                                  | -----           | ----- | ----- | ----- | -----       | -----                    | ----- | ----- | -----      | ----- | ----- | -----      | ----- | ----- |   |
| Saturation Flow Module:                                |                 |       |       |       |             |                          |       |       |            |       |       |            |       |       |   |
| Sat/Lane:                                              | 1800            | 1800  | 1800  |       | 1800        | 1800                     | 1800  | 1800  | 1800       | 1800  | 1800  | 1800       | 1800  |       |   |
| Adjustment:                                            | 1.00            | 0.95  | 1.00  |       | 1.00        | 0.95                     | 1.00  | 0.97  | 0.95       | 1.00  | 0.97  | 0.91       | 1.00  |       |   |
| Lanes:                                                 | 1.00            | 2.00  | 1.00  |       | 1.00        | 2.00                     | 1.00  | 2.00  | 2.00       | 1.00  | 2.00  | 3.00       | 1.00  |       |   |
| Final Sat.:                                            | 1800            | 3420  | 1800  |       | 1800        | 3420                     | 1800  | 3492  | 3420       | 1800  | 3492  | 4914       | 1800  |       |   |
| -----                                                  | -----           | ----- | ----- | ----- | -----       | -----                    | ----- | ----- | -----      | ----- | ----- | -----      | ----- | ----- |   |
| Capacity Analysis Module:                              |                 |       |       |       |             |                          |       |       |            |       |       |            |       |       |   |
| Vol/Sat:                                               | 0.09            | 0.04  | 0.11  |       | 0.16        | 0.22                     | 0.29  | 0.04  | 0.40       | 0.09  | 0.09  | 0.29       | 0.04  |       |   |
| Crit Moves:                                            | ****            |       |       |       | ****        |                          |       |       | ****       |       |       | ****       |       |       |   |
| Green/Cycle:                                           | 0.09            | 0.16  | 0.16  |       | 0.24        | 0.30                     | 0.30  | 0.06  | 0.43       | 0.43  | 0.09  | 0.46       | 0.46  |       |   |
| Volume/Cap:                                            | 0.94            | 0.25  | 0.69  |       | 0.69        | 0.72                     | 0.94  | 0.64  | 0.94       | 0.21  | 0.94  | 0.64       | 0.09  |       |   |
| Delay/Veh:                                             | 95.3            | 36.9  | 46.5  |       | 39.5        | 33.4                     | 57.4  | 52.8  | 39.0       | 18.3  | 78.2  | 21.1       | 15.1  |       |   |
| User DelAdj:                                           | 1.00            | 1.00  | 1.00  |       | 1.00        | 1.00                     | 1.00  | 1.00  | 1.00       | 1.00  | 1.00  | 1.00       | 1.00  |       |   |
| AdjDel/Veh:                                            | 95.3            | 36.9  | 46.5  |       | 39.5        | 33.4                     | 57.4  | 52.8  | 39.0       | 18.3  | 78.2  | 21.1       | 15.1  |       |   |
| LOS by Move:                                           | F               | D     | D     |       | D           | C                        | E     | D     | D          | B     | E     | C          | B     |       |   |
| HCM2kAvgQ:                                             | 8               | 2     | 7     |       | 10          | 12                       | 20    | 3     | 26         | 3     | 8     | 13         | 1     |       |   |
| *****                                                  |                 |       |       |       |             |                          |       |       |            |       |       |            |       |       |   |
| Note: Queue reported is the number of cars per lane.   |                 |       |       |       |             |                          |       |       |            |       |       |            |       |       |   |
| *****                                                  |                 |       |       |       |             |                          |       |       |            |       |       |            |       |       |   |

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

| Level Of Service Computation Report                                           |                 |      |                          |             |      |      |            |      |       |            |      |      |
|-------------------------------------------------------------------------------|-----------------|------|--------------------------|-------------|------|------|------------|------|-------|------------|------|------|
| 2000 HCM Operations Method (Future Volume Alternative)                        |                 |      |                          |             |      |      |            |      |       |            |      |      |
| *****                                                                         |                 |      |                          |             |      |      |            |      |       |            |      |      |
| Intersection #32 Beech Ave/Santa Ana Ave                                      |                 |      |                          |             |      |      |            |      |       |            |      |      |
| *****                                                                         |                 |      |                          |             |      |      |            |      |       |            |      |      |
| Cycle (sec):                                                                  | 100             |      | Critical Vol./Cap.(X):   |             |      |      |            |      | 0.408 |            |      |      |
| Loss Time (sec):                                                              | 6 (Y+R=4.0 sec) |      | Average Delay (sec/veh): |             |      |      |            |      | 20.8  |            |      |      |
| Optimal Cycle:                                                                | 23              |      | Level of Service:        |             |      |      |            |      | C     |            |      |      |
| *****                                                                         |                 |      |                          |             |      |      |            |      |       |            |      |      |
| Approach:                                                                     | North Bound     |      |                          | South Bound |      |      | East Bound |      |       | West Bound |      |      |
| Movement:                                                                     | L               | T    | R                        | L           | T    | R    | L          | T    | R     | L          | T    | R    |
| ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- |                 |      |                          |             |      |      |            |      |       |            |      |      |
| Control:                                                                      | Protected       |      |                          | Protected   |      |      | Permitted  |      |       | Permitted  |      |      |
| Rights:                                                                       | Include         |      |                          | Include     |      |      | Include    |      |       | Include    |      |      |
| Min. Green:                                                                   | 0               | 0    | 0                        | 0           | 0    | 0    | 0          | 0    | 0     | 0          | 0    | 0    |
| Lanes:                                                                        | 1               | 0    | 1                        | 0           | 1    | 0    | 1          | 0    | 1     | 0          | 1    | 0    |
| ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- |                 |      |                          |             |      |      |            |      |       |            |      |      |
| Volume Module:                                                                |                 |      |                          |             |      |      |            |      |       |            |      |      |
| Base Vol:                                                                     | 8               | 122  | 72                       | 22          | 55   | 19   | 50         | 126  | 7     | 38         | 97   | 36   |
| Growth Adj:                                                                   | 1.23            | 1.23 | 1.23                     | 1.23        | 1.23 | 1.23 | 1.23       | 1.23 | 1.23  | 1.23       | 1.23 | 1.23 |
| Initial Bse:                                                                  | 10              | 150  | 89                       | 27          | 68   | 23   | 62         | 155  | 9     | 47         | 120  | 44   |
| Added Vol:                                                                    | 62              | 175  | 0                        | 134         | 351  | 390  | 84         | 0    | 12    | 0          | 0    | 17   |
| PasserByVol:                                                                  | 0               | 0    | 0                        | 0           | 0    | 0    | 0          | 0    | 0     | 0          | 0    | 0    |
| Initial Fut:                                                                  | 72              | 325  | 89                       | 161         | 419  | 413  | 146        | 155  | 21    | 47         | 120  | 61   |
| User Adj:                                                                     | 1.00            | 1.00 | 1.00                     | 1.00        | 1.00 | 1.00 | 1.00       | 1.00 | 1.00  | 1.00       | 1.00 | 1.00 |
| PHF Adj:                                                                      | 0.95            | 0.95 | 0.95                     | 0.95        | 0.95 | 0.95 | 0.95       | 0.95 | 0.95  | 0.95       | 0.95 | 0.95 |
| PHF Volume:                                                                   | 76              | 342  | 93                       | 170         | 441  | 435  | 153        | 163  | 22    | 49         | 126  | 65   |
| Reduct Vol:                                                                   | 0               | 0    | 0                        | 0           | 0    | 0    | 0          | 0    | 0     | 0          | 0    | 0    |
| Reduced Vol:                                                                  | 76              | 342  | 93                       | 170         | 441  | 435  | 153        | 163  | 22    | 49         | 126  | 65   |
| PCE Adj:                                                                      | 1.00            | 1.00 | 1.00                     | 1.00        | 1.00 | 1.00 | 1.00       | 1.00 | 1.00  | 1.00       | 1.00 | 1.00 |
| MLF Adj:                                                                      | 1.00            | 1.00 | 1.00                     | 1.00        | 1.00 | 1.00 | 1.00       | 1.00 | 1.00  | 1.00       | 1.00 | 1.00 |
| FinalVolume:                                                                  | 76              | 342  | 93                       | 170         | 441  | 435  | 153        | 163  | 22    | 49         | 126  | 65   |
| ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- |                 |      |                          |             |      |      |            |      |       |            |      |      |
| Saturation Flow Module:                                                       |                 |      |                          |             |      |      |            |      |       |            |      |      |
| Sat/Lane:                                                                     | 1800            | 1800 | 1800                     | 1800        | 1800 | 1800 | 1800       | 1800 | 1800  | 1800       | 1800 | 1800 |
| Adjustment:                                                                   | 1.00            | 1.00 | 1.00                     | 1.00        | 1.00 | 1.00 | 0.95       | 0.95 | 0.95  | 0.95       | 0.95 | 0.95 |
| Lanes:                                                                        | 1.00            | 1.00 | 1.00                     | 1.00        | 1.00 | 1.00 | 0.91       | 0.96 | 0.13  | 0.41       | 1.05 | 0.54 |
| Final Sat.:                                                                   | 1800            | 1800 | 1800                     | 1800        | 1800 | 1800 | 1549       | 1652 | 219   | 703        | 1795 | 922  |
| ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- |                 |      |                          |             |      |      |            |      |       |            |      |      |
| Capacity Analysis Module:                                                     |                 |      |                          |             |      |      |            |      |       |            |      |      |
| Vol/Sat:                                                                      | 0.04            | 0.19 | 0.05                     | 0.09        | 0.24 | 0.24 | 0.10       | 0.10 | 0.10  | 0.07       | 0.07 | 0.07 |
| Crit Moves:                                                                   | ****            |      |                          | ****        |      |      | ****       |      |       |            |      |      |
| Green/Cycle:                                                                  | 0.10            | 0.47 | 0.47                     | 0.23        | 0.60 | 0.60 | 0.24       | 0.24 | 0.24  | 0.24       | 0.24 | 0.24 |
| Volume/Cap:                                                                   | 0.41            | 0.41 | 0.11                     | 0.41        | 0.41 | 0.41 | 0.41       | 0.41 | 0.41  | 0.29       | 0.29 | 0.29 |
| Delay/Veh:                                                                    | 43.6            | 17.9 | 15.1                     | 33.3        | 11.1 | 11.1 | 32.2       | 32.2 | 32.2  | 31.0       | 31.0 | 31.0 |
| User DeAdj:                                                                   | 1.00            | 1.00 | 1.00                     | 1.00        | 1.00 | 1.00 | 1.00       | 1.00 | 1.00  | 1.00       | 1.00 | 1.00 |
| AdjDel/Veh:                                                                   | 43.6            | 17.9 | 15.1                     | 33.3        | 11.1 | 11.1 | 32.2       | 32.2 | 32.2  | 31.0       | 31.0 | 31.0 |
| LOS by Move:                                                                  | D               | B    | B                        | C           | B    | B    | C          | C    | C     | C          | C    | C    |
| HCM2kAvgQ:                                                                    | 3               | 7    | 2                        | 5           | 7    | 7    | 5          | 5    | 5     | 3          | 3    | 3    |
| *****                                                                         |                 |      |                          |             |      |      |            |      |       |            |      |      |
| Note: Queue reported is the number of cars per lane.                          |                 |      |                          |             |      |      |            |      |       |            |      |      |
| *****                                                                         |                 |      |                          |             |      |      |            |      |       |            |      |      |

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

| Level Of Service Computation Report                                           |                  |      |      |             |      |                          |            |      |      |            |      |      |
|-------------------------------------------------------------------------------|------------------|------|------|-------------|------|--------------------------|------------|------|------|------------|------|------|
| 2000 HCM Operations Method (Future Volume Alternative)                        |                  |      |      |             |      |                          |            |      |      |            |      |      |
| *****                                                                         |                  |      |      |             |      |                          |            |      |      |            |      |      |
| Intersection #33 Beech Ave/Jurupa St                                          |                  |      |      |             |      |                          |            |      |      |            |      |      |
| *****                                                                         |                  |      |      |             |      |                          |            |      |      |            |      |      |
| Cycle (sec):                                                                  | 100              |      |      |             |      | Critical Vol./Cap.(X):   |            |      |      | 1.049      |      |      |
| Loss Time (sec):                                                              | 10 (Y+R=4.0 sec) |      |      |             |      | Average Delay (sec/veh): |            |      |      | 49.8       |      |      |
| Optimal Cycle:                                                                | 180              |      |      |             |      | Level Of Service:        |            |      |      | D          |      |      |
| *****                                                                         |                  |      |      |             |      |                          |            |      |      |            |      |      |
| Approach:                                                                     | North Bound      |      |      | South Bound |      |                          | East Bound |      |      | West Bound |      |      |
| Movement:                                                                     | L                | T    | R    | L           | T    | R                        | L          | T    | R    | L          | T    | R    |
| Control:                                                                      | Protected        |      |      | Protected   |      |                          | Protected  |      |      | Protected  |      |      |
| Rights:                                                                       | Include          |      |      | Include     |      |                          | Include    |      |      | Include    |      |      |
| Min. Green:                                                                   | 0                | 0    | 0    | 0           | 0    | 0                        | 0          | 0    | 0    | 0          | 0    | 0    |
| Lanes:                                                                        | 2                | 0    | 1    | 0           | 1    | 0                        | 1          | 0    | 3    | 0          | 1    | 0    |
| ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- |                  |      |      |             |      |                          |            |      |      |            |      |      |
| Volume Module:                                                                |                  |      |      |             |      |                          |            |      |      |            |      |      |
| Base Vol:                                                                     | 316              | 38   | 13   | 2           | 5    | 73                       | 117        | 412  | 137  | 1          | 303  | 11   |
| Growth Adj:                                                                   | 1.23             | 1.23 | 1.23 | 1.23        | 1.23 | 1.23                     | 1.23       | 1.23 | 1.23 | 1.23       | 1.23 | 1.23 |
| Initial Bse:                                                                  | 389              | 47   | 16   | 2           | 6    | 90                       | 144        | 508  | 169  | 1          | 373  | 14   |
| Added Vol:                                                                    | 95               | 221  | 126  | 0           | 54   | 119                      | 17         | 747  | 17   | 18         | 1517 | 0    |
| PasserByVol:                                                                  | 0                | 0    | 0    | 0           | 0    | 0                        | 0          | 0    | 0    | 0          | 0    | 0    |
| Initial Fut:                                                                  | 484              | 268  | 142  | 2           | 60   | 209                      | 161        | 1255 | 186  | 19         | 1890 | 14   |
| User Adj:                                                                     | 1.00             | 1.00 | 1.00 | 1.00        | 1.00 | 1.00                     | 1.00       | 1.00 | 1.00 | 1.00       | 1.00 | 1.00 |
| PHF Adj:                                                                      | 0.95             | 0.95 | 0.95 | 0.95        | 0.95 | 0.95                     | 0.95       | 0.95 | 0.95 | 0.95       | 0.95 | 0.95 |
| PHF Volume:                                                                   | 510              | 282  | 149  | 3           | 63   | 220                      | 170        | 1321 | 196  | 20         | 1990 | 14   |
| Reduct Vol:                                                                   | 0                | 0    | 0    | 0           | 0    | 0                        | 0          | 0    | 0    | 0          | 0    | 0    |
| Reduced Vol:                                                                  | 510              | 282  | 149  | 3           | 63   | 220                      | 170        | 1321 | 196  | 20         | 1990 | 14   |
| PCE Adj:                                                                      | 1.00             | 1.00 | 1.00 | 1.00        | 1.00 | 1.00                     | 1.00       | 1.00 | 1.00 | 1.00       | 1.00 | 1.00 |
| MLF Adj:                                                                      | 1.00             | 1.00 | 1.00 | 1.00        | 1.00 | 1.00                     | 1.00       | 1.00 | 1.00 | 1.00       | 1.00 | 1.00 |
| FinalVolume:                                                                  | 510              | 282  | 149  | 3           | 63   | 220                      | 170        | 1321 | 196  | 20         | 1990 | 14   |
| ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- |                  |      |      |             |      |                          |            |      |      |            |      |      |
| Saturation Flow Module:                                                       |                  |      |      |             |      |                          |            |      |      |            |      |      |
| Sat/Lane:                                                                     | 1800             | 1800 | 1800 | 1800        | 1800 | 1800                     | 1800       | 1800 | 1800 | 1800       | 1800 | 1800 |
| Adjustment:                                                                   | 0.97             | 1.00 | 1.00 | 1.00        | 1.00 | 1.00                     | 1.00       | 0.91 | 1.00 | 1.00       | 0.95 | 1.00 |
| Lanes:                                                                        | 2.00             | 1.00 | 1.00 | 1.00        | 1.00 | 1.00                     | 1.00       | 3.00 | 1.00 | 1.00       | 2.00 | 1.00 |
| Final Sat.:                                                                   | 3492             | 1800 | 1800 | 1800        | 1800 | 1800                     | 1800       | 4914 | 1800 | 1800       | 3420 | 1800 |
| ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- |                  |      |      |             |      |                          |            |      |      |            |      |      |
| Capacity Analysis Module:                                                     |                  |      |      |             |      |                          |            |      |      |            |      |      |
| Vol/Sat:                                                                      | 0.15             | 0.16 | 0.08 | 0.00        | 0.04 | 0.12                     | 0.09       | 0.27 | 0.11 | 0.01       | 0.58 | 0.01 |
| Crit Moves:                                                                   | ****             |      |      | ****        |      |                          | ****       |      |      | ****       |      |      |
| Green/Cycle:                                                                  | 0.14             | 0.25 | 0.25 | 0.00        | 0.12 | 0.12                     | 0.09       | 0.62 | 0.62 | 0.03       | 0.55 | 0.55 |
| Volume/Cap:                                                                   | 1.05             | 0.62 | 0.33 | 0.62        | 0.30 | 1.05                     | 1.05       | 0.43 | 0.18 | 0.43       | 1.05 | 0.01 |
| Delay/Veh:                                                                    | 97.4             | 35.6 | 30.8 | 201.1       | 41.3 | 119.9                    | 129.9      | 10.1 | 8.2  | 54.4       | 57.2 | 10.0 |
| User DelAdj:                                                                  | 1.00             | 1.00 | 1.00 | 1.00        | 1.00 | 1.00                     | 1.00       | 1.00 | 1.00 | 1.00       | 1.00 | 1.00 |
| AdjDel/Veh:                                                                   | 97.4             | 35.6 | 30.8 | 201.1       | 41.3 | 119.9                    | 129.9      | 10.1 | 8.2  | 54.4       | 57.2 | 10.0 |
| LOS by Move:                                                                  | F                | D    | C    | F           | D    | F                        | F          | B    | A    | D          | E    | B    |
| HCM2kAvgQ:                                                                    | 14               | 8    | 4    | 1           | 2    | 12                       | 10         | 8    | 3    | 1          | 44   | 0    |
| *****                                                                         |                  |      |      |             |      |                          |            |      |      |            |      |      |
| Note: Queue reported is the number of cars per lane.                          |                  |      |      |             |      |                          |            |      |      |            |      |      |
| *****                                                                         |                  |      |      |             |      |                          |            |      |      |            |      |      |

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)  
\*\*\*\*\*  
Intersection #34 Citrus Ave/Valley Blvd  
\*\*\*\*\*  
Cycle (sec): 100 Critical Vol./Cap.(X): 0.901  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 38.9  
Optimal Cycle: 100 Level Of Service: D  
\*\*\*\*\*  
Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R  
Control: Protected Protected Protected Protected  
Rights: Include Include Ovl Include  
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0  
Lanes: 2 0 2 0 1 1 0 2 0 1 2 0 1 1 0  
\*\*\*\*\*  
Volume Module:  
Base Vol: 352 695 122 104 727 35 28 206 491 397 425 83  
Growth Adj: 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23  
Initial Bse: 434 856 150 128 896 43 34 254 605 489 524 102  
Added Vol: 113 84 0 0 465 91 13 26 122 0 124 0  
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0  
Initial Fut: 547 940 150 128 1361 134 47 280 727 489 648 102  
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95  
PHF Volume: 575 990 158 135 1432 141 50 295 765 515 682 108  
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
Reduced Vol: 575 990 158 135 1432 141 50 295 765 515 682 108  
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
FinalVolume: 575 990 158 135 1432 141 50 295 765 515 682 108  
\*\*\*\*\*  
Saturation Flow Module:  
Sat/Lane: 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800  
Adjustment: 0.97 0.95 1.00 1.00 0.95 1.00 0.97 0.95 0.88 0.97 0.95 0.95  
Lanes: 2.00 2.00 1.00 1.00 2.00 1.00 2.00 2.00 2.00 2.00 1.73 0.27  
Final Sat.: 3492 3420 1800 1800 3420 1800 3492 3420 3168 3492 2954 466  
\*\*\*\*\*  
Capacity Analysis Module:  
Vol/Sat: 0.16 0.29 0.09 0.07 0.42 0.08 0.01 0.09 0.24 0.15 0.23 0.23  
Crit Moves: \*\*\*\* \*\*\*\* \*\*\*\* \*\*\*\*  
Green/Cycle: 0.18 0.51 0.51 0.13 0.46 0.46 0.02 0.10 0.28 0.17 0.26 0.26  
Volume/Cap: 0.90 0.56 0.17 0.56 0.90 0.17 0.90 0.86 0.85 0.86 0.90 0.90  
Delay/Veh: 55.8 17.0 13.0 43.6 32.0 15.6 134.3 63.2 41.8 52.1 48.3 48.3  
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
AdjDel/Veh: 55.8 17.0 13.0 43.6 32.0 15.6 134.3 63.2 41.8 52.1 48.3 48.3  
LOS by Move: E B B D C B F E D D D D  
HCM2kAvgQ: 12 11 3 5 25 2 2 7 15 11 16 16  
\*\*\*\*\*  
Note: Queue reported is the number of cars per lane.  
\*\*\*\*\*

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)  
\*\*\*\*\*  
Intersection #37 Citrus Ave/Slover Ave  
\*\*\*\*\*  
Cycle (sec): 100 Critical Vol./Cap.(X): 0.999  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 49.9  
Optimal Cycle: 180 Level Of Service: D  
\*\*\*\*\*  
Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R  
Control: Protected Protected Protected Protected  
Rights: Include Include Include Include  
Min. Green: 0 0 0 0 0 0 0 0 0 0 0 0  
Lanes: 1 0 2 0 1 1 0 2 0 2 2 0 3 0 1 1 0 3 0 1  
\*\*\*\*\*  
Volume Module:  
Base Vol: 17 376 62 245 179 505 237 235 7 48 422 224  
Growth Adj: 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23  
Initial Bse: 21 463 76 302 221 622 292 290 9 59 520 276  
Added Vol: 86 103 36 0 643 410 115 283 25 238 1307 0  
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0  
Initial Fut: 107 566 112 302 864 1032 407 573 34 297 1827 276  
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95  
PHF Volume: 113 596 118 318 909 1086 428 603 35 313 1923 290  
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
Reduced Vol: 113 596 118 318 909 1086 428 603 35 313 1923 290  
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
FinalVolume: 113 596 118 318 909 1086 428 603 35 313 1923 290  
\*\*\*\*\*  
Saturation Flow Module:  
Sat/Lane: 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800  
Adjustment: 1.00 0.95 1.00 1.00 0.95 0.88 0.97 0.91 1.00 1.00 0.91 1.00  
Lanes: 1.00 2.00 1.00 1.00 2.00 2.00 2.00 3.00 1.00 1.00 3.00 1.00  
Final Sat.: 1800 3420 1800 1800 3420 3168 3492 4914 1800 1800 4914 1800  
\*\*\*\*\*  
Capacity Analysis Module:  
Vol/Sat: 0.06 0.17 0.07 0.18 0.27 0.34 0.12 0.12 0.02 0.17 0.39 0.16  
Crit Moves: \*\*\*\* \*\*\*\* \*\*\*\* \*\*\*\*  
Green/Cycle: 0.06 0.20 0.20 0.20 0.34 0.34 0.12 0.21 0.21 0.30 0.39 0.39  
Volume/Cap: 1.00 0.86 0.33 0.86 0.77 1.00 1.00 0.58 0.09 0.58 1.00 0.41  
Delay/Veh: 131.5 49.7 34.6 57.2 32.7 60.0 87.2 36.1 31.7 31.1 50.8 22.5  
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
AdjDel/Veh: 131.5 49.7 34.6 57.2 32.7 60.0 87.2 36.1 31.7 31.1 50.8 22.5  
LOS by Move: F D C E C E F D C C D C  
HCM2kAvgQ: 7 12 3 12 15 26 11 7 1 9 29 7  
\*\*\*\*\*  
Note: Queue reported is the number of cars per lane.  
\*\*\*\*\*

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #38 Citrus Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 1.007  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 54.0  
Optimal Cycle: 180 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 0 | 1           | 0 | 0 | 1          | 0 | 0 | 1          | 0 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 11   | 280  | 37   | 18   | 155  | 33   | 49   | 103  | 0    | 20   | 178  | 21   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 14   | 345  | 46   | 22   | 191  | 41   | 60   | 127  | 0    | 25   | 219  | 26   |
| Added Vol:   | 87   | 212  | 0    | 0    | 427  | 277  | 37   | 28   | 11   | 0    | 205  | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 101  | 557  | 46   | 22   | 618  | 318  | 97   | 155  | 11   | 25   | 424  | 26   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 106  | 586  | 48   | 23   | 650  | 334  | 102  | 163  | 12   | 26   | 447  | 27   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 106  | 586  | 48   | 23   | 650  | 334  | 102  | 163  | 12   | 26   | 447  | 27   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 106  | 586  | 48   | 23   | 650  | 334  | 102  | 163  | 12   | 26   | 447  | 27   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 0.92 | 0.08 | 1.00 | 0.66 | 0.34 | 1.00 | 0.93 | 0.07 | 1.00 | 0.94 | 0.06 |
| Final Sat.: | 1800 | 1664 | 136  | 1800 | 1189 | 611  | 1800 | 1681 | 119  | 1800 | 1697 | 103  |

Capacity Analysis Module:

|              |       |      |      |      |      |      |       |      |      |      |      |      |
|--------------|-------|------|------|------|------|------|-------|------|------|------|------|------|
| Vol/Sat:     | 0.06  | 0.35 | 0.35 | 0.01 | 0.55 | 0.55 | 0.06  | 0.10 | 0.10 | 0.01 | 0.26 | 0.26 |
| Crit Moves:  | ****  |      |      | **** |      | **** |       |      |      | **** |      |      |
| Green/Cycle: | 0.06  | 0.58 | 0.58 | 0.02 | 0.54 | 0.54 | 0.06  | 0.28 | 0.28 | 0.04 | 0.26 | 0.26 |
| Volume/Cap:  | 1.01  | 0.61 | 0.61 | 0.61 | 1.01 | 1.01 | 1.01  | 0.35 | 0.35 | 0.35 | 1.01 | 1.01 |
| Delay/Veh:   | 136.7 | 14.6 | 14.6 | 73.3 | 53.2 | 53.2 | 138.2 | 29.4 | 29.4 | 49.5 | 80.1 | 80.1 |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 136.7 | 14.6 | 14.6 | 73.3 | 53.2 | 53.2 | 138.2 | 29.4 | 29.4 | 49.5 | 80.1 | 80.1 |
| LOS by Move: | F     | B    | B    | E    | D    | D    | F     | C    | C    | D    | F    | F    |
| HCM2kAvgQ:   | 7     | 13   | 13   | 2    | 39   | 39   | 6     | 4    | 4    | 1    | 21   | 21   |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #39 Citrus Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 1.065  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 54.4  
Optimal Cycle: 180 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 1 | 1 | 0          | 1 | 0 | 4          | 0 | 1 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 71   | 174  | 240  | 40   | 63   | 51   | 119  | 422  | 23   | 99   | 347  | 35   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 87   | 214  | 296  | 49   | 78   | 63   | 147  | 520  | 28   | 122  | 428  | 43   |
| Added Vol:   | 95   | 265  | 0    | 54   | 52   | 179  | 74   | 336  | 13   | 0    | 2349 | 341  |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 182  | 479  | 296  | 103  | 130  | 242  | 221  | 856  | 41   | 122  | 2777 | 384  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 192  | 505  | 311  | 109  | 136  | 255  | 232  | 901  | 44   | 128  | 2923 | 404  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 192  | 505  | 311  | 109  | 136  | 255  | 232  | 901  | 44   | 128  | 2923 | 404  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 192  | 505  | 311  | 109  | 136  | 255  | 232  | 901  | 44   | 128  | 2923 | 404  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 0.97 | 0.95 | 0.95 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 2.00 | 1.00 | 1.00 | 1.00 | 4.00 | 1.00 | 1.00 | 3.00 | 1.00 |
| Final Sat.: | 1800 | 3420 | 1800 | 3492 | 1710 | 1710 | 1800 | 6552 | 1800 | 1800 | 4914 | 1800 |

Capacity Analysis Module:

|              |       |      |      |      |      |       |       |      |      |      |      |      |
|--------------|-------|------|------|------|------|-------|-------|------|------|------|------|------|
| Vol/Sat:     | 0.11  | 0.15 | 0.17 | 0.03 | 0.08 | 0.15  | 0.13  | 0.14 | 0.02 | 0.07 | 0.59 | 0.22 |
| Crit Moves:  | ****  |      |      | **** |      | ****  | ****  |      |      | **** |      |      |
| Green/Cycle: | 0.10  | 0.20 | 0.20 | 0.04 | 0.14 | 0.14  | 0.12  | 0.45 | 0.45 | 0.23 | 0.56 | 0.56 |
| Volume/Cap:  | 1.06  | 0.73 | 0.85 | 0.85 | 0.57 | 1.06  | 1.06  | 0.31 | 0.05 | 0.31 | 1.06 | 0.40 |
| Delay/Veh:   | 130.1 | 41.0 | 55.3 | 86.4 | 41.4 | 108.1 | 123.0 | 17.7 | 15.7 | 32.2 | 59.5 | 12.8 |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 130.1 | 41.0 | 55.3 | 86.4 | 41.4 | 108.1 | 123.0 | 17.7 | 15.7 | 32.2 | 59.5 | 12.8 |
| LOS by Move: | F     | D    | E    | F    | D    | F     | F     | B    | B    | C    | E    | B    |
| HCM2kAvgQ:   | 11    | 9    | 12   | 4    | 5    | 14    | 13    | 5    | 1    | 3    | 46   | 7    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #40 Sierra Ave/Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.926  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 37.4  
Optimal Cycle: 116 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Ovl        |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 3 | 0           | 1 | 0 | 2          | 0 | 4 | 0          | 1 | 2 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 102  | 1006 | 50   | 409  | 555  | 277  | 200  | 103  | 45   | 25   | 182  | 366  |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 126  | 1239 | 62   | 504  | 684  | 341  | 246  | 127  | 55   | 31   | 224  | 451  |
| Added Vol:   | 0    | 53   | 0    | 0    | 379  | 0    | 0    | 298  | 0    | 0    | 1403 | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 126  | 1292 | 62   | 504  | 1063 | 341  | 246  | 425  | 55   | 31   | 1627 | 451  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 132  | 1360 | 65   | 530  | 1119 | 359  | 259  | 447  | 58   | 32   | 1713 | 475  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 132  | 1360 | 65   | 530  | 1119 | 359  | 259  | 447  | 58   | 32   | 1713 | 475  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 132  | 1360 | 65   | 530  | 1119 | 359  | 259  | 447  | 58   | 32   | 1713 | 475  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.91 | 1.00 | 0.97 | 0.91 | 0.91 | 0.97 | 0.91 | 1.00 | 0.97 | 0.91 |
| Lanes:      | 2.00 | 3.00 | 1.00 | 2.00 | 2.27 | 0.73 | 2.00 | 4.00 | 1.00 | 2.00 | 3.00 |
| Final Sat.: | 3492 | 4914 | 1800 | 3492 | 3720 | 1194 | 3492 | 6552 | 1800 | 3492 | 4914 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.04 | 0.28 | 0.04 | 0.15 | 0.30 | 0.30 | 0.07 | 0.07 | 0.03 | 0.01 | 0.35 | 0.15 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.05 | 0.30 | 0.30 | 0.16 | 0.41 | 0.41 | 0.08 | 0.40 | 0.40 | 0.05 | 0.38 | 0.54 |
| Volume/Cap:  | 0.73 | 0.93 | 0.12 | 0.93 | 0.73 | 0.73 | 0.93 | 0.17 | 0.08 | 0.17 | 0.93 | 0.28 |
| Delay/Veh:   | 60.9 | 44.2 | 25.6 | 62.3 | 26.2 | 26.2 | 80.3 | 19.2 | 18.5 | 45.5 | 38.3 | 12.5 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 60.9 | 44.2 | 25.6 | 62.3 | 26.2 | 26.2 | 80.3 | 19.2 | 18.5 | 45.5 | 38.3 | 12.5 |
| LOS by Move: | E    | D    | C    | E    | C    | C    | F    | B    | B    | D    | D    | B    |
| HCM2kAvgQ:   | 4    | 19   | 1    | 12   | 15   | 15   | 7    | 2    | 1    | 1    | 23   | 4    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #42 Sierra Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.962  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 42.3  
Optimal Cycle: 149 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 2 | 0           | 1 | 0 | 2          | 0 | 2 | 0          | 1 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 138  | 554  | 79   | 38   | 352  | 158  | 338  | 297  | 106  | 115  | 252  | 111  |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 170  | 683  | 97   | 47   | 434  | 195  | 416  | 366  | 131  | 142  | 310  | 137  |
| Added Vol:   | 112  | 0    | 0    | 0    | 0    | 379  | 53   | 273  | 18   | 0    | 1872 | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 282  | 683  | 97   | 47   | 434  | 574  | 469  | 639  | 149  | 142  | 2182 | 137  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 297  | 718  | 102  | 49   | 456  | 604  | 494  | 673  | 156  | 149  | 2297 | 144  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 297  | 718  | 102  | 49   | 456  | 604  | 494  | 673  | 156  | 149  | 2297 | 144  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 297  | 718  | 102  | 49   | 456  | 604  | 494  | 673  | 156  | 149  | 2297 | 144  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 0.88 | 0.97 | 0.95 | 1.00 | 1.00 | 0.91 |
| Lanes:      | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 3.00 |
| Final Sat.: | 3492 | 3420 | 1800 | 3492 | 3420 | 3168 | 3492 | 3420 | 1800 | 1800 | 4914 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.09 | 0.21 | 0.06 | 0.01 | 0.13 | 0.19 | 0.14 | 0.20 | 0.09 | 0.08 | 0.47 | 0.08 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.09 | 0.27 | 0.27 | 0.02 | 0.20 | 0.20 | 0.15 | 0.45 | 0.45 | 0.19 | 0.49 | 0.49 |
| Volume/Cap:  | 0.96 | 0.78 | 0.21 | 0.78 | 0.67 | 0.96 | 0.96 | 0.44 | 0.20 | 0.44 | 0.96 | 0.16 |
| Delay/Veh:   | 86.2 | 38.3 | 28.6 | 94.7 | 39.8 | 66.3 | 72.4 | 19.3 | 16.9 | 36.9 | 35.7 | 14.4 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 86.2 | 38.3 | 28.6 | 94.7 | 39.8 | 66.3 | 72.4 | 19.3 | 16.9 | 36.9 | 35.7 | 14.4 |
| LOS by Move: | F    | D    | C    | F    | D    | E    | E    | B    | B    | D    | D    | B    |
| HCM2kAvgQ:   | 8    | 13   | 2    | 2    | 8    | 15   | 12   | 8    | 3    | 4    | 31   | 2    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
AM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #43 Armstrong Rd/Sierra Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.619  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 28.5  
Optimal Cycle: 40 Level Of Service: C

| Approach:   | North Bound |   |   |   | South Bound |   |   |   | East Bound |   |   |   | West Bound |   |   |   |   |   |   |   |
|-------------|-------------|---|---|---|-------------|---|---|---|------------|---|---|---|------------|---|---|---|---|---|---|---|
| Movement:   | L           | T | R |   | L           | T | R |   | L          | T | R |   | L          | T | R |   |   |   |   |   |
| Control:    | Protected   |   |   |   | Protected   |   |   |   | Protected  |   |   |   | Protected  |   |   |   |   |   |   |   |
| Rights:     | Include     |   |   |   | Include     |   |   |   | Include    |   |   |   | Include    |   |   |   |   |   |   |   |
| Min. Green: | 0           | 0 | 0 |   | 0           | 0 | 0 |   | 0          | 0 | 0 |   | 0          | 0 | 0 |   |   |   |   |   |
| Lanes:      | 2           | 0 | 1 | 0 | 1           | 1 | 0 | 1 | 0          | 1 | 1 | 0 | 1          | 1 | 1 | 1 | 0 | 1 | 1 | 0 |

| Volume Module: |      |      |      |      |      |      |      |      |      |      |      |      |
|----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:      | 572  | 136  | 18   | 11   | 171  | 21   | 9    | 6    | 459  | 29   | 23   | 13   |
| Growth Adj:    | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse:   | 705  | 168  | 22   | 14   | 211  | 26   | 11   | 7    | 565  | 36   | 28   | 16   |
| Added Vol:     | 112  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 18   | 0    | 0    | 0    |
| PasserByVol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:   | 817  | 168  | 22   | 14   | 211  | 26   | 11   | 7    | 583  | 36   | 28   | 16   |
| User Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:       | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:    | 860  | 176  | 23   | 14   | 222  | 27   | 12   | 8    | 614  | 38   | 30   | 17   |
| Reduct Vol:    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:   | 860  | 176  | 23   | 14   | 222  | 27   | 12   | 8    | 614  | 38   | 30   | 17   |
| PCE Adj:       | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:       | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume:   | 860  | 176  | 23   | 14   | 222  | 27   | 12   | 8    | 614  | 38   | 30   | 17   |

| Saturation Flow Module: |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:               | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment:             | 0.97 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Lanes:                  | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.28 | 0.72 |
| Final Sat.:             | 3492 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1710 | 3420 | 1800 | 2185 | 1235 |

| Capacity Analysis Module: |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:                  | 0.25 | 0.10 | 0.01 | 0.01 | 0.12 | 0.02 | 0.01 | 0.00 | 0.18 | 0.02 | 0.01 | 0.01 |
| Crit Moves:               | **** |      |      | **** |      |      |      |      | **** | **** |      |      |
| Green/Cycle:              | 0.40 | 0.55 | 0.55 | 0.04 | 0.20 | 0.20 | 0.10 | 0.29 | 0.29 | 0.03 | 0.22 | 0.22 |
| Volume/Cap:               | 0.62 | 0.18 | 0.02 | 0.18 | 0.62 | 0.08 | 0.06 | 0.02 | 0.62 | 0.62 | 0.06 | 0.06 |
| Delay/Veh:                | 24.9 | 11.2 | 10.2 | 47.1 | 39.9 | 32.7 | 40.5 | 25.3 | 31.9 | 65.6 | 30.9 | 30.9 |
| User DelAdj:              | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:               | 24.9 | 11.2 | 10.2 | 47.1 | 39.9 | 32.7 | 40.5 | 25.3 | 31.9 | 65.6 | 30.9 | 30.9 |
| LOS by Move:              | C    | B    | B    | D    | D    | C    | D    | C    | C    | E    | C    | C    |
| HCM2kAvgQ:                | 11   | 3    | 0    | 1    | 7    | 1    | 0    | 0    | 9    | 2    | 1    | 1    |

Note: Queue reported is the number of cars per lane.



FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 I-15 SB Ramps/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.868  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 23.9  
Optimal Cycle: 78 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Split Phase |   |   | Split Phase |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 0           | 0 | 0 | 2           | 0 | 1 | 0          | 1 | 0 | 0          | 3 | 0 |

| Volume Module: | North Bound |      |      | South Bound |      |      | East Bound |      |      | West Bound |      |      |
|----------------|-------------|------|------|-------------|------|------|------------|------|------|------------|------|------|
| Base Vol:      | 0           | 0    | 0    | 405         | 27   | 376  | 0          | 938  | 554  | 435        | 419  | 0    |
| Growth Adj:    | 1.23        | 1.23 | 1.23 | 1.23        | 1.23 | 1.23 | 1.23       | 1.23 | 1.23 | 1.23       | 1.23 | 1.23 |
| Initial Bse:   | 0           | 0    | 0    | 499         | 33   | 463  | 0          | 1156 | 683  | 536        | 516  | 0    |
| Added Vol:     | 0           | 0    | 0    | 0           | 0    | 0    | 0          | 273  | 0    | 0          | 1685 | 0    |
| PasserByVol:   | 0           | 0    | 0    | 0           | 0    | 0    | 0          | 0    | 0    | 0          | 0    | 0    |
| Initial Fut:   | 0           | 0    | 0    | 499         | 33   | 463  | 0          | 1429 | 683  | 536        | 2201 | 0    |
| User Adj:      | 1.00        | 1.00 | 1.00 | 1.00        | 1.00 | 1.00 | 1.00       | 1.00 | 1.00 | 1.00       | 1.00 | 1.00 |
| PHF Adj:       | 0.95        | 0.95 | 0.95 | 0.95        | 0.95 | 0.95 | 0.95       | 0.95 | 0.95 | 0.95       | 0.95 | 0.95 |
| PHF Volume:    | 0           | 0    | 0    | 525         | 35   | 488  | 0          | 1504 | 718  | 564        | 2317 | 0    |
| Reduct Vol:    | 0           | 0    | 0    | 0           | 0    | 0    | 0          | 0    | 0    | 0          | 0    | 0    |
| Reduced Vol:   | 0           | 0    | 0    | 525         | 35   | 488  | 0          | 1504 | 718  | 564        | 2317 | 0    |
| PCE Adj:       | 1.00        | 1.00 | 1.00 | 1.00        | 1.00 | 1.00 | 1.00       | 1.00 | 1.00 | 1.00       | 1.00 | 1.00 |
| MLF Adj:       | 1.00        | 1.00 | 1.00 | 1.00        | 1.00 | 1.00 | 1.00       | 1.00 | 1.00 | 1.00       | 1.00 | 1.00 |
| Final Volume:  | 0           | 0    | 0    | 525         | 35   | 488  | 0          | 1504 | 718  | 564        | 2317 | 0    |

| Saturation Flow Module: | North Bound |      |      | South Bound |      |      | East Bound |      |      | West Bound |      |      |
|-------------------------|-------------|------|------|-------------|------|------|------------|------|------|------------|------|------|
| Sat/Lane:               | 1800        | 1800 | 1800 | 1800        | 1800 | 1800 | 1800       | 1800 | 1800 | 1800       | 1800 | 1800 |
| Adjustment:             | 1.00        | 1.00 | 1.00 | 0.97        | 1.00 | 1.00 | 1.00       | 0.91 | 1.00 | 0.97       | 0.91 | 1.00 |
| Lanes:                  | 0.00        | 0.00 | 0.00 | 2.39        | 0.08 | 1.53 | 0.00       | 3.00 | 1.00 | 2.00       | 3.00 | 0.00 |
| Final Sat.:             | 0           | 0    | 0    | 4178        | 137  | 2755 | 0          | 4914 | 1800 | 3492       | 4914 | 0    |

| Capacity Analysis Module: | North Bound |      |      | South Bound |      |      | East Bound |      |      | West Bound |      |      |
|---------------------------|-------------|------|------|-------------|------|------|------------|------|------|------------|------|------|
| Vol/Sat:                  | 0.00        | 0.00 | 0.00 | 0.13        | 0.26 | 0.18 | 0.00       | 0.31 | 0.40 | 0.16       | 0.47 | 0.00 |
| Crit Moves:               | ****        |      |      | ****        |      |      | ****       |      |      | ****       |      |      |
| Green/Cycle:              | 0.00        | 0.00 | 0.00 | 0.29        | 0.29 | 0.29 | 0.00       | 0.46 | 0.46 | 0.19       | 0.65 | 0.00 |
| Volume/Cap:               | 0.00        | 0.00 | 0.00 | 0.43        | 0.87 | 0.60 | 0.00       | 0.67 | 0.87 | 0.87       | 0.73 | 0.00 |
| Delay/Veh:                | 0.0         | 0.0  | 0.0  | 28.6        | 40.4 | 30.9 | 0.0        | 21.8 | 34.0 | 51.5       | 12.7 | 0.0  |
| User DelAdj:              | 1.00        | 1.00 | 1.00 | 1.00        | 1.00 | 1.00 | 1.00       | 1.00 | 1.00 | 1.00       | 1.00 | 1.00 |
| AdjDel/Veh:               | 0.0         | 0.0  | 0.0  | 28.6        | 40.4 | 30.9 | 0.0        | 21.8 | 34.0 | 51.5       | 12.7 | 0.0  |
| LOS by Move:              | A           | A    | A    | C           | D    | C    | A          | C    | C    | D          | B    | A    |
| HCM2kAvgQ:                | 0           | 0    | 0    | 6           | 16   | 9    | 0          | 14   | 23   | 12         | 18   | 0    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Etiwanda Ave/San Bernardino Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.792  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 32.7  
Optimal Cycle: 63 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Ovl        |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 3 | 0           | 1 | 0 | 2          | 0 | 1 | 1          | 0 | 2 |

| Volume Module: | North Bound |      |      | South Bound |      |      | East Bound |      |      | West Bound |      |      |
|----------------|-------------|------|------|-------------|------|------|------------|------|------|------------|------|------|
| Base Vol:      | 242         | 694  | 52   | 42          | 603  | 113  | 274        | 407  | 348  | 55         | 178  | 21   |
| Growth Adj:    | 1.23        | 1.23 | 1.23 | 1.23        | 1.23 | 1.23 | 1.23       | 1.23 | 1.23 | 1.23       | 1.23 | 1.23 |
| Initial Bse:   | 298         | 855  | 64   | 52          | 743  | 139  | 338        | 501  | 429  | 68         | 219  | 26   |
| Added Vol:     | 0           | 650  | 0    | 224         | 154  | 0    | 0          | 9    | 0    | 0          | 54   | 881  |
| PasserByVol:   | 0           | 0    | 0    | 0           | 0    | 0    | 0          | 0    | 0    | 0          | 0    | 0    |
| Initial Fut:   | 298         | 1505 | 64   | 276         | 897  | 139  | 338        | 510  | 429  | 68         | 273  | 907  |
| User Adj:      | 1.00        | 1.00 | 1.00 | 1.00        | 1.00 | 1.00 | 1.00       | 1.00 | 1.00 | 1.00       | 1.00 | 1.00 |
| PHF Adj:       | 0.95        | 0.95 | 0.95 | 0.95        | 0.95 | 0.95 | 0.95       | 0.95 | 0.95 | 0.95       | 0.95 | 0.95 |
| PHF Volume:    | 314         | 1584 | 67   | 290         | 944  | 147  | 355        | 537  | 451  | 71         | 288  | 955  |
| Reduct Vol:    | 0           | 0    | 0    | 0           | 0    | 0    | 0          | 0    | 0    | 0          | 0    | 0    |
| Reduced Vol:   | 314         | 1584 | 67   | 290         | 944  | 147  | 355        | 537  | 451  | 71         | 288  | 955  |
| PCE Adj:       | 1.00        | 1.00 | 1.00 | 1.00        | 1.00 | 1.00 | 1.00       | 1.00 | 1.00 | 1.00       | 1.00 | 1.00 |
| MLF Adj:       | 1.00        | 1.00 | 1.00 | 1.00        | 1.00 | 1.00 | 1.00       | 1.00 | 1.00 | 1.00       | 1.00 | 1.00 |
| Final Volume:  | 314         | 1584 | 67   | 290         | 944  | 147  | 355        | 537  | 451  | 71         | 288  | 955  |

| Saturation Flow Module: | North Bound |      |      | South Bound |      |      | East Bound |      |      | West Bound |      |      |
|-------------------------|-------------|------|------|-------------|------|------|------------|------|------|------------|------|------|
| Sat/Lane:               | 1800        | 1800 | 1800 | 1800        | 1800 | 1800 | 1800       | 1800 | 1800 | 1800       | 1800 | 1800 |
| Adjustment:             | 0.97        | 0.91 | 1.00 | 0.97        | 0.95 | 0.95 | 0.97       | 0.95 | 1.00 | 0.97       | 0.95 | 0.88 |
| Lanes:                  | 2.00        | 3.00 | 1.00 | 2.00        | 1.73 | 0.27 | 2.00       | 2.00 | 1.00 | 2.00       | 2.00 | 2.00 |
| Final Sat.:             | 3492        | 4914 | 1800 | 3492        | 2960 | 460  | 3492       | 3420 | 1800 | 3492       | 3420 | 3168 |

| Capacity Analysis Module: | North Bound |      |      | South Bound |      |      | East Bound |      |      | West Bound |      |      |
|---------------------------|-------------|------|------|-------------|------|------|------------|------|------|------------|------|------|
| Vol/Sat:                  | 0.09        | 0.32 | 0.04 | 0.08        | 0.32 | 0.32 | 0.10       | 0.16 | 0.25 | 0.02       | 0.08 | 0.30 |
| Crit Moves:               | ****        |      |      | ****        |      |      | ****       |      |      | ****       |      |      |
| Green/Cycle:              | 0.11        | 0.41 | 0.41 | 0.11        | 0.40 | 0.40 | 0.13       | 0.37 | 0.37 | 0.03       | 0.28 | 0.38 |
| Volume/Cap:               | 0.79        | 0.79 | 0.09 | 0.79        | 0.79 | 0.79 | 0.79       | 0.42 | 0.67 | 0.67       | 0.31 | 0.79 |
| Delay/Veh:                | 53.6        | 27.8 | 18.1 | 54.2        | 29.4 | 29.4 | 51.6       | 23.5 | 28.8 | 63.5       | 28.8 | 31.0 |
| User DelAdj:              | 1.00        | 1.00 | 1.00 | 1.00        | 1.00 | 1.00 | 1.00       | 1.00 | 1.00 | 1.00       | 1.00 | 1.00 |
| AdjDel/Veh:               | 53.6        | 27.8 | 18.1 | 54.2        | 29.4 | 29.4 | 51.6       | 23.5 | 28.8 | 63.5       | 28.8 | 31.0 |
| LOS by Move:              | D           | C    | B    | D           | C    | C    | D          | C    | C    | E          | C    | C    |
| HCM2kAvgQ:                | 7           | 17   | 1    | 7           | 17   | 17   | 8          | 7    | 12   | 2          | 4    | 17   |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #6 Etiwanda Ave/ East Airport Dr-Slover Ave  
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.967  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 46.2  
Optimal Cycle: 156 Level Of Service: D  
\*\*\*\*\*

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 2 | 1           | 0 | 0 | 2          | 0 | 1 | 0          | 2 | 0 |

Volume Module:  
Base Vol: 26 839 30 188 713 74 316 97 72 69 93 582  
Growth Adj: 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23  
Initial Bse: 32 1034 37 232 878 91 389 120 89 85 115 717  
Added Vol: 288 85 0 95 26 0 0 326 173 0 1087 285  
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0  
Initial Fut: 320 1119 37 327 904 91 389 446 262 85 1202 1002  
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95  
PHF Volume: 337 1178 39 344 952 96 410 469 275 89 1265 1055  
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
Reduced Vol: 337 1178 39 344 952 96 410 469 275 89 1265 1055  
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
FinalVolume: 337 1178 39 344 952 96 410 469 275 89 1265 1055  
-----

Saturation Flow Module:  
Sat/Lane: 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800  
Adjustment: 0.97 0.91 0.91 0.97 0.95 0.95 0.97 0.95 0.95 1.00 0.95 0.88  
Lanes: 2.00 2.90 0.10 2.00 1.82 0.18 2.00 1.26 0.74 1.00 2.00 2.00  
Final Sat.: 3492 4757 157 3492 3107 313 3492 2154 1266 1800 3420 3168  
-----

Capacity Analysis Module:  
Vol/Sat: 0.10 0.25 0.25 0.10 0.31 0.31 0.12 0.22 0.22 0.05 0.37 0.33  
Crit Moves: \*\*\*\*  
Green/Cycle: 0.10 0.30 0.30 0.12 0.32 0.32 0.12 0.41 0.41 0.09 0.38 0.38  
Volume/Cap: 0.97 0.83 0.83 0.83 0.97 0.97 0.97 0.53 0.53 0.53 0.97 0.87  
Delay/Veh: 84.3 36.9 36.9 56.4 53.5 53.5 78.9 22.6 22.6 46.4 47.9 35.7  
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
AdjDel/Veh: 84.3 36.9 36.9 56.4 53.5 53.5 78.9 22.6 22.6 46.4 47.9 35.7  
LOS by Move: F D D E D D E C C D D D  
HCM2kAvgQ: 9 15 15 8 22 22 11 9 9 3 26 20  
\*\*\*\*\*

Note: Queue reported is the number of cars per lane.  
\*\*\*\*\*

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #7 Etiwanda Ave/Jurupa St  
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.957  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 42.6  
Optimal Cycle: 144 Level Of Service: D  
\*\*\*\*\*

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 2 | 0           | 2 | 0 | 2          | 0 | 3 | 0          | 4 | 0 |

Volume Module:  
Base Vol: 323 595 140 390 771 231 169 964 355 71 561 100  
Growth Adj: 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23 1.23  
Initial Bse: 398 733 172 480 950 285 208 1188 437 87 691 123  
Added Vol: 24 43 38 186 13 0 0 266 8 53 1660 331  
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0  
Initial Fut: 422 776 210 666 963 285 208 1454 445 140 2351 454  
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95  
PHF Volume: 444 817 222 702 1014 300 219 1530 469 148 2475 478  
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
Reduced Vol: 444 817 222 702 1014 300 219 1530 469 148 2475 478  
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
FinalVolume: 444 817 222 702 1014 300 219 1530 469 148 2475 478  
-----

Saturation Flow Module:  
Sat/Lane: 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800 1800  
Adjustment: 0.97 0.95 1.00 0.97 0.95 1.00 0.97 0.91 1.00 0.97 0.91 1.00  
Lanes: 2.00 2.00 1.00 2.00 2.00 1.00 2.00 3.00 1.00 2.00 4.00 1.00  
Final Sat.: 3492 3420 1800 3492 3420 1800 3492 4914 1800 3492 6552 1800  
-----

Capacity Analysis Module:  
Vol/Sat: 0.13 0.24 0.12 0.20 0.30 0.17 0.06 0.31 0.26 0.04 0.38 0.27  
Crit Moves: \*\*\*\*  
Green/Cycle: 0.14 0.25 0.25 0.21 0.32 0.32 0.07 0.41 0.41 0.06 0.39 0.39  
Volume/Cap: 0.92 0.96 0.49 0.96 0.92 0.52 0.96 0.77 0.64 0.77 0.96 0.67  
Delay/Veh: 65.7 57.9 33.0 62.2 45.1 28.4 93.8 27.6 25.9 63.6 39.0 27.5  
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
AdjDel/Veh: 65.7 57.9 33.0 62.2 45.1 28.4 93.8 27.6 25.9 63.6 39.0 27.5  
LOS by Move: E E C E D C F C C E D C  
HCM2kAvgQ: 11 18 6 16 20 8 7 16 12 4 26 13  
\*\*\*\*\*

Note: Queue reported is the number of cars per lane.  
\*\*\*\*\*

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #12 Commerce Way/Ontario Mills Pkwy  
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.775  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 30.1  
Optimal Cycle: 60 Level Of Service: C  
\*\*\*\*\*

| Approach:   | North Bound |   |   |   | South Bound |   |   |   | East Bound |   |   |   | West Bound |   |   |  |
|-------------|-------------|---|---|---|-------------|---|---|---|------------|---|---|---|------------|---|---|--|
| Movement:   | L           | T | R |   | L           | T | R |   | L          | T | R |   | L          | T | R |  |
| Control:    | Protected   |   |   |   | Protected   |   |   |   | Protected  |   |   |   | Protected  |   |   |  |
| Rights:     | Include     |   |   |   | Include     |   |   |   | Include    |   |   |   | Include    |   |   |  |
| Min. Green: | 0           | 0 | 0 |   | 0           | 0 | 0 |   | 0          | 0 | 0 |   | 0          | 0 | 0 |  |
| Lanes:      | 2           | 0 | 1 | 0 | 2           | 1 | 0 | 1 | 1          | 0 | 2 | 0 | 1          | 2 | 0 |  |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 16   | 159  | 798  | 24   | 121  | 16   | 16   | 232  | 11   | 446  | 301  | 18   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 20   | 196  | 983  | 30   | 149  | 20   | 20   | 286  | 14   | 549  | 371  | 22   |
| Added Vol:   | 0    | 0    | 61   | 0    | 0    | 0    | 0    | 115  | 0    | 197  | 542  | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 20   | 196  | 1044 | 30   | 149  | 20   | 20   | 401  | 14   | 746  | 913  | 22   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 21   | 206  | 1099 | 31   | 157  | 21   | 21   | 422  | 14   | 786  | 961  | 23   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 21   | 206  | 1099 | 31   | 157  | 21   | 21   | 422  | 14   | 786  | 961  | 23   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 21   | 206  | 1099 | 31   | 157  | 21   | 21   | 422  | 14   | 786  | 961  | 23   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 1.00 | 0.88 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 |
| Lanes:      | 2.00 | 1.00 | 2.00 | 1.00 | 1.77 | 0.23 | 1.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 |
| Final Sat.: | 3492 | 1800 | 3168 | 1800 | 3021 | 399  | 1800 | 3420 | 1800 | 3492 | 3420 | 1800 |

Capacity Analysis Module:

|              |      |      |      |       |      |      |      |      |      |      |      |      |
|--------------|------|------|------|-------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.01 | 0.11 | 0.35 | 0.02  | 0.05 | 0.05 | 0.01 | 0.12 | 0.01 | 0.23 | 0.28 | 0.01 |
| Crit Moves:  | **** |      |      | ****  |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.05 | 0.45 | 0.45 | 0.02  | 0.42 | 0.42 | 0.02 | 0.16 | 0.16 | 0.29 | 0.43 | 0.43 |
| Volume/Cap:  | 0.12 | 0.26 | 0.77 | 0.77  | 0.12 | 0.12 | 0.65 | 0.77 | 0.05 | 0.77 | 0.65 | 0.03 |
| Delay/Veh:   | 45.9 | 17.4 | 26.1 | 110.3 | 17.7 | 17.7 | 87.6 | 47.2 | 35.7 | 36.3 | 23.5 | 16.4 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 45.9 | 17.4 | 26.1 | 110.3 | 17.7 | 17.7 | 87.6 | 47.2 | 35.7 | 36.3 | 23.5 | 16.4 |
| LOS by Move: | D    | B    | C    | F     | B    | B    | F    | D    | D    | D    | C    | B    |
| HCM2kAvgQ:   | 0    | 4    | 18   | 2     | 2    | 2    | 2    | 9    | 0    | 13   | 13   | 0    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

\*\*\*\*\*  
Intersection #13 Mulberry Ave/Slover Ave  
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.918  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 38.7  
Optimal Cycle: 111 Level Of Service: D  
\*\*\*\*\*

| Approach:   | North Bound |   |   |   | South Bound |   |   |   | East Bound |   |   |   | West Bound |   |   |  |
|-------------|-------------|---|---|---|-------------|---|---|---|------------|---|---|---|------------|---|---|--|
| Movement:   | L           | T | R |   | L           | T | R |   | L          | T | R |   | L          | T | R |  |
| Control:    | Protected   |   |   |   | Protected   |   |   |   | Protected  |   |   |   | Protected  |   |   |  |
| Rights:     | Include     |   |   |   | Include     |   |   |   | Include    |   |   |   | Include    |   |   |  |
| Min. Green: | 0           | 0 | 0 |   | 0           | 0 | 0 |   | 0          | 0 | 0 |   | 0          | 0 | 0 |  |
| Lanes:      | 1           | 0 | 2 | 0 | 1           | 0 | 3 | 0 | 1          | 0 | 3 | 0 | 1          | 0 | 3 |  |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 145  | 0    | 107  | 0    | 0    | 0    | 0    | 258  | 81   | 136  | 404  | 0    |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 179  | 0    | 132  | 0    | 0    | 0    | 0    | 318  | 100  | 168  | 498  | 0    |
| Added Vol:   | 130  | 1187 | 67   | 182  | 202  | 0    | 0    | 391  | 31   | 165  | 1242 | 467  |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 309  | 1187 | 199  | 182  | 202  | 0    | 0    | 709  | 131  | 333  | 1740 | 467  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 325  | 1249 | 209  | 192  | 213  | 0    | 0    | 746  | 138  | 350  | 1831 | 492  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 325  | 1249 | 209  | 192  | 213  | 0    | 0    | 746  | 138  | 350  | 1831 | 492  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 325  | 1249 | 209  | 192  | 213  | 0    | 0    | 746  | 138  | 350  | 1831 | 492  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 3.00 | 1.00 | 1.00 | 3.00 | 1.00 | 1.00 | 3.00 | 1.00 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 4914 | 1800 | 1800 | 4914 | 1800 | 1800 | 4914 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.18 | 0.37 | 0.12 | 0.11 | 0.04 | 0.00 | 0.00 | 0.15 | 0.08 | 0.19 | 0.37 | 0.27 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.41 | 0.40 | 0.40 | 0.12 | 0.10 | 0.00 | 0.00 | 0.18 | 0.18 | 0.23 | 0.41 | 0.41 |
| Volume/Cap:  | 0.44 | 0.92 | 0.29 | 0.92 | 0.44 | 0.00 | 0.00 | 0.85 | 0.43 | 0.85 | 0.92 | 0.67 |
| Delay/Veh:   | 21.3 | 38.6 | 20.7 | 83.9 | 43.0 | 0.0  | 0.0  | 48.0 | 37.5 | 52.7 | 35.4 | 26.7 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 21.3 | 38.6 | 20.7 | 83.9 | 43.0 | 0.0  | 0.0  | 48.0 | 37.5 | 52.7 | 35.4 | 26.7 |
| LOS by Move: | C    | D    | C    | F    | D    | A    | A    | D    | D    | D    | D    | C    |
| HCM2kAvgQ:   | 7    | 23   | 4    | 9    | 3    | 0    | 0    | 11   | 4    | 13   | 24   | 13   |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #14 Mulberry Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.847  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 32.9  
Optimal Cycle: 78 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 1 | 0 | 1          | 0 | 0 | 1          | 0 | 1 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 8    | 180  | 44   | 29   | 226  | 7    | 8    | 13   | 66   | 62   | 13   | 84   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 10   | 222  | 54   | 36   | 278  | 9    | 10   | 16   | 81   | 76   | 16   | 103  |
| Added Vol:   | 0    | 922  | 174  | 88   | 310  | 0    | 0    | 0    | 0    | 289  | 0    | 463  |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 10   | 1144 | 228  | 124  | 588  | 9    | 10   | 16   | 81   | 365  | 16   | 566  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 10   | 1204 | 240  | 130  | 619  | 9    | 10   | 17   | 86   | 385  | 17   | 596  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 10   | 1204 | 240  | 130  | 619  | 9    | 10   | 17   | 86   | 385  | 17   | 596  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 10   | 1204 | 240  | 130  | 619  | 9    | 10   | 17   | 86   | 385  | 17   | 596  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 0.99 | 0.01 | 1.00 | 0.16 | 0.84 | 1.00 | 1.00 | 1.00 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 1774 | 26   | 1800 | 296  | 1504 | 1800 | 1710 | 1710 |

Capacity Analysis Module:

|              |       |      |      |      |      |      |       |      |      |      |      |      |
|--------------|-------|------|------|------|------|------|-------|------|------|------|------|------|
| Vol/Sat:     | 0.01  | 0.35 | 0.13 | 0.07 | 0.35 | 0.35 | 0.01  | 0.06 | 0.06 | 0.21 | 0.01 | 0.35 |
| Crit Moves:  | ****  | **** | **** | **** | **** | **** | ****  | **** | **** | **** | **** | **** |
| Green/Cycle: | 0.01  | 0.42 | 0.42 | 0.09 | 0.49 | 0.49 | 0.01  | 0.09 | 0.09 | 0.33 | 0.41 | 0.41 |
| Volume/Cap:  | 0.71  | 0.85 | 0.32 | 0.85 | 0.71 | 0.71 | 0.85  | 0.65 | 0.65 | 0.65 | 0.02 | 0.85 |
| Delay/Veh:   | 144.7 | 31.3 | 19.9 | 78.1 | 22.4 | 22.4 | 223.5 | 53.0 | 53.0 | 31.0 | 17.5 | 35.7 |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 144.7 | 31.3 | 19.9 | 78.1 | 22.4 | 22.4 | 223.5 | 53.0 | 53.0 | 31.0 | 17.5 | 35.7 |
| LOS by Move: | F     | C    | B    | E    | C    | C    | F     | D    | D    | C    | B    | D    |
| HCM2kAvgQ:   | 1     | 20   | 5    | 6    | 16   | 16   | 1     | 4    | 4    | 11   | 0    | 20   |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #15 Mulberry Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 1.028  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 48.4  
Optimal Cycle: 180 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Ovl         |   |   | Ovl         |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 2 | 0           | 2 | 0 | 2          | 0 | 3 | 0          | 3 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 129  | 278  | 338  | 55   | 427  | 188  | 149  | 1232 | 417  | 387  | 758  | 49   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 159  | 342  | 416  | 68   | 526  | 232  | 184  | 1518 | 514  | 477  | 934  | 60   |
| Added Vol:   | 22   | 113  | 92   | 67   | 178  | 301  | 216  | 307  | 34   | 265  | 1651 | 469  |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 181  | 455  | 508  | 135  | 704  | 533  | 400  | 1825 | 548  | 742  | 2585 | 529  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 190  | 479  | 535  | 142  | 741  | 561  | 421  | 1921 | 577  | 781  | 2721 | 557  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 190  | 479  | 535  | 142  | 741  | 561  | 421  | 1921 | 577  | 781  | 2721 | 557  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 190  | 479  | 535  | 142  | 741  | 561  | 421  | 1921 | 577  | 781  | 2721 | 557  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.91 | 1.00 | 0.97 | 0.91 | 1.00 |
| Lanes:      | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 3.00 | 1.00 | 2.00 | 3.00 | 1.00 |
| Final Sat.: | 3492 | 3420 | 1800 | 3492 | 3420 | 1800 | 3492 | 4914 | 1800 | 3492 | 4914 | 1800 |

Capacity Analysis Module:

|              |       |      |      |      |      |      |      |      |      |      |      |      |
|--------------|-------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.05  | 0.14 | 0.30 | 0.04 | 0.22 | 0.31 | 0.12 | 0.39 | 0.32 | 0.22 | 0.55 | 0.31 |
| Crit Moves:  | ****  | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Green/Cycle: | 0.05  | 0.20 | 0.44 | 0.06 | 0.21 | 0.33 | 0.12 | 0.42 | 0.42 | 0.24 | 0.54 | 0.54 |
| Volume/Cap:  | 1.03  | 0.69 | 0.67 | 0.69 | 1.03 | 0.95 | 1.03 | 0.94 | 0.77 | 0.94 | 1.03 | 0.57 |
| Delay/Veh:   | 120.9 | 39.6 | 24.3 | 55.3 | 80.2 | 57.8 | 95.9 | 36.8 | 29.8 | 55.0 | 48.1 | 16.2 |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 120.9 | 39.6 | 24.3 | 55.3 | 80.2 | 57.8 | 95.9 | 36.8 | 29.8 | 55.0 | 48.1 | 16.2 |
| LOS by Move: | F     | D    | C    | E    | F    | E    | F    | D    | C    | E    | D    | B    |
| HCM2kAvgQ:   | 6     | 8    | 14   | 4    | 19   | 22   | 12   | 26   | 17   | 17   | 41   | 12   |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #21 Banana Ave/Valley Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.499  
Loss Time (sec): 6 Average Delay (sec/veh): 3.8  
Optimal Cycle: 27 Level Of Service: A

| Approach:   | North Bound |     |     | South Bound |     |     | East Bound |     |     | West Bound |     |     |
|-------------|-------------|-----|-----|-------------|-----|-----|------------|-----|-----|------------|-----|-----|
| Movement:   | L           | T   | R   | L           | T   | R   | L          | T   | R   | L          | T   | R   |
| Control:    | Permitted   |     |     | Permitted   |     |     | Permitted  |     |     | Permitted  |     |     |
| Rights:     | Include     |     |     | Include     |     |     | Include    |     |     | Include    |     |     |
| Min. Green: | 0           | 0   | 0   | 0           | 0   | 0   | 0          | 0   | 0   | 0          | 0   | 0   |
| Y+R:        | 4.0         | 4.0 | 4.0 | 4.0         | 4.0 | 4.0 | 4.0        | 4.0 | 4.0 | 4.0        | 4.0 | 4.0 |
| Lanes:      | 0           | 0   | 0   | 0           | 0   | 0   | 1          | 0   | 2   | 0          | 1   | 1   |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 0    | 0    | 30   | 0    | 0    | 61   | 50   | 1023 | 12   | 8    | 577  | 36   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 0    | 0    | 37   | 0    | 0    | 75   | 62   | 1260 | 15   | 10   | 711  | 44   |
| Added Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 120  | 0    | 0    | 130  | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 0    | 0    | 37   | 0    | 0    | 75   | 62   | 1380 | 15   | 10   | 841  | 44   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 0    | 0    | 39   | 0    | 0    | 79   | 65   | 1453 | 16   | 10   | 885  | 47   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 0    | 0    | 39   | 0    | 0    | 79   | 65   | 1453 | 16   | 10   | 885  | 47   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 0    | 0    | 39   | 0    | 0    | 79   | 65   | 1453 | 16   | 10   | 885  | 47   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 |
| Lanes:      | 0.00 | 0.00 | 1.00 | 0.00 | 0.00 | 1.00 | 1.00 | 2.00 | 1.00 | 1.00 | 1.90 | 0.10 |
| Final Sat.: | 0    | 0    | 1800 | 0    | 0    | 1800 | 1800 | 3420 | 1800 | 1800 | 3249 | 171  |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.04 | 0.04 | 0.42 | 0.01 | 0.01 | 0.27 | 0.27 |
| Crit Moves:  | **** |      |      |      |      |      |      |      |      |      |      |      |
| Green/Cycle: | 0.00 | 0.00 | 0.09 | 0.00 | 0.00 | 0.09 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 |
| Volume/Cap:  | 0.00 | 0.00 | 0.25 | 0.00 | 0.00 | 0.50 | 0.04 | 0.50 | 0.01 | 0.01 | 0.32 | 0.32 |
| Delay/Veh:   | 0.0  | 0.0  | 43.3 | 0.0  | 0.0  | 45.9 | 1.1  | 2.0  | 1.1  | 1.1  | 1.6  | 1.6  |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 0.0  | 0.0  | 43.3 | 0.0  | 0.0  | 45.9 | 1.1  | 2.0  | 1.1  | 1.1  | 1.6  | 1.6  |
| LOS by Move: | A    | A    | D    | A    | A    | D    | A    | A    | A    | A    | A    | A    |
| HCM2kAvgQ:   | 0    | 0    | 1    | 0    | 0    | 3    | 0    | 6    | 0    | 0    | 3    | 3    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #22 Cherry Ave/San Bernardino Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.987  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 41.9  
Optimal Cycle: 180 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Ignore      |   |   | Ignore     |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 1           | 0 | 3 | 2          | 0 | 2 | 1          | 0 | 1 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 19   | 834  | 87   | 58   | 731  | 143  | 315  | 426  | 88   | 119  | 157  | 48   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 23   | 1027 | 107  | 71   | 901  | 176  | 388  | 525  | 108  | 147  | 193  | 59   |
| Added Vol:   | 0    | 1450 | 16   | 26   | 381  | 33   | 187  | 47   | 0    | 3    | 8    | 130  |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 23   | 2477 | 123  | 97   | 1282 | 209  | 575  | 572  | 108  | 150  | 201  | 189  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.00 | 0.95 | 0.95 | 0.00 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 25   | 2608 | 130  | 103  | 1349 | 0    | 605  | 602  | 0    | 157  | 212  | 199  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 25   | 2608 | 130  | 103  | 1349 | 0    | 605  | 602  | 0    | 157  | 212  | 199  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 25   | 2608 | 130  | 103  | 1349 | 0    | 605  | 602  | 0    | 157  | 212  | 199  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 1.00 | 0.97 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 |
| Lanes:      | 1.00 | 2.86 | 0.14 | 1.00 | 3.00 | 1.00 | 2.00 | 2.00 | 1.00 | 1.00 | 1.03 | 0.97 |
| Final Sat.: | 1800 | 4681 | 233  | 1800 | 4914 | 1800 | 3492 | 3420 | 1800 | 1800 | 1764 | 1656 |

Capacity Analysis Module:

|              |      |      |      |       |      |      |      |      |      |      |      |      |
|--------------|------|------|------|-------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.01 | 0.56 | 0.56 | 0.06  | 0.27 | 0.00 | 0.17 | 0.18 | 0.00 | 0.09 | 0.12 | 0.12 |
| Crit Moves:  | **** |      |      |       |      |      |      |      |      |      |      |      |
| Green/Cycle: | 0.03 | 0.56 | 0.56 | 0.06  | 0.59 | 0.00 | 0.18 | 0.20 | 0.00 | 0.10 | 0.12 | 0.12 |
| Volume/Cap:  | 0.46 | 0.99 | 0.99 | 0.99  | 0.46 | 0.00 | 0.99 | 0.89 | 0.00 | 0.89 | 0.99 | 0.99 |
| Delay/Veh:   | 54.0 | 35.4 | 35.4 | 130.8 | 11.5 | 0.0  | 73.9 | 52.3 | 0.0  | 81.7 | 84.2 | 84.2 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 54.0 | 35.4 | 35.4 | 130.8 | 11.5 | 0.0  | 73.9 | 52.3 | 0.0  | 81.7 | 84.2 | 84.2 |
| LOS by Move: | D    | D    | D    | F     | B    | A    | E    | D    | A    | F    | F    | F    |
| HCM2kAvgQ:   | 1    | 38   | 38   | 6     | 9    | 0    | 15   | 13   | 0    | 8    | 11   | 11   |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #23 Cherry Ave/Valley Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 1.039  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 53.1  
Optimal Cycle: 180 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 3 | 0           | 1 | 1 | 1          | 0 | 2 | 0          | 1 | 2 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 118  | 531  | 306  | 139  | 632  | 127  | 124  | 699  | 197  | 275  | 408  | 63   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 145  | 654  | 377  | 171  | 779  | 156  | 153  | 861  | 243  | 339  | 503  | 78   |
| Added Vol:   | 9    | 1323 | 54   | 18   | 722  | 15   | 74   | 91   | 59   | 89   | 70   | 3    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 154  | 1977 | 431  | 189  | 1501 | 171  | 227  | 952  | 302  | 428  | 573  | 81   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 163  | 2081 | 454  | 199  | 1580 | 180  | 239  | 1002 | 318  | 450  | 603  | 85   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 163  | 2081 | 454  | 199  | 1580 | 180  | 239  | 1002 | 318  | 450  | 603  | 85   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 163  | 2081 | 454  | 199  | 1580 | 180  | 239  | 1002 | 318  | 450  | 603  | 85   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | 1.00 | 1.00 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 |
| Lanes:      | 1.00 | 3.00 | 1.00 | 1.00 | 3.00 | 1.00 | 1.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 |
| Final Sat.: | 1800 | 4914 | 1800 | 1800 | 4914 | 1800 | 1800 | 3420 | 1800 | 3492 | 3420 | 1800 |

Capacity Analysis Module:

|              |      |      |      |       |      |      |      |      |      |      |      |      |
|--------------|------|------|------|-------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.09 | 0.42 | 0.25 | 0.11  | 0.32 | 0.10 | 0.13 | 0.29 | 0.18 | 0.13 | 0.18 | 0.05 |
| Crit Moves:  | **** |      |      | ****  |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.11 | 0.41 | 0.41 | 0.11  | 0.40 | 0.40 | 0.17 | 0.28 | 0.28 | 0.12 | 0.23 | 0.23 |
| Volume/Cap:  | 0.80 | 1.04 | 0.62 | 1.04  | 0.80 | 0.25 | 0.76 | 1.04 | 0.63 | 1.04 | 0.76 | 0.20 |
| Delay/Veh:   | 63.2 | 60.8 | 25.1 | 120.4 | 28.9 | 20.1 | 49.7 | 75.6 | 33.8 | 97.6 | 40.2 | 31.2 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 63.2 | 60.8 | 25.1 | 120.4 | 28.9 | 20.1 | 49.7 | 75.6 | 33.8 | 97.6 | 40.2 | 31.2 |
| LOS by Move: | E    | E    | C    | F     | C    | C    | D    | E    | C    | F    | D    | C    |
| HCM2kAvgQ:   | 7    | 33   | 12   | 11    | 18   | 4    | 9    | 24   | 9    | 12   | 11   | 2    |

Note: Queue reported is the number of cars per lane.

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FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #26 Cherry Ave/Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 1.006  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 49.6  
Optimal Cycle: 180 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Ovl         |   |   | Include    |   |   | Ovl        |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 5 | 0           | 1 | 1 | 2          | 0 | 3 | 0          | 1 | 2 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 34   | 405  | 23   | 245  | 392  | 304  | 307  | 724  | 52   | 44   | 280  | 294  |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 42   | 499  | 28   | 302  | 483  | 375  | 378  | 892  | 64   | 54   | 345  | 362  |
| Added Vol:   | 382  | 1647 | 275  | 324  | 576  | 164  | 366  | 610  | 267  | 142  | 759  | 620  |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 424  | 2146 | 303  | 626  | 1059 | 539  | 744  | 1502 | 331  | 196  | 1104 | 982  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 446  | 2259 | 319  | 659  | 1115 | 567  | 783  | 1581 | 348  | 207  | 1162 | 1034 |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 446  | 2259 | 319  | 659  | 1115 | 567  | 783  | 1581 | 348  | 207  | 1162 | 1034 |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 446  | 2259 | 319  | 659  | 1115 | 567  | 783  | 1581 | 348  | 207  | 1162 | 1034 |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.91 | 1.00 | 0.97 | 0.91 | 0.88 | 0.97 | 0.91 | 1.00 | 1.00 | 0.91 | 0.88 |
| Lanes:      | 2.00 | 5.00 | 1.00 | 2.00 | 3.00 | 2.00 | 2.00 | 3.00 | 1.00 | 1.00 | 3.00 | 2.00 |
| Final Sat.: | 3492 | 8190 | 1800 | 3492 | 4914 | 3168 | 3492 | 4914 | 1800 | 1800 | 4914 | 3168 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.13 | 0.28 | 0.18 | 0.19 | 0.23 | 0.18 | 0.22 | 0.32 | 0.19 | 0.11 | 0.24 | 0.33 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.17 | 0.27 | 0.27 | 0.19 | 0.30 | 0.52 | 0.22 | 0.34 | 0.34 | 0.12 | 0.24 | 0.42 |
| Volume/Cap:  | 0.77 | 1.01 | 0.65 | 1.01 | 0.77 | 0.35 | 1.01 | 0.95 | 0.57 | 0.95 | 1.01 | 0.77 |
| Delay/Veh:   | 46.0 | 56.7 | 35.0 | 77.2 | 34.6 | 14.2 | 72.5 | 45.0 | 28.5 | 91.4 | 66.1 | 27.6 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 46.0 | 56.7 | 35.0 | 77.2 | 34.6 | 14.2 | 72.5 | 45.0 | 28.5 | 91.4 | 66.1 | 27.6 |
| LOS by Move: | D    | E    | C    | E    | C    | B    | E    | D    | C    | F    | E    | C    |
| HCM2kAvgQ:   | 9    | 22   | 10   | 16   | 13   | 6    | 18   | 23   | 9    | 10   | 19   | 17   |

Note: Queue reported is the number of cars per lane.

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FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #27 Cherry Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.798  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 26.7  
Optimal Cycle: 58 Level Of Service: C

| Approach:   | North Bound |   |   |   | South Bound |   |   |   | East Bound |   |   |   | West Bound |   |   |  |
|-------------|-------------|---|---|---|-------------|---|---|---|------------|---|---|---|------------|---|---|--|
| Movement:   | L           | T | R |   | L           | T | R |   | L          | T | R |   | L          | T | R |  |
| Control:    | Protected   |   |   |   | Protected   |   |   |   | Permitted  |   |   |   | Permitted  |   |   |  |
| Rights:     | Include     |   |   |   | Include     |   |   |   | Include    |   |   |   | Include    |   |   |  |
| Min. Green: | 0           | 0 | 0 |   | 0           | 0 | 0 |   | 0          | 0 | 0 |   | 0          | 0 | 0 |  |
| Lanes:      | 1           | 0 | 2 | 1 | 0           | 1 | 0 | 1 | 0          | 1 | 0 | 1 | 0          | 1 | 0 |  |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 12   | 399  | 6    | 17   | 575  | 59   | 117  | 29   | 8    | 7    | 20   | 34   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 15   | 492  | 7    | 21   | 708  | 73   | 144  | 36   | 10   | 9    | 25   | 42   |
| Added Vol:   | 74   | 1110 | 11   | 62   | 687  | 69   | 432  | 0    | 461  | 26   | 0    | 178  |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 89   | 1602 | 18   | 83   | 1395 | 142  | 576  | 36   | 471  | 35   | 25   | 220  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 93   | 1686 | 19   | 87   | 1469 | 149  | 606  | 38   | 496  | 36   | 26   | 231  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 93   | 1686 | 19   | 87   | 1469 | 149  | 606  | 38   | 496  | 36   | 26   | 231  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 93   | 1686 | 19   | 87   | 1469 | 149  | 606  | 38   | 496  | 36   | 26   | 231  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.91 | 0.91 | 1.00 | 0.91 | 1.00 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 2.97 | 0.03 | 1.00 | 3.00 | 1.00 | 1.00 | 0.07 | 0.93 | 0.58 | 0.42 | 1.00 |
| Final Sat.: | 1800 | 4858 | 56   | 1800 | 4914 | 1800 | 1710 | 121  | 1589 | 1052 | 748  | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.05 | 0.35 | 0.35 | 0.05 | 0.30 | 0.08 | 0.35 | 0.31 | 0.31 | 0.03 | 0.03 | 0.13 |
| Crit Moves:  | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Green/Cycle: | 0.07 | 0.43 | 0.43 | 0.06 | 0.42 | 0.42 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 | 0.44 |
| Volume/Cap:  | 0.71 | 0.80 | 0.80 | 0.80 | 0.71 | 0.20 | 0.80 | 0.70 | 0.70 | 0.08 | 0.08 | 0.29 |
| Delay/Veh:   | 61.5 | 26.7 | 26.7 | 78.8 | 25.0 | 18.3 | 27.2 | 23.8 | 23.8 | 16.0 | 16.0 | 17.9 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 61.5 | 26.7 | 26.7 | 78.8 | 25.0 | 18.3 | 27.2 | 23.8 | 23.8 | 16.0 | 16.0 | 17.9 |
| LOS by Move: | E    | C    | C    | E    | C    | B    | C    | C    | C    | B    | B    | B    |
| HCM2kAvgQ:   | 4    | 18   | 18   | 5    | 15   | 3    | 19   | 15   | 15   | 1    | 1    | 5    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #28 Cherry Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 1.040  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 51.6  
Optimal Cycle: 180 Level Of Service: D

| Approach:   | North Bound |   |   |   | South Bound |   |   |   | East Bound |   |   |   | West Bound |   |   |  |
|-------------|-------------|---|---|---|-------------|---|---|---|------------|---|---|---|------------|---|---|--|
| Movement:   | L           | T | R |   | L           | T | R |   | L          | T | R |   | L          | T | R |  |
| Control:    | Protected   |   |   |   | Protected   |   |   |   | Protected  |   |   |   | Protected  |   |   |  |
| Rights:     | Include     |   |   |   | Include     |   |   |   | Include    |   |   |   | Include    |   |   |  |
| Min. Green: | 0           | 0 | 0 |   | 0           | 0 | 0 |   | 0          | 0 | 0 |   | 0          | 0 | 0 |  |
| Lanes:      | 2           | 0 | 3 | 0 | 1           | 2 | 0 | 2 | 2          | 0 | 2 | 1 | 0          | 2 | 0 |  |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 183  | 260  | 40   | 123  | 423  | 105  | 138  | 813  | 213  | 87   | 734  | 69   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 225  | 320  | 49   | 152  | 521  | 129  | 170  | 1002 | 262  | 107  | 904  | 85   |
| Added Vol:   | 14   | 202  | 25   | 385  | 641  | 506  | 287  | 418  | 77   | 135  | 1011 | 304  |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 239  | 522  | 74   | 537  | 1162 | 635  | 457  | 1420 | 339  | 242  | 1915 | 389  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 252  | 550  | 78   | 565  | 1223 | 669  | 481  | 1494 | 357  | 255  | 2016 | 409  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 252  | 550  | 78   | 565  | 1223 | 669  | 481  | 1494 | 357  | 255  | 2016 | 409  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 252  | 550  | 78   | 565  | 1223 | 669  | 481  | 1494 | 357  | 255  | 2016 | 409  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.91 | 1.00 | 0.97 | 0.95 | 0.88 | 0.97 | 0.91 | 0.91 | 0.97 | 0.91 | 1.00 |
| Lanes:      | 2.00 | 3.00 | 1.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.42 | 0.58 | 2.00 | 3.00 | 1.00 |
| Final Sat.: | 3492 | 4914 | 1800 | 3492 | 3420 | 3168 | 3492 | 3966 | 948  | 3492 | 4914 | 1800 |

Capacity Analysis Module:

|              |       |      |      |      |      |      |      |      |      |      |      |      |
|--------------|-------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.07  | 0.11 | 0.04 | 0.16 | 0.36 | 0.21 | 0.14 | 0.38 | 0.38 | 0.07 | 0.41 | 0.23 |
| Crit Moves:  | ****  | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** | **** |
| Green/Cycle: | 0.07  | 0.17 | 0.17 | 0.24 | 0.34 | 0.34 | 0.13 | 0.44 | 0.44 | 0.09 | 0.39 | 0.39 |
| Volume/Cap:  | 1.04  | 0.66 | 0.26 | 0.66 | 1.04 | 0.61 | 1.04 | 0.85 | 0.85 | 0.85 | 1.04 | 0.58 |
| Delay/Veh:   | 115.3 | 40.9 | 36.5 | 36.0 | 70.1 | 28.3 | 96.1 | 28.6 | 28.6 | 65.7 | 62.1 | 24.9 |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 115.3 | 40.9 | 36.5 | 36.0 | 70.1 | 28.3 | 96.1 | 28.6 | 28.6 | 65.7 | 62.1 | 24.9 |
| LOS by Move: | F     | D    | D    | D    | E    | C    | F    | C    | C    | E    | E    | C    |
| HCM2kAvgQ:   | 8     | 7    | 2    | 9    | 29   | 10   | 13   | 21   | 21   | 6    | 32   | 10   |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #30 Beech Ave/Valley Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.882  
Loss Time (sec): 6 (Y+R=4.0 sec) Average Delay (sec/veh): 30.0  
Optimal Cycle: 84 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Permitted   |   |   | Permitted   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 1 | 1           | 0 | 2 | 1          | 0 | 1 | 1          | 0 | 2 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 12   | 9    | 25   | 53   | 5    | 19   | 47   | 748  | 9    | 10   | 504  | 76   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 15   | 11   | 31   | 65   | 6    | 23   | 58   | 922  | 11   | 12   | 621  | 94   |
| Added Vol:   | 0    | 1254 | 120  | 74   | 442  | 42   | 70   | 215  | 0    | 56   | 76   | 124  |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 15   | 1265 | 151  | 139  | 448  | 65   | 128  | 1137 | 11   | 68   | 697  | 218  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 16   | 1332 | 159  | 147  | 472  | 69   | 135  | 1196 | 12   | 72   | 734  | 229  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 16   | 1332 | 159  | 147  | 472  | 69   | 135  | 1196 | 12   | 72   | 734  | 229  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 16   | 1332 | 159  | 147  | 472  | 69   | 135  | 1196 | 12   | 72   | 734  | 229  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 1.00 |
| Lanes:      | 1.00 | 1.79 | 0.21 | 1.00 | 2.00 | 1.00 | 1.00 | 1.98 | 0.02 | 1.00 | 2.00 | 1.00 |
| Final Sat.: | 1800 | 3056 | 364  | 1800 | 3420 | 1800 | 1800 | 3387 | 33   | 1800 | 3420 | 1800 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |       |      |      |
|--------------|------|------|------|------|------|------|------|------|------|-------|------|------|
| Vol/Sat:     | 0.01 | 0.44 | 0.44 | 0.08 | 0.14 | 0.04 | 0.07 | 0.35 | 0.35 | 0.04  | 0.21 | 0.13 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | ****  |      |      |
| Green/Cycle: | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.12 | 0.40 | 0.40 | 0.05  | 0.33 | 0.33 |
| Volume/Cap:  | 0.02 | 0.88 | 0.88 | 0.16 | 0.28 | 0.08 | 0.65 | 0.88 | 0.88 | 0.88  | 0.65 | 0.39 |
| Delay/Veh:   | 12.9 | 28.5 | 28.5 | 14.0 | 14.9 | 13.3 | 49.3 | 34.8 | 34.8 | 109.3 | 29.9 | 26.1 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 |
| AdjDel/Veh:  | 12.9 | 28.5 | 28.5 | 14.0 | 14.9 | 13.3 | 49.3 | 34.8 | 34.8 | 109.3 | 29.9 | 26.1 |
| LOS by Move: | B    | C    | C    | B    | B    | B    | D    | C    | C    | F     | C    | C    |
| HCM2kAvgQ:   | 0    | 25   | 25   | 2    | 4    | 1    | 5    | 21   | 21   | 4     | 11   | 5    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #31 Beech Ave/Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 1.010  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 49.0  
Optimal Cycle: 180 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 1           | 0 | 2 | 2          | 0 | 2 | 2          | 0 | 3 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 84   | 0    | 123  | 48   | 20   | 2    | 8    | 462  | 83   | 104  | 400  | 19   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 103  | 0    | 152  | 59   | 25   | 2    | 10   | 569  | 102  | 128  | 493  | 23   |
| Added Vol:   | 74   | 713  | 164  | 145  | 135  | 236  | 516  | 1091 | 74   | 136  | 957  | 253  |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 177  | 713  | 316  | 204  | 160  | 238  | 526  | 1660 | 176  | 264  | 1450 | 276  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 187  | 751  | 332  | 215  | 168  | 251  | 554  | 1748 | 186  | 278  | 1526 | 291  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 187  | 751  | 332  | 215  | 168  | 251  | 554  | 1748 | 186  | 278  | 1526 | 291  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 187  | 751  | 332  | 215  | 168  | 251  | 554  | 1748 | 186  | 278  | 1526 | 291  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 0.91 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 3.00 | 1.00 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 3420 | 1800 | 3492 | 3420 | 1800 | 3492 | 4914 | 1800 |

Capacity Analysis Module:

|              |      |      |      |       |      |      |      |      |      |       |      |      |
|--------------|------|------|------|-------|------|------|------|------|------|-------|------|------|
| Vol/Sat:     | 0.10 | 0.22 | 0.18 | 0.12  | 0.05 | 0.14 | 0.16 | 0.51 | 0.10 | 0.08  | 0.31 | 0.16 |
| Crit Moves:  | **** |      |      | ****  |      |      | **** |      |      | ****  |      |      |
| Green/Cycle: | 0.14 | 0.22 | 0.22 | 0.12  | 0.19 | 0.19 | 0.20 | 0.51 | 0.51 | 0.08  | 0.39 | 0.39 |
| Volume/Cap:  | 0.73 | 1.01 | 0.85 | 1.01  | 0.26 | 0.73 | 0.80 | 1.01 | 0.20 | 1.01  | 0.80 | 0.42 |
| Delay/Veh:   | 50.8 | 74.7 | 53.5 | 108.5 | 34.5 | 45.4 | 45.0 | 48.9 | 13.7 | 102.9 | 29.8 | 22.8 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 |
| AdjDel/Veh:  | 50.8 | 74.7 | 53.5 | 108.5 | 34.5 | 45.4 | 45.0 | 48.9 | 13.7 | 102.9 | 29.8 | 22.8 |
| LOS by Move: | D    | E    | D    | F     | C    | D    | D    | D    | B    | F     | C    | C    |
| HCM2kAvgQ:   | 7    | 18   | 13   | 11    | 2    | 9    | 11   | 37   | 3    | 8     | 17   | 7    |

Note: Queue reported is the number of cars per lane.



FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

| Level Of Service Computation Report                    |                 |      |                          |             |      |      |            |      |       |            |      |      |
|--------------------------------------------------------|-----------------|------|--------------------------|-------------|------|------|------------|------|-------|------------|------|------|
| 2000 HCM Operations Method (Future Volume Alternative) |                 |      |                          |             |      |      |            |      |       |            |      |      |
| *****                                                  |                 |      |                          |             |      |      |            |      |       |            |      |      |
| Intersection #32 Beech Ave/Santa Ana Ave               |                 |      |                          |             |      |      |            |      |       |            |      |      |
| *****                                                  |                 |      |                          |             |      |      |            |      |       |            |      |      |
| Cycle (sec):                                           | 100             |      | Critical Vol./Cap.(X):   |             |      |      |            |      | 0.631 |            |      |      |
| Loss Time (sec):                                       | 6 (Y+R=4.0 sec) |      | Average Delay (sec/veh): |             |      |      |            |      | 22.2  |            |      |      |
| Optimal Cycle:                                         | 35              |      | Level Of Service:        |             |      |      |            |      | C     |            |      |      |
| *****                                                  |                 |      |                          |             |      |      |            |      |       |            |      |      |
| Approach:                                              | North Bound     |      |                          | South Bound |      |      | East Bound |      |       | West Bound |      |      |
| Movement:                                              | L               | T    | R                        | L           | T    | R    | L          | T    | R     | L          | T    | R    |
| ----- ----- ----- -----                                |                 |      |                          |             |      |      |            |      |       |            |      |      |
| Control:                                               | Protected       |      |                          | Protected   |      |      | Permitted  |      |       | Permitted  |      |      |
| Rights:                                                | Include         |      |                          | Include     |      |      | Include    |      |       | Include    |      |      |
| Min. Green:                                            | 0               | 0    | 0                        | 0           | 0    | 0    | 0          | 0    | 0     | 0          | 0    | 0    |
| Lanes:                                                 | 1               | 0    | 1                        | 0           | 1    | 0    | 1          | 0    | 1     | 0          | 1    | 0    |
| ----- ----- ----- -----                                |                 |      |                          |             |      |      |            |      |       |            |      |      |
| Volume Module:                                         |                 |      |                          |             |      |      |            |      |       |            |      |      |
| Base Vol:                                              | 9               | 79   | 59                       | 52          | 115  | 50   | 36         | 195  | 24    | 50         | 99   | 38   |
| Growth Adj:                                            | 1.23            | 1.23 | 1.23                     | 1.23        | 1.23 | 1.23 | 1.23       | 1.23 | 1.23  | 1.23       | 1.23 | 1.23 |
| Initial Bse:                                           | 11              | 97   | 73                       | 64          | 142  | 62   | 44         | 240  | 30    | 62         | 122  | 47   |
| Added Vol:                                             | 16              | 416  | 0                        | 19          | 207  | 120  | 353        | 0    | 56    | 0          | 0    | 125  |
| PasserByVol:                                           | 0               | 0    | 0                        | 0           | 0    | 0    | 0          | 0    | 0     | 0          | 0    | 0    |
| Initial Fut:                                           | 27              | 513  | 73                       | 83          | 349  | 182  | 397        | 240  | 86    | 62         | 122  | 172  |
| User Adj:                                              | 1.00            | 1.00 | 1.00                     | 1.00        | 1.00 | 1.00 | 1.00       | 1.00 | 1.00  | 1.00       | 1.00 | 1.00 |
| PHF Adj:                                               | 0.95            | 0.95 | 0.95                     | 0.95        | 0.95 | 0.95 | 0.95       | 0.95 | 0.95  | 0.95       | 0.95 | 0.95 |
| PHF Volume:                                            | 29              | 540  | 77                       | 87          | 367  | 191  | 418        | 253  | 90    | 65         | 128  | 181  |
| Reduct Vol:                                            | 0               | 0    | 0                        | 0           | 0    | 0    | 0          | 0    | 0     | 0          | 0    | 0    |
| Reduced Vol:                                           | 29              | 540  | 77                       | 87          | 367  | 191  | 418        | 253  | 90    | 65         | 128  | 181  |
| PCE Adj:                                               | 1.00            | 1.00 | 1.00                     | 1.00        | 1.00 | 1.00 | 1.00       | 1.00 | 1.00  | 1.00       | 1.00 | 1.00 |
| MLF Adj:                                               | 1.00            | 1.00 | 1.00                     | 1.00        | 1.00 | 1.00 | 1.00       | 1.00 | 1.00  | 1.00       | 1.00 | 1.00 |
| FinalVolume:                                           | 29              | 540  | 77                       | 87          | 367  | 191  | 418        | 253  | 90    | 65         | 128  | 181  |
| ----- ----- ----- -----                                |                 |      |                          |             |      |      |            |      |       |            |      |      |
| Saturation Flow Module:                                |                 |      |                          |             |      |      |            |      |       |            |      |      |
| Sat/Lane:                                              | 1800            | 1800 | 1800                     | 1800        | 1800 | 1800 | 1800       | 1800 | 1800  | 1800       | 1800 | 1800 |
| Adjustment:                                            | 1.00            | 1.00 | 1.00                     | 1.00        | 1.00 | 1.00 | 0.95       | 0.95 | 0.95  | 0.95       | 0.95 | 0.95 |
| Lanes:                                                 | 1.00            | 1.00 | 1.00                     | 1.00        | 1.00 | 1.00 | 1.00       | 0.74 | 0.26  | 0.35       | 0.68 | 0.97 |
| Final Sat.:                                            | 1800            | 1800 | 1800                     | 1800        | 1800 | 1800 | 1710       | 1261 | 449   | 593        | 1174 | 1653 |
| ----- ----- ----- -----                                |                 |      |                          |             |      |      |            |      |       |            |      |      |
| Capacity Analysis Module:                              |                 |      |                          |             |      |      |            |      |       |            |      |      |
| Vol/Sat:                                               | 0.02            | 0.30 | 0.04                     | 0.05        | 0.20 | 0.11 | 0.24       | 0.20 | 0.20  | 0.11       | 0.11 | 0.11 |
| Crit Moves:                                            | ****            |      |                          | ****        |      |      | ****       |      |       |            |      |      |
| Green/Cycle:                                           | 0.04            | 0.48 | 0.48                     | 0.08        | 0.51 | 0.51 | 0.39       | 0.39 | 0.39  | 0.39       | 0.39 | 0.39 |
| Volume/Cap:                                            | 0.40            | 0.63 | 0.09                     | 0.63        | 0.40 | 0.21 | 0.63       | 0.52 | 0.52  | 0.28       | 0.28 | 0.28 |
| Delay/Veh:                                             | 50.4            | 21.2 | 14.4                     | 53.8        | 15.2 | 13.4 | 25.9       | 23.8 | 23.8  | 21.2       | 21.2 | 21.2 |
| User DelAdj:                                           | 1.00            | 1.00 | 1.00                     | 1.00        | 1.00 | 1.00 | 1.00       | 1.00 | 1.00  | 1.00       | 1.00 | 1.00 |
| AdjDel/Veh:                                            | 50.4            | 21.2 | 14.4                     | 53.8        | 15.2 | 13.4 | 25.9       | 23.8 | 23.8  | 21.2       | 21.2 | 21.2 |
| LOS by Move:                                           | D               | C    | B                        | D           | B    | B    | C          | C    | C     | C          | C    | C    |
| HCM2kAvgQ:                                             | 1               | 13   | 1                        | 4           | 7    | 3    | 12         | 9    | 9     | 4          | 4    | 4    |
| *****                                                  |                 |      |                          |             |      |      |            |      |       |            |      |      |
| Note: Queue reported is the number of cars per lane.   |                 |      |                          |             |      |      |            |      |       |            |      |      |
| *****                                                  |                 |      |                          |             |      |      |            |      |       |            |      |      |

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

| Level Of Service Computation Report                    |                  |                          |      |             |      |      |            |      |       |            |      |      |
|--------------------------------------------------------|------------------|--------------------------|------|-------------|------|------|------------|------|-------|------------|------|------|
| 2000 HCM Operations Method (Future Volume Alternative) |                  |                          |      |             |      |      |            |      |       |            |      |      |
| *****                                                  |                  |                          |      |             |      |      |            |      |       |            |      |      |
| Intersection #33 Beech Ave/Jurupa St                   |                  |                          |      |             |      |      |            |      |       |            |      |      |
| *****                                                  |                  |                          |      |             |      |      |            |      |       |            |      |      |
| Cycle (sec):                                           | 100              | Critical Vol./Cap.(X):   |      |             |      |      |            |      | 0.864 |            |      |      |
| Loss Time (sec):                                       | 10 (Y+R=4.0 sec) | Average Delay (sec/veh): |      |             |      |      |            |      | 30.7  |            |      |      |
| Optimal Cycle:                                         | 90               | Level Of Service:        |      |             |      |      |            |      | C     |            |      |      |
| *****                                                  |                  |                          |      |             |      |      |            |      |       |            |      |      |
| Approach:                                              | North Bound      |                          |      | South Bound |      |      | East Bound |      |       | West Bound |      |      |
| Movement:                                              | L                | T                        | R    | L           | T    | R    | L          | T    | R     | L          | T    | R    |
| ----- ----- ----- -----                                |                  |                          |      |             |      |      |            |      |       |            |      |      |
| Control:                                               | Protected        |                          |      | Protected   |      |      | Protected  |      |       | Protected  |      |      |
| Rights:                                                | Include          |                          |      | Include     |      |      | Include    |      |       | Include    |      |      |
| Min. Green:                                            | 0                | 0                        | 0    | 0           | 0    | 0    | 0          | 0    | 0     | 0          | 0    | 0    |
| Lanes:                                                 | 2                | 0                        | 1    | 0           | 1    | 0    | 1          | 0    | 3     | 0          | 1    | 1    |
| ----- ----- ----- -----                                |                  |                          |      |             |      |      |            |      |       |            |      |      |
| Volume Module:                                         |                  |                          |      |             |      |      |            |      |       |            |      |      |
| Base Vol:                                              | 180              | 21                       | 11   | 10          | 39   | 125  | 78         | 584  | 266   | 8          | 332  | 7    |
| Growth Adj:                                            | 1.23             | 1.23                     | 1.23 | 1.23        | 1.23 | 1.23 | 1.23       | 1.23 | 1.23  | 1.23       | 1.23 | 1.23 |
| Initial Bse:                                           | 222              | 26                       | 14   | 12          | 48   | 154  | 96         | 719  | 328   | 10         | 409  | 9    |
| Added Vol:                                             | 21               | 118                      | 18   | 0           | 247  | 17   | 110        | 1420 | 87    | 116        | 692  | 0    |
| PasserByVol:                                           | 0                | 0                        | 0    | 0           | 0    | 0    | 0          | 0    | 0     | 0          | 0    | 0    |
| Initial Fut:                                           | 243              | 144                      | 32   | 12          | 295  | 171  | 206        | 2139 | 415   | 126        | 1101 | 9    |
| User Adj:                                              | 1.00             | 1.00                     | 1.00 | 1.00        | 1.00 | 1.00 | 1.00       | 1.00 | 1.00  | 1.00       | 1.00 | 1.00 |
| PHF Adj:                                               | 0.95             | 0.95                     | 0.95 | 0.95        | 0.95 | 0.95 | 0.95       | 0.95 | 0.95  | 0.95       | 0.95 | 0.95 |
| PHF Volume:                                            | 256              | 151                      | 33   | 13          | 311  | 180  | 217        | 2252 | 437   | 132        | 1159 | 9    |
| Reduct Vol:                                            | 0                | 0                        | 0    | 0           | 0    | 0    | 0          | 0    | 0     | 0          | 0    | 0    |
| Reduced Vol:                                           | 256              | 151                      | 33   | 13          | 311  | 180  | 217        | 2252 | 437   | 132        | 1159 | 9    |
| PCE Adj:                                               | 1.00             | 1.00                     | 1.00 | 1.00        | 1.00 | 1.00 | 1.00       | 1.00 | 1.00  | 1.00       | 1.00 | 1.00 |
| MLF Adj:                                               | 1.00             | 1.00                     | 1.00 | 1.00        | 1.00 | 1.00 | 1.00       | 1.00 | 1.00  | 1.00       | 1.00 | 1.00 |
| FinalVolume:                                           | 256              | 151                      | 33   | 13          | 311  | 180  | 217        | 2252 | 437   | 132        | 1159 | 9    |
| ----- ----- ----- -----                                |                  |                          |      |             |      |      |            |      |       |            |      |      |
| Saturation Flow Module:                                |                  |                          |      |             |      |      |            |      |       |            |      |      |
| Sat/Lane:                                              | 1800             | 1800                     | 1800 | 1800        | 1800 | 1800 | 1800       | 1800 | 1800  | 1800       | 1800 | 1800 |
| Adjustment:                                            | 0.97             | 1.00                     | 1.00 | 1.00        | 1.00 | 1.00 | 1.00       | 0.91 | 1.00  | 1.00       | 0.95 | 1.00 |
| Lanes:                                                 | 2.00             | 1.00                     | 1.00 | 1.00        | 1.00 | 1.00 | 1.00       | 3.00 | 1.00  | 1.00       | 2.00 | 1.00 |
| Final Sat.:                                            | 3492             | 1800                     | 1800 | 1800        | 1800 | 1800 | 1800       | 4914 | 1800  | 1800       | 3420 | 1800 |
| ----- ----- ----- -----                                |                  |                          |      |             |      |      |            |      |       |            |      |      |
| Capacity Analysis Module:                              |                  |                          |      |             |      |      |            |      |       |            |      |      |
| Vol/Sat:                                               | 0.07             | 0.08                     | 0.02 | 0.01        | 0.17 | 0.10 | 0.12       | 0.46 | 0.24  | 0.07       | 0.34 | 0.01 |
| Crit Moves:                                            | ****             |                          |      |             | **** |      |            | **** |       | ****       |      |      |
| Green/Cycle:                                           | 0.08             | 0.26                     | 0.26 | 0.02        | 0.20 | 0.20 | 0.16       | 0.53 | 0.53  | 0.09       | 0.45 | 0.45 |
| Volume/Cap:                                            | 0.86             | 0.32                     | 0.07 | 0.32        | 0.86 | 0.50 | 0.75       | 0.86 | 0.46  | 0.86       | 0.75 | 0.01 |
| Delay/Veh:                                             | 67.4             | 30.1                     | 27.8 | 52.7        | 57.7 | 36.7 | 50.1       | 23.6 | 14.9  | 81.7       | 24.6 | 15.0 |
| User DelAdj:                                           | 1.00             | 1.00                     | 1.00 | 1.00        | 1.00 | 1.00 | 1.00       | 1.00 | 1.00  | 1.00       | 1.00 | 1.00 |
| AdjDel/Veh:                                            | 67.4             | 30.1                     | 27.8 | 52.7        | 57.7 | 36.7 | 50.1       | 23.6 | 14.9  | 81.7       | 24.6 | 15.0 |
| LOS by Move:                                           | E                | C                        | C    | D           | E    | D    | D          | C    | B     | F          | C    | B    |
| HCM2kAvgQ:                                             | 7                | 4                        | 1    | 1           | 12   | 5    | 8          | 25   | 8     | 7          | 17   | 0    |
| *****                                                  |                  |                          |      |             |      |      |            |      |       |            |      |      |
| Note: Queue reported is the number of cars per lane.   |                  |                          |      |             |      |      |            |      |       |            |      |      |
| *****                                                  |                  |                          |      |             |      |      |            |      |       |            |      |      |

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)  
\*\*\*\*\*  
Intersection #34 Citrus Ave/Valley Blvd  
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 1.021  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 52.6  
Optimal Cycle: 180 Level Of Service: D  
\*\*\*\*\*

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Ovl        |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 2 | 0           | 1 | 1 | 2          | 0 | 2 | 0          | 2 | 0 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 290  | 836  | 216  | 122  | 763  | 43   | 108  | 578  | 358  | 346  | 452  | 133  |
| Growth Adj:   | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse:  | 357  | 1030 | 266  | 150  | 940  | 53   | 133  | 712  | 441  | 426  | 557  | 164  |
| Added Vol:    | 188  | 465  | 0    | 0    | 134  | 13   | 84   | 142  | 182  | 0    | 54   | 0    |
| PasserByVol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:  | 545  | 1495 | 266  | 150  | 1074 | 66   | 217  | 854  | 623  | 426  | 611  | 164  |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 574  | 1574 | 280  | 158  | 1131 | 69   | 228  | 899  | 656  | 449  | 643  | 172  |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 574  | 1574 | 280  | 158  | 1131 | 69   | 228  | 899  | 656  | 449  | 643  | 172  |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 574  | 1574 | 280  | 158  | 1131 | 69   | 228  | 899  | 656  | 449  | 643  | 172  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | 0.97 | 0.95 | 0.88 | 0.97 | 0.95 | 0.95 |
| Lanes:      | 2.00 | 2.00 | 1.00 | 1.00 | 2.00 | 1.00 | 2.00 | 2.00 | 2.00 | 2.00 | 1.58 | 0.42 |
| Final Sat.: | 3492 | 3420 | 1800 | 1800 | 3420 | 1800 | 3492 | 3420 | 3168 | 3492 | 2697 | 723  |

Capacity Analysis Module:

|              |      |      |      |       |      |      |      |      |      |      |      |      |
|--------------|------|------|------|-------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.16 | 0.46 | 0.16 | 0.09  | 0.33 | 0.04 | 0.07 | 0.26 | 0.21 | 0.13 | 0.24 | 0.24 |
| Crit Moves:  | **** | **** | **** | ****  | **** | **** | **** | **** | **** | **** | **** | **** |
| Green/Cycle: | 0.18 | 0.45 | 0.45 | 0.09  | 0.36 | 0.36 | 0.08 | 0.26 | 0.44 | 0.13 | 0.30 | 0.30 |
| Volume/Cap:  | 0.92 | 1.02 | 0.35 | 1.02  | 0.92 | 0.11 | 0.79 | 1.02 | 0.48 | 1.02 | 0.79 | 0.79 |
| Delay/Veh:   | 59.7 | 55.9 | 18.1 | 123.7 | 42.2 | 21.5 | 59.0 | 72.9 | 20.3 | 92.1 | 36.4 | 36.4 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 59.7 | 55.9 | 18.1 | 123.7 | 42.2 | 21.5 | 59.0 | 72.9 | 20.3 | 92.1 | 36.4 | 36.4 |
| LOS by Move: | E    | E    | B    | F     | D    | C    | E    | E    | C    | F    | D    | D    |
| HCM2kAvgQ:   | 13   | 34   | 6    | 9     | 22   | 1    | 6    | 21   | 8    | 12   | 14   | 14   |

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Note: Queue reported is the number of cars per lane.  
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FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)  
\*\*\*\*\*  
Intersection #37 Citrus Ave/Slover Ave  
\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 1.042  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 52.1  
Optimal Cycle: 180 Level Of Service: D  
\*\*\*\*\*

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 0           | 1 | 1 | 2          | 0 | 2 | 2          | 0 | 3 |

Volume Module:

|               |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:     | 25   | 249  | 72   | 155  | 302  | 296  | 302  | 862  | 50   | 75   | 267  | 95   |
| Growth Adj:   | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse:  | 31   | 307  | 89   | 191  | 372  | 365  | 372  | 1062 | 62   | 92   | 329  | 117  |
| Added Vol:    | 65   | 495  | 223  | 0    | 135  | 225  | 588  | 1377 | 108  | 41   | 518  | 0    |
| PasserByVol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut:  | 96   | 802  | 312  | 191  | 507  | 590  | 960  | 2439 | 170  | 133  | 847  | 117  |
| User Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:      | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:   | 101  | 844  | 328  | 201  | 534  | 621  | 1011 | 2567 | 179  | 140  | 892  | 123  |
| Reduct Vol:   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol:  | 101  | 844  | 328  | 201  | 534  | 621  | 1011 | 2567 | 179  | 140  | 892  | 123  |
| PCE Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:      | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Final Volume: | 101  | 844  | 328  | 201  | 534  | 621  | 1011 | 2567 | 179  | 140  | 892  | 123  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 0.88 | 0.97 | 0.91 | 1.00 | 1.00 | 0.91 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 | 3.00 | 1.00 | 1.00 | 3.00 | 1.00 |
| Final Sat.: | 1800 | 3420 | 1800 | 1800 | 3420 | 3168 | 3492 | 4914 | 1800 | 1800 | 4914 | 1800 |

Capacity Analysis Module:

|              |      |      |      |       |      |      |      |      |      |       |      |      |
|--------------|------|------|------|-------|------|------|------|------|------|-------|------|------|
| Vol/Sat:     | 0.06 | 0.25 | 0.18 | 0.11  | 0.16 | 0.20 | 0.29 | 0.52 | 0.10 | 0.08  | 0.18 | 0.07 |
| Crit Moves:  | **** | **** | **** | ****  | **** | **** | **** | **** | **** | ****  | **** | **** |
| Green/Cycle: | 0.08 | 0.24 | 0.24 | 0.11  | 0.27 | 0.27 | 0.35 | 0.50 | 0.50 | 0.07  | 0.22 | 0.22 |
| Volume/Cap:  | 0.73 | 1.04 | 0.77 | 1.04  | 0.58 | 0.73 | 0.82 | 1.04 | 0.20 | 1.04  | 0.82 | 0.31 |
| Delay/Veh:   | 63.4 | 81.3 | 44.0 | 121.0 | 32.8 | 36.7 | 33.7 | 55.3 | 13.9 | 135.5 | 41.9 | 32.9 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 |
| AdjDel/Veh:  | 63.4 | 81.3 | 44.0 | 121.0 | 32.8 | 36.7 | 33.7 | 55.3 | 13.9 | 135.5 | 41.9 | 32.9 |
| LOS by Move: | E    | F    | D    | F     | C    | D    | C    | E    | B    | F     | D    | C    |
| HCM2kAvgQ:   | 5    | 21   | 11   | 11    | 8    | 11   | 17   | 40   | 3    | 8     | 12   | 3    |

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Note: Queue reported is the number of cars per lane.  
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FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #38 Citrus Ave/Santa Ana Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.860  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 40.0  
Optimal Cycle: 82 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 0 | 1           | 0 | 0 | 1          | 0 | 0 | 1          | 0 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 4    | 169  | 37   | 41   | 284  | 18   | 64   | 267  | 5    | 50   | 117  | 35   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 5    | 208  | 46   | 51   | 350  | 22   | 79   | 329  | 6    | 62   | 144  | 43   |
| Added Vol:   | 13   | 363  | 0    | 0    | 255  | 40   | 256  | 190  | 81   | 0    | 30   | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 18   | 571  | 46   | 51   | 605  | 62   | 335  | 519  | 87   | 62   | 174  | 43   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 19   | 601  | 48   | 53   | 637  | 65   | 352  | 546  | 92   | 65   | 183  | 45   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 19   | 601  | 48   | 53   | 637  | 65   | 352  | 546  | 92   | 65   | 183  | 45   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 19   | 601  | 48   | 53   | 637  | 65   | 352  | 546  | 92   | 65   | 183  | 45   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Lanes:      | 1.00 | 0.93 | 0.07 | 1.00 | 0.91 | 0.09 | 1.00 | 0.86 | 0.14 | 1.00 | 0.80 | 0.20 |
| Final Sat.: | 1800 | 1667 | 133  | 1800 | 1632 | 168  | 1800 | 1541 | 259  | 1800 | 1443 | 357  |

Capacity Analysis Module:

|              |       |      |      |       |      |      |      |      |      |       |      |      |
|--------------|-------|------|------|-------|------|------|------|------|------|-------|------|------|
| Vol/Sat:     | 0.01  | 0.36 | 0.36 | 0.03  | 0.39 | 0.39 | 0.20 | 0.35 | 0.35 | 0.04  | 0.13 | 0.13 |
| Crit Moves:  | ****  |      |      | ****  |      |      | **** |      |      | ****  |      |      |
| Green/Cycle: | 0.01  | 0.43 | 0.43 | 0.04  | 0.45 | 0.45 | 0.28 | 0.41 | 0.41 | 0.04  | 0.18 | 0.18 |
| Volume/Cap:  | 0.86  | 0.84 | 0.84 | 0.84  | 0.86 | 0.86 | 0.71 | 0.86 | 0.86 | 0.86  | 0.71 | 0.71 |
| Delay/Veh:   | 177.8 | 33.3 | 33.3 | 107.6 | 33.6 | 33.6 | 37.4 | 36.7 | 36.7 | 106.4 | 45.9 | 45.9 |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 |
| AdjDel/Veh:  | 177.8 | 33.3 | 33.3 | 107.6 | 33.6 | 33.6 | 37.4 | 36.7 | 36.7 | 106.4 | 45.9 | 45.9 |
| LOS by Move: | F     | C    | C    | F     | C    | C    | D    | D    | D    | F     | D    | D    |
| HCM2kAvgQ:   | 2     | 20   | 20   | 3     | 22   | 22   | 11   | 21   | 21   | 4     | 8    | 8    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #39 Citrus Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.912  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 33.7  
Optimal Cycle: 107 Level Of Service: C

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 1           | 0 | 2 | 2           | 0 | 1 | 1          | 0 | 4 | 1          | 0 | 3 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 37   | 109  | 123  | 90   | 139  | 141  | 91   | 684  | 83   | 140  | 366  | 35   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 46   | 134  | 152  | 111  | 171  | 174  | 112  | 843  | 102  | 172  | 451  | 43   |
| Added Vol:   | 14   | 105  | 0    | 318  | 282  | 83   | 79   | 2174 | 87   | 0    | 358  | 58   |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 60   | 239  | 152  | 429  | 453  | 257  | 191  | 3017 | 189  | 172  | 809  | 101  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 63   | 252  | 160  | 451  | 477  | 270  | 201  | 3175 | 199  | 182  | 851  | 106  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 63   | 252  | 160  | 451  | 477  | 270  | 201  | 3175 | 199  | 182  | 851  | 106  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 63   | 252  | 160  | 451  | 477  | 270  | 201  | 3175 | 199  | 182  | 851  | 106  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 1.00 | 0.95 | 1.00 | 0.97 | 0.95 | 0.95 | 1.00 | 0.91 | 1.00 | 1.00 | 0.91 | 1.00 |
| Lanes:      | 1.00 | 2.00 | 1.00 | 2.00 | 1.28 | 0.72 | 1.00 | 4.00 | 1.00 | 1.00 | 3.00 | 1.00 |
| Final Sat.: | 1800 | 3420 | 1800 | 3492 | 2183 | 1237 | 1800 | 6552 | 1800 | 1800 | 4914 | 1800 |

Capacity Analysis Module:

|              |       |      |      |      |      |      |      |      |      |      |      |      |
|--------------|-------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.03  | 0.07 | 0.09 | 0.13 | 0.22 | 0.22 | 0.11 | 0.48 | 0.11 | 0.10 | 0.17 | 0.06 |
| Crit Moves:  | ****  |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.04  | 0.11 | 0.11 | 0.16 | 0.24 | 0.24 | 0.25 | 0.53 | 0.53 | 0.11 | 0.39 | 0.39 |
| Volume/Cap:  | 0.91  | 0.65 | 0.78 | 0.78 | 0.91 | 0.91 | 0.44 | 0.91 | 0.21 | 0.91 | 0.44 | 0.15 |
| Delay/Veh:   | 126.1 | 46.4 | 61.0 | 47.0 | 51.3 | 51.3 | 32.2 | 25.4 | 12.4 | 84.0 | 22.6 | 19.9 |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 126.1 | 46.4 | 61.0 | 47.0 | 51.3 | 51.3 | 32.2 | 25.4 | 12.4 | 84.0 | 22.6 | 19.9 |
| LOS by Move: | F     | D    | E    | D    | D    | D    | C    | C    | B    | F    | C    | B    |
| HCM2kAvgQ:   | 4     | 5    | 7    | 9    | 16   | 16   | 5    | 28   | 3    | 9    | 7    | 2    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #40 Sierra Ave/Slover Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.977  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 45.8  
Optimal Cycle: 169 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Ovl        |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 3 | 0           | 1 | 2 | 0          | 2 | 1 | 0          | 2 | 0 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 51   | 945  | 97   | 500  | 770  | 173  | 586  | 471  | 71   | 132  | 213  | 637  |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 63   | 1164 | 120  | 616  | 949  | 213  | 722  | 580  | 87   | 163  | 262  | 785  |
| Added Vol:   | 0    | 349  | 0    | 0    | 55   | 0    | 0    | 1468 | 0    | 0    | 536  | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 63   | 1513 | 120  | 616  | 1004 | 213  | 722  | 2048 | 87   | 163  | 798  | 785  |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 66   | 1593 | 126  | 648  | 1056 | 224  | 760  | 2156 | 92   | 171  | 840  | 826  |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 66   | 1593 | 126  | 648  | 1056 | 224  | 760  | 2156 | 92   | 171  | 840  | 826  |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 66   | 1593 | 126  | 648  | 1056 | 224  | 760  | 2156 | 92   | 171  | 840  | 826  |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.91 | 1.00 | 0.97 | 0.91 | 0.91 | 0.97 | 0.91 | 1.00 | 0.97 | 0.91 | 0.88 |
| Lanes:      | 2.00 | 3.00 | 1.00 | 2.00 | 2.47 | 0.53 | 2.00 | 4.00 | 1.00 | 2.00 | 3.00 | 2.00 |
| Final Sat.: | 3492 | 4914 | 1800 | 3492 | 4053 | 861  | 3492 | 6552 | 1800 | 3492 | 4914 | 3168 |

Capacity Analysis Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Vol/Sat:     | 0.02 | 0.32 | 0.07 | 0.19 | 0.26 | 0.26 | 0.22 | 0.33 | 0.05 | 0.05 | 0.17 | 0.26 |
| Crit Moves:  | **** |      |      | **** |      |      | **** |      |      | **** |      |      |
| Green/Cycle: | 0.04 | 0.33 | 0.33 | 0.19 | 0.49 | 0.49 | 0.22 | 0.35 | 0.35 | 0.05 | 0.18 | 0.37 |
| Volume/Cap:  | 0.54 | 0.98 | 0.21 | 0.98 | 0.54 | 0.54 | 0.98 | 0.95 | 0.15 | 0.95 | 0.98 | 0.71 |
| Delay/Veh:   | 52.0 | 50.0 | 24.2 | 69.3 | 18.1 | 18.1 | 65.1 | 41.5 | 22.6 | 99.7 | 66.0 | 29.4 |
| User DelAdj: | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| AdjDel/Veh:  | 52.0 | 50.0 | 24.2 | 69.3 | 18.1 | 18.1 | 65.1 | 41.5 | 22.6 | 99.7 | 66.0 | 29.4 |
| LOS by Move: | D    | D    | C    | E    | B    | B    | E    | D    | C    | F    | E    | C    |
| HCM2kAvgQ:   | 2    | 24   | 3    | 15   | 10   | 10   | 17   | 23   | 2    | 5    | 14   | 13   |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #42 Sierra Ave/Jurupa St

Cycle (sec): 100 Critical Vol./Cap.(X): 0.990  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 43.7  
Optimal Cycle: 180 Level Of Service: D

| Approach:   | North Bound |   |   | South Bound |   |   | East Bound |   |   | West Bound |   |   |
|-------------|-------------|---|---|-------------|---|---|------------|---|---|------------|---|---|
| Movement:   | L           | T | R | L           | T | R | L          | T | R | L          | T | R |
| Control:    | Protected   |   |   | Protected   |   |   | Protected  |   |   | Protected  |   |   |
| Rights:     | Include     |   |   | Include     |   |   | Include    |   |   | Include    |   |   |
| Min. Green: | 0           | 0 | 0 | 0           | 0 | 0 | 0          | 0 | 0 | 0          | 0 | 0 |
| Lanes:      | 2           | 0 | 2 | 0           | 1 | 2 | 0          | 2 | 0 | 1          | 0 | 3 |

Volume Module:

|              |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Base Vol:    | 99   | 469  | 107  | 109  | 488  | 273  | 424  | 235  | 184  | 83   | 196  | 60   |
| Growth Adj:  | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| Initial Bse: | 122  | 578  | 132  | 134  | 601  | 336  | 522  | 290  | 227  | 102  | 241  | 74   |
| Added Vol:   | 21   | 0    | 0    | 0    | 0    | 55   | 349  | 1735 | 105  | 0    | 292  | 0    |
| PasserByVol: | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Initial Fut: | 143  | 578  | 132  | 134  | 601  | 391  | 871  | 2025 | 332  | 102  | 533  | 74   |
| User Adj:    | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| PHF Adj:     | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| PHF Volume:  | 150  | 608  | 139  | 141  | 633  | 412  | 917  | 2131 | 349  | 108  | 562  | 78   |
| Reduct Vol:  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Reduced Vol: | 150  | 608  | 139  | 141  | 633  | 412  | 917  | 2131 | 349  | 108  | 562  | 78   |
| PCE Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| MLF Adj:     | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| FinalVolume: | 150  | 608  | 139  | 141  | 633  | 412  | 917  | 2131 | 349  | 108  | 562  | 78   |

Saturation Flow Module:

|             |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Sat/Lane:   | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 |
| Adjustment: | 0.97 | 0.95 | 1.00 | 0.97 | 0.95 | 0.88 | 0.97 | 0.95 | 1.00 | 1.00 | 0.91 | 1.00 |
| Lanes:      | 2.00 | 2.00 | 1.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 1.00 | 1.00 | 3.00 | 1.00 |
| Final Sat.: | 3492 | 3420 | 1800 | 3492 | 3420 | 3168 | 3492 | 3420 | 1800 | 1800 | 4914 | 1800 |

Capacity Analysis Module:

|              |       |      |      |       |      |      |      |      |      |       |      |      |
|--------------|-------|------|------|-------|------|------|------|------|------|-------|------|------|
| Vol/Sat:     | 0.04  | 0.18 | 0.08 | 0.04  | 0.19 | 0.13 | 0.26 | 0.62 | 0.19 | 0.06  | 0.11 | 0.04 |
| Crit Moves:  | ****  |      |      | ****  |      |      | **** |      |      | ****  |      |      |
| Green/Cycle: | 0.04  | 0.19 | 0.19 | 0.04  | 0.19 | 0.19 | 0.48 | 0.63 | 0.63 | 0.06  | 0.21 | 0.21 |
| Volume/Cap:  | 0.99  | 0.95 | 0.41 | 0.95  | 0.99 | 0.70 | 0.55 | 0.99 | 0.31 | 0.99  | 0.55 | 0.21 |
| Delay/Veh:   | 117.7 | 63.5 | 36.6 | 105.6 | 73.6 | 41.6 | 18.7 | 35.3 | 8.7  | 130.0 | 35.9 | 33.0 |
| User DelAdj: | 1.00  | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00  | 1.00 | 1.00 |
| AdjDel/Veh:  | 117.7 | 63.5 | 36.6 | 105.6 | 73.6 | 41.6 | 18.7 | 35.3 | 8.7  | 130.0 | 35.9 | 33.0 |
| LOS by Move: | F     | E    | D    | F     | E    | D    | B    | D    | A    | F     | D    | C    |
| HCM2kAvgQ:   | 5     | 14   | 4    | 5     | 15   | 8    | 10   | 42   | 5    | 7     | 6    | 2    |

Note: Queue reported is the number of cars per lane.

FONTANA SOUTHWEST INDUSTRIAL PARK PROJECT (JN: 65100340)  
IMPROVED FORECAST YEAR 2030 WITH PROJECT CONDITIONS  
PM PEAK HOUR

Level Of Service Computation Report  
2000 HCM Operations Method (Future Volume Alternative)

Intersection #43 Armstrong Rd/Sierra Ave

Cycle (sec): 100 Critical Vol./Cap.(X): 0.734  
Loss Time (sec): 8 (Y+R=4.0 sec) Average Delay (sec/veh): 30.1  
Optimal Cycle: 53 Level Of Service: C

| Approach:   | North Bound |   |   |   | South Bound |   |   |   | East Bound |   |   |   | West Bound |   |   |  |
|-------------|-------------|---|---|---|-------------|---|---|---|------------|---|---|---|------------|---|---|--|
| Movement:   | L           | T | R |   | L           | T | R |   | L          | T | R |   | L          | T | R |  |
| Control:    | Protected   |   |   |   | Protected   |   |   |   | Protected  |   |   |   | Protected  |   |   |  |
| Rights:     | Include     |   |   |   | Include     |   |   |   | Include    |   |   |   | Include    |   |   |  |
| Min. Green: | 0           | 0 | 0 |   | 0           | 0 | 0 |   | 0          | 0 | 0 |   | 0          | 0 | 0 |  |
| Lanes:      | 2           | 0 | 1 | 0 | 1           | 0 | 1 | 0 | 1          | 0 | 1 | 1 | 1          | 0 | 1 |  |

| Volume Module: | North Bound |      |      |  | South Bound |      |      |  | East Bound |      |      |  | West Bound |      |      |  |
|----------------|-------------|------|------|--|-------------|------|------|--|------------|------|------|--|------------|------|------|--|
| Base Vol:      | 665         | 261  | 22   |  | 18          | 170  | 24   |  | 32         | 34   | 677  |  | 15         | 25   | 9    |  |
| Growth Adj:    | 1.23        | 1.23 | 1.23 |  | 1.23        | 1.23 | 1.23 |  | 1.23       | 1.23 | 1.23 |  | 1.23       | 1.23 | 1.23 |  |
| Initial Bse:   | 819         | 322  | 27   |  | 22          | 209  | 30   |  | 39         | 42   | 834  |  | 18         | 31   | 11   |  |
| Added Vol:     | 21          | 0    | 0    |  | 0           | 0    | 0    |  | 0          | 0    | 105  |  | 0          | 0    | 0    |  |
| PasserByVol:   | 0           | 0    | 0    |  | 0           | 0    | 0    |  | 0          | 0    | 0    |  | 0          | 0    | 0    |  |
| Initial Fut:   | 840         | 322  | 27   |  | 22          | 209  | 30   |  | 39         | 42   | 939  |  | 18         | 31   | 11   |  |
| User Adj:      | 1.00        | 1.00 | 1.00 |  | 1.00        | 1.00 | 1.00 |  | 1.00       | 1.00 | 1.00 |  | 1.00       | 1.00 | 1.00 |  |
| PHF Adj:       | 0.95        | 0.95 | 0.95 |  | 0.95        | 0.95 | 0.95 |  | 0.95       | 0.95 | 0.95 |  | 0.95       | 0.95 | 0.95 |  |
| PHF Volume:    | 885         | 338  | 29   |  | 23          | 220  | 31   |  | 41         | 44   | 988  |  | 19         | 32   | 12   |  |
| Reduct Vol:    | 0           | 0    | 0    |  | 0           | 0    | 0    |  | 0          | 0    | 0    |  | 0          | 0    | 0    |  |
| Reduced Vol:   | 885         | 338  | 29   |  | 23          | 220  | 31   |  | 41         | 44   | 988  |  | 19         | 32   | 12   |  |
| PCE Adj:       | 1.00        | 1.00 | 1.00 |  | 1.00        | 1.00 | 1.00 |  | 1.00       | 1.00 | 1.00 |  | 1.00       | 1.00 | 1.00 |  |
| MLF Adj:       | 1.00        | 1.00 | 1.00 |  | 1.00        | 1.00 | 1.00 |  | 1.00       | 1.00 | 1.00 |  | 1.00       | 1.00 | 1.00 |  |
| FinalVolume:   | 885         | 338  | 29   |  | 23          | 220  | 31   |  | 41         | 44   | 988  |  | 19         | 32   | 12   |  |

| Saturation Flow Module: | North Bound |      |      |  | South Bound |      |      |  | East Bound |      |      |  | West Bound |      |      |  |
|-------------------------|-------------|------|------|--|-------------|------|------|--|------------|------|------|--|------------|------|------|--|
| Sat/Lane:               | 1800        | 1800 | 1800 |  | 1800        | 1800 | 1800 |  | 1800       | 1800 | 1800 |  | 1800       | 1800 | 1800 |  |
| Adjustment:             | 0.97        | 1.00 | 1.00 |  | 1.00        | 1.00 | 1.00 |  | 1.00       | 0.95 | 0.95 |  | 1.00       | 0.95 | 0.95 |  |
| Lanes:                  | 2.00        | 1.00 | 1.00 |  | 1.00        | 1.00 | 1.00 |  | 1.00       | 1.00 | 2.00 |  | 1.00       | 1.47 | 0.53 |  |
| Final Sat.:             | 3492        | 1800 | 1800 |  | 1800        | 1800 | 1800 |  | 1800       | 1710 | 3420 |  | 1800       | 2515 | 905  |  |

| Capacity Analysis Module: | North Bound |      |      |  | South Bound |      |      |  | East Bound |      |      |  | West Bound |      |      |  |
|---------------------------|-------------|------|------|--|-------------|------|------|--|------------|------|------|--|------------|------|------|--|
| Vol/Sat:                  | 0.25        | 0.19 | 0.02 |  | 0.01        | 0.12 | 0.02 |  | 0.02       | 0.03 | 0.29 |  | 0.01       | 0.01 | 0.01 |  |
| Crit Moves:               | ****        |      |      |  | ****        |      |      |  | ****       |      |      |  | ****       |      |      |  |
| Green/Cycle:              | 0.34        | 0.48 | 0.48 |  | 0.03        | 0.17 | 0.17 |  | 0.26       | 0.39 | 0.39 |  | 0.01       | 0.15 | 0.15 |  |
| Volume/Cap:               | 0.73        | 0.39 | 0.03 |  | 0.39        | 0.73 | 0.10 |  | 0.09       | 0.07 | 0.73 |  | 0.73       | 0.09 | 0.09 |  |
| Delay/Veh:                | 31.1        | 17.0 | 13.8 |  | 51.6        | 48.6 | 35.5 |  | 28.0       | 18.9 | 27.9 |  | 118.8      | 37.0 | 37.0 |  |
| User DelAdj:              | 1.00        | 1.00 | 1.00 |  | 1.00        | 1.00 | 1.00 |  | 1.00       | 1.00 | 1.00 |  | 1.00       | 1.00 | 1.00 |  |
| AdjDel/Veh:               | 31.1        | 17.0 | 13.8 |  | 51.6        | 48.6 | 35.5 |  | 28.0       | 18.9 | 27.9 |  | 118.8      | 37.0 | 37.0 |  |
| LOS by Move:              | C           | B    | B    |  | D           | D    | D    |  | C          | B    | C    |  | F          | D    | D    |  |
| HCM2kAvgQ:                | 14          | 7    | 0    |  | 1           | 8    | 1    |  | 1          | 1    | 15   |  | 2          | 1    | 1    |  |

Note: Queue reported is the number of cars per lane.

## **APPENDIX C**

### **Forecast Trip Generation by District**

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## FREEWAY INDUSTRIAL COMMERCIAL (CENTRAL)

| Land Use (Proposed ITE Code)           | Existing SF | Future SF | Net SF/DU |
|----------------------------------------|-------------|-----------|-----------|
| Light Industrial (110)                 | -57.204     |           | -57.204   |
| Manufacturing (140)                    |             |           | 0.000     |
| Warehouse (150)                        |             | 761.067   | 761.067   |
| Residential (210)                      | -54         |           | -54       |
| Institutional (560)                    | -5.831      |           | -5.831    |
| Commercial/Office (710)                | -4.427      | 152.213   | 147.786   |
| Service Commercial [Office Park] (750) |             | 152.213   | 152.213   |
| Commercial/Retail (820)                |             | 456.640   | 456.640   |

| Land Use                             |            | Quantity | AM   |      |       | PM   |       |       | ADT    |
|--------------------------------------|------------|----------|------|------|-------|------|-------|-------|--------|
|                                      |            |          | IN   | OUT  | TOTAL | IN   | OUT   | TOTAL |        |
| Light Industrial (110)               | Rate       | tsf      | 0.81 | 0.11 | 0.92  | 0.12 | 0.85  | 0.97  | 6.97   |
|                                      | Generation | -57.204  | -46  | -6   | -52   | -7   | -49   | -56   | -399   |
| Warehousing (150)                    | Rate       | tsf      | 0.24 | 0.06 | 0.30  | 0.08 | 0.24  | 0.32  | 3.56   |
|                                      | Generation | 761.067  | 183  | 46   | 229   | 61   | 183   | 244   | 2,709  |
| Single-Family Detached Housing (210) | Rate       | du       | 0.19 | 0.56 | 0.75  | 0.64 | 0.37  | 1.01  | 9.57   |
|                                      | Generation | -54      | -10  | -30  | -40   | -35  | -20   | -55   | -517   |
| Church (560)                         | Rate       | tsf      | 0.35 | 0.21 | 0.56  | 0.26 | 0.29  | 0.55  | 9.11   |
|                                      | Generation | -5.831   | -2   | -1   | -3    | -2   | -2    | -4    | -53    |
| General Office Building (710)        | Rate       | tsf      | 1.36 | 0.19 | 1.55  | 0.25 | 1.24  | 1.49  | 11.01  |
|                                      | Generation | 147.786  | 201  | 28   | 229   | 37   | 183   | 220   | 1,627  |
| Office Park (750)                    | Rate       | tsf      | 1.52 | 0.19 | 1.71  | 0.21 | 1.27  | 1.48  | 11.42  |
|                                      | Generation | 152.213  | 231  | 29   | 260   | 32   | 193   | 225   | 1,738  |
| Shopping Center (820)                | Rate       | tsf      | 0.61 | 0.39 | 1.00  | 1.83 | 1.90  | 3.73  | 42.94  |
|                                      | Generation | 456.640  | 279  | 178  | 457   | 836  | 868   | 1704  | 19,608 |
| Pass-By Reduction (34%) (820)        |            |          | N/A  | N/A  | N/A   |      |       |       |        |
| NET SHOPPING CENTER TRIPS (820)      |            |          | 279  | 178  | 457   | -284 | -295  | -579  | -579   |
|                                      |            |          |      |      |       | 552  | 573   | 1,125 | 19,029 |
| Total Net Trip Generation            |            |          | 836  | 244  | 1,080 | 638  | 1,061 | 1,699 | 24,134 |

Source: ITE Trip Generation (8th Edition, 2008)

Source: Pass-By Reduction - ITE Trip Generation Handbook, 2nd Edition, 2004

Notes: du = dwelling units; tsf = thousand square feet.

| Use to determine land uses for TAZ 1 through 4. |              |                | Existing Commercial (710) | Existing Industrial (110) | Existing Miscellaneous (560) | NEW Comm/Retail (820) | NEW Comm/Office (710) | NEW Warehouse (150) | NEW Service Commercial (Office Park) (750) |
|-------------------------------------------------|--------------|----------------|---------------------------|---------------------------|------------------------------|-----------------------|-----------------------|---------------------|--------------------------------------------|
| Land Use District                               | Acres        | Percent        | 15.889                    | 205.293                   | 20.927                       | 1,638.793             | 546.264               | 2,731.321           | 546.264                                    |
| Frwy Indus Comm District - Central              | 92.9         | 27.86%         | 4.427                     | 57.204                    | 5.831                        | 456.640               | 152.213               | 761.067             | 152.213                                    |
| Frwy Indus Comm District - East                 | 108.2        | 32.45%         | 5.157                     | 66.625                    | 6.792                        | 531.846               | 177.282               | 886.410             | 177.282                                    |
| Frwy Indus Comm District - North                | 41.0         | 12.30%         | 1.954                     | 25.246                    | 2.574                        | 201.531               | 67.177                | 335.885             | 67.177                                     |
| Frwy Indus Comm District - West                 | 91.3         | 27.38%         | 4.351                     | 56.219                    | 5.731                        | 448.776               | 149.592               | 747.959             | 149.592                                    |
| <b>Total</b>                                    | <b>333.4</b> | <b>100.00%</b> | <b>15.889</b>             | <b>205.293</b>            | <b>20.927</b>                | <b>1,638.793</b>      | <b>546.264</b>        | <b>2,731.321</b>    | <b>546.264</b>                             |



## FREEWAY INDUSTRIAL COMMERCIAL (EAST)

| Land Use (Proposed ITE Code)           | Existing SF | Future SF | Net SF/DU |
|----------------------------------------|-------------|-----------|-----------|
| Light Industrial (110)                 | -66.625     |           | -66.625   |
| Manufacturing (140)                    |             |           | 0.000     |
| Warehouse (150)                        |             | 886.410   | 886.410   |
| Residential (210)                      | -63         |           | -63       |
| Institutional (560)                    | -6.792      |           | -6.792    |
| Commercial/Office (710)                | -5.157      | 177.282   | 172.125   |
| Service Commercial [Office Park] (750) |             | 177.282   | 177.282   |
| Commercial/Retail (820)                |             | 531.846   | 531.846   |

| Land Use                               |            | Quantity | AM         |            |              | PM         |              |              | ADT           |
|----------------------------------------|------------|----------|------------|------------|--------------|------------|--------------|--------------|---------------|
|                                        |            |          | IN         | OUT        | TOTAL        | IN         | OUT          | TOTAL        |               |
| Light Industrial (110)                 | Rate       | tsf      | 0.81       | 0.11       | 0.92         | 0.12       | 0.85         | 0.97         | 6.97          |
|                                        | Generation | -66.625  | -54        | -7         | -61          | -8         | -57          | -65          | -464          |
| Warehousing (150)                      | Rate       | tsf      | 0.24       | 0.06       | 0.30         | 0.08       | 0.24         | 0.32         | 3.56          |
|                                        | Generation | 886.410  | 213        | 53         | 266          | 71         | 213          | 284          | 3,156         |
| Single-Family Detached Housing (210)   | Rate       | du       | 0.19       | 0.56       | 0.75         | 0.64       | 0.37         | 1.01         | 9.57          |
|                                        | Generation | -63      | -12        | -35        | -47          | -40        | -23          | -63          | -603          |
| Church (560)                           | Rate       | tsf      | 0.35       | 0.21       | 0.56         | 0.26       | 0.29         | 0.55         | 9.11          |
|                                        | Generation | -6.792   | -2         | -1         | -3           | -2         | -2           | -4           | -62           |
| General Office Building (710)          | Rate       | tsf      | 1.36       | 0.19       | 1.55         | 0.25       | 1.24         | 1.49         | 11.01         |
|                                        | Generation | 172.125  | 234        | 33         | 267          | 43         | 213          | 256          | 1,895         |
| Office Park (750)                      | Rate       | tsf      | 1.52       | 0.19       | 1.71         | 0.21       | 1.27         | 1.48         | 11.42         |
|                                        | Generation | 177.282  | 269        | 34         | 303          | 37         | 225          | 262          | 2,025         |
| Shopping Center (820)                  | Rate       | tsf      | 0.61       | 0.39       | 1.00         | 1.83       | 1.90         | 3.73         | 42.94         |
|                                        | Generation | 531.846  | 324        | 207        | 531          | 973        | 1,011        | 1984         | 22,837        |
| Pass-By Reduction (34%) (820)          |            |          | N/A        | N/A        | N/A          |            |              |              |               |
|                                        |            |          |            |            |              | -331       | -344         | -675         | -675          |
| <b>NET SHOPPING CENTER TRIPS (820)</b> |            |          | 324        | 207        | 531          | 642        | 667          | 1,309        | 22,162        |
| <b>Total Net Trip Generation</b>       |            |          | <b>972</b> | <b>284</b> | <b>1,256</b> | <b>743</b> | <b>1,236</b> | <b>1,979</b> | <b>28,109</b> |

Source: ITE Trip Generation (8th Edition, 2008)

Source: Pass-By Reduction - ITE Trip Generation Handbook, 2nd Edition, 2004

Notes: du = dwelling units; tsf = thousand square feet.

|                                                 |              |                | Existing Commercial (710) | Existing Industrial (110) | Existing Miscellaneous (560) | NEW Comm/Retail (820) | NEW Comm/Office (710) | NEW Warehouse (150) | NEW Service Commercial (Office Park) (750) |
|-------------------------------------------------|--------------|----------------|---------------------------|---------------------------|------------------------------|-----------------------|-----------------------|---------------------|--------------------------------------------|
| Use to determine land uses for TAZ 1 through 4. |              |                |                           |                           |                              |                       |                       |                     |                                            |
| <b>Land Use District</b>                        | <b>Acres</b> | <b>Percent</b> | <b>15.889</b>             | <b>205.293</b>            | <b>20.927</b>                | <b>1,638.793</b>      | <b>546.264</b>        | <b>2,731.321</b>    | <b>546.264</b>                             |
| Frwy Indus Comm District - Central              | 92.9         | 27.86%         | 4.427                     | 57.204                    | 5.831                        | 456.640               | 152.213               | 761.067             | 152.213                                    |
| Frwy Indus Comm District - East                 | 108.2        | 32.45%         | 5.157                     | 66.625                    | 6.792                        | 531.846               | 177.282               | 886.410             | 177.282                                    |
| Frwy Indus Comm District - North                | 41.0         | 12.30%         | 1.954                     | 25.246                    | 2.574                        | 201.531               | 67.177                | 335.885             | 67.177                                     |
| Frwy Indus Comm District - West                 | 91.3         | 27.38%         | 4.351                     | 56.219                    | 5.731                        | 448.776               | 149.592               | 747.959             | 149.592                                    |
| <b>Total</b>                                    | <b>333.4</b> | <b>100.00%</b> | <b>15.889</b>             | <b>205.293</b>            | <b>20.927</b>                | <b>1,638.793</b>      | <b>546.264</b>        | <b>2,731.321</b>    | <b>546.264</b>                             |

## FREEWAY INDUSTRIAL COMMERCIAL (NORTH)

| Land Use (Proposed ITE Code)           | Existing SF | Future SF | Net SF/DU |
|----------------------------------------|-------------|-----------|-----------|
| Light Industrial (110)                 | -25.246     |           | -25.246   |
| Manufacturing (140)                    |             |           | 0.000     |
| Warehouse (150)                        |             | 335.885   | 335.885   |
| Residential (210)                      | -24         |           | -24       |
| Institutional (560)                    | -2.574      |           | -2.574    |
| Commercial/Office (710)                | -1.954      | 67.177    | 65.223    |
| Service Commercial [Office Park] (750) |             | 67.177    | 67.177    |
| Commercial/Retail (820)                |             | 201.531   | 201.531   |

| Land Use                               |            | Quantity | AM         |            |            | PM         |            |            | ADT           |
|----------------------------------------|------------|----------|------------|------------|------------|------------|------------|------------|---------------|
|                                        |            |          | IN         | OUT        | TOTAL      | IN         | OUT        | TOTAL      |               |
| Light Industrial (110)                 | Rate       | tsf      | 0.81       | 0.11       | 0.92       | 0.12       | 0.85       | 0.97       | 6.97          |
|                                        | Generation | -25.246  | -20        | -3         | -23        | -3         | -21        | -24        | -176          |
| Warehousing (150)                      | Rate       | tsf      | 0.24       | 0.06       | 0.30       | 0.08       | 0.24       | 0.32       | 3.56          |
|                                        | Generation | 335.885  | 81         | 20         | 101        | 27         | 81         | 108        | 1,196         |
| Single-Family Detached Housing (210)   | Rate       | du       | 0.19       | 0.56       | 0.75       | 0.64       | 0.37       | 1.01       | 9.57          |
|                                        | Generation | -24      | -5         | -13        | -18        | -15        | -9         | -24        | -230          |
| Church (560)                           | Rate       | tsf      | 0.35       | 0.21       | 0.56       | 0.26       | 0.29       | 0.55       | 9.11          |
|                                        | Generation | -2.574   | -1         | -1         | -2         | -1         | -1         | -2         | -23           |
| General Office Building (710)          | Rate       | tsf      | 1.36       | 0.19       | 1.55       | 0.25       | 1.24       | 1.49       | 11.01         |
|                                        | Generation | 65.223   | 89         | 12         | 101        | 16         | 81         | 97         | 718           |
| Office Park (750)                      | Rate       | tsf      | 1.52       | 0.19       | 1.71       | 0.21       | 1.27       | 1.48       | 11.42         |
|                                        | Generation | 67.177   | 102        | 13         | 115        | 14         | 85         | 99         | 767           |
| Shopping Center (820)                  | Rate       | tsf      | 0.61       | 0.39       | 1.00       | 1.83       | 1.90       | 3.73       | 42.94         |
|                                        | Generation | 201.531  | 123        | 79         | 202        | 369        | 383        | 752        | 8,654         |
| Pass-By Reduction (34%) (820)          |            |          | N/A        | N/A        | N/A        |            |            |            |               |
|                                        |            |          |            |            |            | -125       | -130       | -256       | -256          |
| <b>NET SHOPPING CENTER TRIPS (820)</b> |            |          | 123        | 79         | 202        | 244        | 253        | 496        | 8,398         |
| <b>Total Net Trip Generation</b>       |            |          | <b>369</b> | <b>107</b> | <b>476</b> | <b>282</b> | <b>469</b> | <b>750</b> | <b>10,650</b> |

Source: ITE Trip Generation (8th Edition, 2008)

Source: Pass-By Reduction - ITE Trip Generation Handbook, 2nd Edition, 2004

Notes: du = dwelling units; tsf = thousand square feet.

|                                                 |              |                | Existing Commercial (710) | Existing Industrial (110) | Existing Miscellaneous (560) | NEW Comm/Retail (820) | NEW Comm/Office (710) | NEW Warehouse (150) | NEW Service Commercial (Office Park) (750) |
|-------------------------------------------------|--------------|----------------|---------------------------|---------------------------|------------------------------|-----------------------|-----------------------|---------------------|--------------------------------------------|
| Use to determine land uses for TAZ 1 through 4. |              |                |                           |                           |                              |                       |                       |                     |                                            |
| <b>Land Use District</b>                        | <b>Acres</b> | <b>Percent</b> | <b>15.889</b>             | <b>205.293</b>            | <b>20.927</b>                | <b>1,638.793</b>      | <b>546.264</b>        | <b>2,731.321</b>    | <b>546.264</b>                             |
| Frwy Indus Comm District - Central              | 92.9         | 27.86%         | 4.427                     | 57.204                    | 5.831                        | 456.640               | 152.213               | 761.067             | 152.213                                    |
| Frwy Indus Comm District - East                 | 108.2        | 32.45%         | 5.157                     | 66.625                    | 6.792                        | 531.846               | 177.282               | 886.410             | 177.282                                    |
| Frwy Indus Comm District - North                | 41.0         | 12.30%         | 1.954                     | 25.246                    | 2.574                        | 201.531               | 67.177                | 335.885             | 67.177                                     |
| Frwy Indus Comm District - West                 | 91.3         | 27.38%         | 4.351                     | 56.219                    | 5.731                        | 448.776               | 149.592               | 747.959             | 149.592                                    |
| <b>Total</b>                                    | <b>333.4</b> | <b>100.00%</b> | <b>15.889</b>             | <b>205.293</b>            | <b>20.927</b>                | <b>1,638.793</b>      | <b>546.264</b>        | <b>2,731.321</b>    | <b>546.264</b>                             |

## FREEWAY INDUSTRIAL COMMERCIAL (WEST)

| Land Use (Proposed ITE Code)           | Existing SF | Future SF | Net SF/DU |
|----------------------------------------|-------------|-----------|-----------|
| Light Industrial (110)                 | -56.219     |           | -56.219   |
| Manufacturing (140)                    |             |           | 0.000     |
| Warehouse (150)                        |             | 747.959   | 747.959   |
| Residential (210)                      | -54         |           | -54       |
| Institutional (560)                    | -5.731      |           | -5.731    |
| Commercial/Office (710)                | -4.351      | 149.592   | 145.241   |
| Service Commercial [Office Park] (750) |             | 149.592   | 149.592   |
| Commercial/Retail (820)                |             | 448.776   | 448.776   |

| Land Use                               |            | Quantity | AM         |            |              | PM         |              |              | ADT           |
|----------------------------------------|------------|----------|------------|------------|--------------|------------|--------------|--------------|---------------|
|                                        |            |          | IN         | OUT        | TOTAL        | IN         | OUT          | TOTAL        |               |
| Light Industrial (110)                 | Rate       | tsf      | 0.81       | 0.11       | 0.92         | 0.12       | 0.85         | 0.97         | 6.97          |
|                                        | Generation | -56.219  | -46        | -6         | -52          | -7         | -48          | -55          | -392          |
| Warehousing (150)                      | Rate       | tsf      | 0.24       | 0.06       | 0.30         | 0.08       | 0.24         | 0.32         | 3.56          |
|                                        | Generation | 747.959  | 180        | 45         | 225          | 60         | 180          | 240          | 2,663         |
| Single-Family Detached Housing (210)   | Rate       | du       | 0.19       | 0.56       | 0.75         | 0.64       | 0.37         | 1.01         | 9.57          |
|                                        | Generation | -54      | -10        | -30        | -40          | -35        | -20          | -55          | -517          |
| Church (560)                           | Rate       | tsf      | 0.35       | 0.21       | 0.56         | 0.26       | 0.29         | 0.55         | 9.11          |
|                                        | Generation | -5.731   | -2         | -1         | -3           | -1         | -2           | -3           | -52           |
| General Office Building (710)          | Rate       | tsf      | 1.36       | 0.19       | 1.55         | 0.25       | 1.24         | 1.49         | 11.01         |
|                                        | Generation | 145.241  | 198        | 28         | 226          | 36         | 180          | 216          | 1,599         |
| Office Park (750)                      | Rate       | tsf      | 1.52       | 0.19       | 1.71         | 0.21       | 1.27         | 1.48         | 11.42         |
|                                        | Generation | 149.592  | 227        | 28         | 255          | 31         | 190          | 221          | 1,708         |
| Shopping Center (820)                  | Rate       | tsf      | 0.61       | 0.39       | 1.00         | 1.83       | 1.90         | 3.73         | 42.94         |
|                                        | Generation | 448.776  | 274        | 175        | 449          | 821        | 853          | 1674         | 19,270        |
| Pass-By Reduction (34%) (820)          |            |          | N/A        | N/A        | N/A          |            |              |              |               |
|                                        |            |          |            |            |              | -279       | -290         | -569         | -569          |
| <b>NET SHOPPING CENTER TRIPS (820)</b> |            |          | 274        | 175        | 449          | 542        | 563          | 1,105        | 18,701        |
| <b>Total Net Trip Generation</b>       |            |          | <b>821</b> | <b>239</b> | <b>1,060</b> | <b>626</b> | <b>1,043</b> | <b>1,669</b> | <b>23,710</b> |

Source: ITE Trip Generation (8th Edition, 2008)

Source: Pass-By Reduction - ITE Trip Generation Handbook, 2nd Edition, 2004

Notes: du = dwelling units; tsf = thousand square feet.

|                                                 |              |                | Existing Commercial (710) | Existing Industrial (110) | Existing Miscellaneous (560) | NEW Comm/Retail (820) | NEW Comm/Office (710) | NEW Warehouse (150) | NEW Service Commercial (Office Park) (750) |
|-------------------------------------------------|--------------|----------------|---------------------------|---------------------------|------------------------------|-----------------------|-----------------------|---------------------|--------------------------------------------|
| Use to determine land uses for TAZ 1 through 4. |              |                |                           |                           |                              |                       |                       |                     |                                            |
| <b>Land Use District</b>                        | <b>Acres</b> | <b>Percent</b> | <b>15.889</b>             | <b>205.293</b>            | <b>20.927</b>                | <b>1,638.793</b>      | <b>546.264</b>        | <b>2,731.321</b>    | <b>546.264</b>                             |
| Frwy Indus Comm District - Central              | 92.9         | 27.86%         | 4.427                     | 57.204                    | 5.831                        | 456.640               | 152.213               | 761.067             | 152.213                                    |
| Frwy Indus Comm District - East                 | 108.2        | 32.45%         | 5.157                     | 66.625                    | 6.792                        | 531.846               | 177.282               | 886.410             | 177.282                                    |
| Frwy Indus Comm District - North                | 41.0         | 12.30%         | 1.954                     | 25.246                    | 2.574                        | 201.531               | 67.177                | 335.885             | 67.177                                     |
| Frwy Indus Comm District - West                 | 91.3         | 27.38%         | 4.351                     | 56.219                    | 5.731                        | 448.776               | 149.592               | 747.959             | 149.592                                    |
| <b>Total</b>                                    | <b>333.4</b> | <b>100.00%</b> | <b>15.889</b>             | <b>205.293</b>            | <b>20.927</b>                | <b>1,638.793</b>      | <b>546.264</b>        | <b>2,731.321</b>    | <b>546.264</b>                             |

## JURUPA NORTH RESEARCH AND DEVELOPMENT (WEST)

| Land Use (Proposed ITE Code)             | Existing SF | Future SF | Net SF/DU |
|------------------------------------------|-------------|-----------|-----------|
| Light Industrial (110)                   | -11.075     | 1,355.976 | 1,344.901 |
| Manufacturing (140)                      |             |           | 0.000     |
| Warehouse (150)                          |             |           | 0.000     |
| Residential (210)                        | -40         |           | -40       |
| Institutional (560)                      | -16.683     |           | -16.683   |
| Commercial/Office (710)                  | -30.083     | 508.491   | 478.407   |
| Service Commercial [Office Park] (750)   |             | 847.485   | 847.485   |
| Live/Work [Research & Development] (760) |             | 338.994   | 338.994   |
| Flex Tech [Research & Development] (760) |             | 338.994   | 338.994   |
| Commercial/Retail (820)                  |             |           | 0.000     |

DU's      Existing Residential Units:      -97

| Land Use                             |            | Quantity | AM    |      |       | PM   |       |       | ADT    |
|--------------------------------------|------------|----------|-------|------|-------|------|-------|-------|--------|
|                                      |            |          | IN    | OUT  | TOTAL | IN   | OUT   | TOTAL |        |
| Light Industrial (110)               | Rate       | tsf      | 0.81  | 0.11 | 0.92  | 0.12 | 0.85  | 0.97  | 6.97   |
|                                      | Generation | 1344.901 | 1,089 | 148  | 1237  | 161  | 1,143 | 1304  | 9,374  |
| Single-Family Detached Housing (210) | Rate       | du       | 0.19  | 0.56 | 0.75  | 0.64 | 0.37  | 1.01  | 9.57   |
|                                      | Generation | -40      | -8    | -23  | -31   | -26  | -15   | -41   | -387   |
| Church (560)                         | Rate       | tsf      | 0.35  | 0.21 | 0.56  | 0.26 | 0.29  | 0.55  | 9.11   |
|                                      | Generation | -16.683  | -6    | -4   | -10   | -4   | -5    | -9    | -152   |
| General Office Building (710)        | Rate       | tsf      | 1.36  | 0.19 | 1.55  | 0.25 | 1.24  | 1.49  | 11.01  |
|                                      | Generation | 478.407  | 651   | 91   | 742   | 120  | 593   | 713   | 5,267  |
| Office Park (750)                    | Rate       | tsf      | 1.52  | 0.19 | 1.71  | 0.21 | 1.27  | 1.48  | 11.42  |
|                                      | Generation | 847.485  | 1,288 | 161  | 1449  | 178  | 1,076 | 1254  | 9,678  |
| Research & Development (760)         | Rate       | tsf      | 1.01  | 0.21 | 1.22  | 0.16 | 0.91  | 1.07  | 8.11   |
|                                      | Generation | 677.988  | 685   | 142  | 827   | 108  | 617   | 725   | 5,498  |
| Total Net Trip Generation            |            |          | 3,699 | 515  | 4,214 | 537  | 3,409 | 3,946 | 29,278 |

Source: ITE Trip Generation (8th Edition, 2008)

Source: Pass-By Reduction - ITE Trip Generation Handbook, 2nd Edition, 2004

Notes: du = dwelling units; tsf = thousand square feet.

|                                                |              |                | Existing Commercial (710) | Existing Industrial (110) | Existing Miscellaneous (560) | NEW Office (710) | NEW Light Industrial (110) | NEW Live/Work & Flex Tech (760) | NEW Service Commercial (Office Park) (750) |
|------------------------------------------------|--------------|----------------|---------------------------|---------------------------|------------------------------|------------------|----------------------------|---------------------------------|--------------------------------------------|
| Use to determine land uses for TAZ 5 through 7 |              |                |                           |                           |                              |                  |                            |                                 |                                            |
| Land Use District                              | Acres        | Percent        | 72.170                    | 26.570                    | 40.023                       | 1,219.865        | 3,252.974                  | 813.243                         | 2,033.109                                  |
| Jurupa North Research & Development (West)     | 233.8        | 41.68%         | 30.083                    | 11.075                    | 16.683                       | 508.491          | 1,355.976                  | 338.994                         | 847.485                                    |
| Jurupa North Research & Development (Central)  | 167.6        | 29.88%         | 21.564                    | 7.939                     | 11.959                       | 364.494          | 971.984                    | 242.996                         | 607.490                                    |
| Jurupa North Research & Development (East)     | 159.5        | 28.44%         | 20.522                    | 7.555                     | 11.381                       | 346.880          | 925.014                    | 231.253                         | 578.134                                    |
| <b>Total</b>                                   | <b>561.0</b> | <b>100.00%</b> | <b>72.170</b>             | <b>26.570</b>             | <b>40.023</b>                | <b>1,219.865</b> | <b>3,252.974</b>           | <b>813.243</b>                  | <b>2,033.109</b>                           |

## JURUPA NORTH RESEARCH AND DEVELOPMENT (CENTRAL)

| Land Use (Proposed ITE Code)             | Existing SF | Future SF | Net SF/DU |
|------------------------------------------|-------------|-----------|-----------|
| Light Industrial (110)                   | -7.939      | 971.984   | 964.045   |
| Manufacturing (140)                      |             |           | 0.000     |
| Warehouse (150)                          |             |           | 0.000     |
| Residential (210)                        | -29         |           | -29       |
| Institutional (560)                      | -11.959     |           | -11.959   |
| Commercial/Office (710)                  | -21.564     | 364.494   | 342.930   |
| Service Commercial [Office Park] (750)   |             | 607.490   | 607.490   |
| Live/Work [Research & Development] (760) |             | 242.996   | 242.996   |
| Flex Tech [Research & Development] (760) |             | 242.996   | 242.996   |
| Commercial/Retail (820)                  |             |           | 0.000     |

DU's      Existing Residential Units:      -97

| Land Use                             |            | Quantity | AM    |      |       | PM   |       |       | ADT    |
|--------------------------------------|------------|----------|-------|------|-------|------|-------|-------|--------|
|                                      |            |          | IN    | OUT  | TOTAL | IN   | OUT   | TOTAL |        |
| Light Industrial (110)               | Rate       | tsf      | 0.81  | 0.11 | 0.92  | 0.12 | 0.85  | 0.97  | 6.97   |
|                                      | Generation | 964.045  | 781   | 106  | 887   | 116  | 819   | 935   | 6,719  |
| Single-Family Detached Housing (210) | Rate       | du       | 0.19  | 0.56 | 0.75  | 0.64 | 0.37  | 1.01  | 9.57   |
|                                      | Generation | -29      | -6    | -16  | -22   | -19  | -11   | -30   | -277   |
| Church (560)                         | Rate       | tsf      | 0.35  | 0.21 | 0.56  | 0.26 | 0.29  | 0.55  | 9.11   |
|                                      | Generation | -11.959  | -4    | -3   | -7    | -3   | -3    | -6    | -109   |
| General Office Building (710)        | Rate       | tsf      | 1.36  | 0.19 | 1.55  | 0.25 | 1.24  | 1.49  | 11.01  |
|                                      | Generation | 342.930  | 466   | 65   | 531   | 86   | 425   | 511   | 3,776  |
| Office Park (750)                    | Rate       | tsf      | 1.52  | 0.19 | 1.71  | 0.21 | 1.27  | 1.48  | 11.42  |
|                                      | Generation | 607.490  | 923   | 115  | 1038  | 128  | 772   | 900   | 6,938  |
| Research & Development (760)         | Rate       | tsf      | 1.01  | 0.21 | 1.22  | 0.16 | 0.91  | 1.07  | 8.11   |
|                                      | Generation | 485.992  | 491   | 102  | 593   | 78   | 442   | 520   | 3,941  |
| Total Net Trip Generation            |            |          | 2,651 | 369  | 3,020 | 386  | 2,444 | 2,830 | 20,988 |

Source: ITE Trip Generation (8th Edition, 2008)

Source: Pass-By Reduction - ITE Trip Generation Handbook, 2nd Edition, 2004

Notes: du = dwelling units; tsf = thousand square feet.

| Use to determine land uses for TAZ 5 through 7 |              |                | Existing Commercial (710) | Existing Industrial (110) | Existing Miscellaneous (560) | NEW Office (710) | NEW Light Industrial (110) | NEW Live/Work & Flex Tech (760) | NEW Service Commercial (Office Park) (750) |
|------------------------------------------------|--------------|----------------|---------------------------|---------------------------|------------------------------|------------------|----------------------------|---------------------------------|--------------------------------------------|
| Land Use District                              | Acres        | Percent        | 72.170                    | 26.570                    | 40.023                       | 1,219.865        | 3,252.974                  | 813.243                         | 2,033.109                                  |
| Jurupa North Research & Development (West)     | 233.8        | 41.68%         | 30.083                    | 11.075                    | 16.683                       | 508.491          | 1,355.976                  | 338.994                         | 847.485                                    |
| Jurupa North Research & Development (Central)  | 167.6        | 29.88%         | 21.564                    | 7.939                     | 11.959                       | 364.494          | 971.984                    | 242.996                         | 607.490                                    |
| Jurupa North Research & Development (East)     | 159.5        | 28.44%         | 20.522                    | 7.555                     | 11.381                       | 346.880          | 925.014                    | 231.253                         | 578.134                                    |
| <b>Total</b>                                   | <b>561.0</b> | <b>100.00%</b> | <b>72.170</b>             | <b>26.570</b>             | <b>40.023</b>                | <b>1,219.865</b> | <b>3,252.974</b>           | <b>813.243</b>                  | <b>2,033.109</b>                           |

## JURUPA NORTH RESEARCH AND DEVELOPMENT (EAST)

| Land Use (Proposed ITE Code)             | Existing SF | Future SF | Net SF/DU |
|------------------------------------------|-------------|-----------|-----------|
| Light Industrial (110)                   | -7.555      | 925.014   | 917.459   |
| Manufacturing (140)                      |             |           | 0.000     |
| Warehouse (150)                          |             |           | 0.000     |
| Residential (210)                        | -28         |           | -28       |
| Institutional (560)                      | -11.381     |           | -11.381   |
| Commercial/Office (710)                  | -20.522     | 346.880   | 326.358   |
| Service Commercial [Office Park] (750)   |             | 578.134   | 578.134   |
| Live/Work [Research & Development] (760) |             | 231.253   | 231.253   |
| Flex Tech [Research & Development] (760) |             | 231.253   | 231.253   |
| Commercial/Retail (820)                  |             |           | 0.000     |

DU's      Existing Residential Units:      -97

| Land Use                             |            | Quantity | AM    |      |       | PM   |       |       | ADT    |
|--------------------------------------|------------|----------|-------|------|-------|------|-------|-------|--------|
|                                      |            |          | IN    | OUT  | TOTAL | IN   | OUT   | TOTAL |        |
| Light Industrial (110)               | Rate       | tsf      | 0.81  | 0.11 | 0.92  | 0.12 | 0.85  | 0.97  | 6.97   |
|                                      | Generation | 917.459  | 743   | 101  | 844   | 110  | 780   | 890   | 6,395  |
| Single-Family Detached Housing (210) | Rate       | du       | 0.19  | 0.56 | 0.75  | 0.64 | 0.37  | 1.01  | 9.57   |
|                                      | Generation | -28      | -5    | -15  | -20   | -18  | -10   | -28   | -264   |
| Church (560)                         | Rate       | tsf      | 0.35  | 0.21 | 0.56  | 0.26 | 0.29  | 0.55  | 9.11   |
|                                      | Generation | -11.381  | -4    | -2   | -6    | -3   | -3    | -6    | -104   |
| General Office Building (710)        | Rate       | tsf      | 1.36  | 0.19 | 1.55  | 0.25 | 1.24  | 1.49  | 11.01  |
|                                      | Generation | 326.358  | 444   | 62   | 506   | 82   | 405   | 487   | 3,593  |
| Office Park (750)                    | Rate       | tsf      | 1.52  | 0.19 | 1.71  | 0.21 | 1.27  | 1.48  | 11.42  |
|                                      | Generation | 578.134  | 879   | 110  | 989   | 121  | 734   | 855   | 6,602  |
| Research & Development (760)         | Rate       | tsf      | 1.01  | 0.21 | 1.22  | 0.16 | 0.91  | 1.07  | 8.11   |
|                                      | Generation | 462.507  | 467   | 97   | 564   | 74   | 421   | 495   | 3,751  |
| Total Net Trip Generation            |            |          | 2,524 | 353  | 2,877 | 366  | 2,327 | 2,693 | 19,973 |

Source: ITE Trip Generation (8th Edition, 2008)

Source: Pass-By Reduction - ITE Trip Generation Handbook, 2nd Edition, 2004

Notes: du = dwelling units; tsf = thousand square feet.

|                                                |              |                | Existing Commercial (710) | Existing Industrial (110) | Existing Miscellaneous (560) | NEW Office (710) | NEW Light Industrial (110) | NEW Live/Work & Flex Tech (760) | NEW Service Commercial (Office Park) (750) |
|------------------------------------------------|--------------|----------------|---------------------------|---------------------------|------------------------------|------------------|----------------------------|---------------------------------|--------------------------------------------|
| Use to determine land uses for TAZ 5 through 7 |              |                |                           |                           |                              |                  |                            |                                 |                                            |
| Land Use District                              | Acres        | Percent        | 72.170                    | 26.570                    | 40.023                       | 1,219.865        | 3,252.974                  | 813.243                         | 2,033.109                                  |
| Jurupa North Research & Development (West)     | 233.8        | 41.68%         | 30.083                    | 11.075                    | 16.683                       | 508.491          | 1,355.976                  | 338.994                         | 847.485                                    |
| Jurupa North Research & Development (Central)  | 167.6        | 29.88%         | 21.564                    | 7.939                     | 11.959                       | 364.494          | 971.984                    | 242.996                         | 607.490                                    |
| Jurupa North Research & Development (East)     | 159.5        | 28.44%         | 20.522                    | 7.555                     | 11.381                       | 346.880          | 925.014                    | 231.253                         | 578.134                                    |
| <b>Total</b>                                   | <b>561.0</b> | <b>100.00%</b> | <b>72.170</b>             | <b>26.570</b>             | <b>40.023</b>                | <b>1,219.865</b> | <b>3,252.974</b>           | <b>813.243</b>                  | <b>2,033.109</b>                           |

## JURUPA SOUTH INDUSTRIAL

| Land Use (Proposed ITE Code)           | Existing SF | Future SF | Net SF/DU |
|----------------------------------------|-------------|-----------|-----------|
| Light Industrial (110)                 | -378.990    | 449.975   | 70.985    |
| Manufacturing (140)                    |             |           | 0.000     |
| Warehouse (150)                        |             | 1,799.899 | 1,799.899 |
| Residential (210)                      |             |           | 0         |
| Institutional (560)                    | -2.600      |           | -2.600    |
| Commercial/Office (710)                | -3.800      |           | -3.800    |
| Service Commercial [Office Park] (750) |             |           | 0.000     |
| Live/Work [Business Park] (770)        |             |           | 0.000     |
| Flex Tech [Business Park] (770)        |             |           | 0.000     |
| Commercial/Retail (820)                |             |           | 0.000     |

| Land Use                      |            | Quantity | AM   |      |       | PM   |      |       | ADT   |
|-------------------------------|------------|----------|------|------|-------|------|------|-------|-------|
|                               |            |          | IN   | OUT  | TOTAL | IN   | OUT  | TOTAL |       |
| Light Industrial (110)        | Rate       | tsf      | 0.81 | 0.11 | 0.92  | 0.12 | 0.85 | 0.97  | 6.97  |
|                               | Generation | 70.985   | 57   | 8    | 65    | 9    | 60   | 69    | 495   |
| Warehousing (150)             | Rate       | tsf      | 0.24 | 0.06 | 0.30  | 0.08 | 0.24 | 0.32  | 3.56  |
|                               | Generation | 1799.899 | 432  | 108  | 540   | 144  | 432  | 576   | 6,408 |
| Church (560)                  | Rate       | tsf      | 0.35 | 0.21 | 0.56  | 0.26 | 0.29 | 0.55  | 9.11  |
|                               | Generation | -2.600   | -1   | -1   | -2    | -1   | -1   | -2    | -24   |
| General Office Building (710) | Rate       | tsf      | 1.36 | 0.19 | 1.55  | 0.25 | 1.24 | 1.49  | 11.01 |
|                               | Generation | -3.800   | -5   | -1   | -6    | -1   | -5   | -6    | -42   |
| Total Net Trip Generation     |            |          | 483  | 114  | 597   | 151  | 486  | 637   | 6,837 |

Source: *ITE Trip Generation (8th Edition, 2008)*

Source: *Pass-By Reduction - ITE Trip Generation Handbook, 2nd Edition, 2004*

Notes: du = dwelling units; tsf = thousand square feet.

## SLOVER CENTRAL MANUFACTURING/INDUSTRIAL

| Land Use (Proposed ITE Code)           | Existing SF | Future SF | Net SF/DU |
|----------------------------------------|-------------|-----------|-----------|
| Light Industrial (110)                 | -108.475    |           | -108.475  |
| Manufacturing (140)                    |             | 1,113.002 | 1,113.002 |
| Warehouse (150)                        |             | 2,597.004 | 2,597.004 |
| Residential (210)                      | -38         |           | -38       |
| Institutional (560)                    | -14.031     |           | -14.031   |
| Commercial/Office (710)                | -12.987     |           | -12.987   |
| Service Commercial [Office Park] (750) |             |           | 0.000     |
| Live/Work [Business Park] (770)        |             |           | 0.000     |
| Flex Tech [Business Park] (770)        |             |           | 0.000     |
| Commercial/Retail (820)                |             |           | 0.000     |

| Land Use                             |            | Quantity | AM    |      |       | PM   |       |       | ADT    |
|--------------------------------------|------------|----------|-------|------|-------|------|-------|-------|--------|
|                                      |            |          | IN    | OUT  | TOTAL | IN   | OUT   | TOTAL |        |
| Light Industrial (110)               | Rate       | tsf      | 0.81  | 0.11 | 0.92  | 0.12 | 0.85  | 0.97  | 6.97   |
|                                      | Generation | -108.475 | -88   | -12  | -100  | -13  | -92   | -105  | -756   |
| Manufacturing (140)                  | Rate       | tsf      | 0.57  | 0.16 | 0.73  | 0.26 | 0.47  | 0.73  | 3.82   |
|                                      | Generation | 1113.002 | 634   | 178  | 812   | 289  | 523   | 812   | 4,252  |
| Warehousing (150)                    | Rate       | tsf      | 0.24  | 0.06 | 0.30  | 0.08 | 0.24  | 0.32  | 3.56   |
|                                      | Generation | 2597.004 | 623   | 156  | 779   | 208  | 623   | 831   | 9,245  |
| Single-Family Detached Housing (210) | Rate       | du       | 0.19  | 0.56 | 0.75  | 0.64 | 0.37  | 1.01  | 9.57   |
|                                      | Generation | -38      | -7    | -21  | -28   | -24  | -14   | -38   | -364   |
| Church (560)                         | Rate       | tsf      | 0.35  | 0.21 | 0.56  | 0.26 | 0.29  | 0.55  | 9.11   |
|                                      | Generation | -14.031  | -5    | -3   | -8    | -4   | -4    | -8    | -128   |
| General Office Building (710)        | Rate       | tsf      | 1.36  | 0.19 | 1.55  | 0.25 | 1.24  | 1.49  | 11.01  |
|                                      | Generation | -12.987  | -18   | -2   | -20   | -3   | -16   | -19   | -143   |
| Total Net Trip Generation            |            |          | 1,139 | 296  | 1,435 | 453  | 1,020 | 1,473 | 12,106 |

Source: ITE Trip Generation (8th Edition, 2008)

Source: Pass-By Reduction - ITE Trip Generation Handbook, 2nd Edition, 2004

Notes: du = dwelling units; tsf = thousand square feet.



## SLOVER EAST INDUSTRIAL

| Land Use (Proposed ITE Code)           | Existing SF | Future SF | Net SF/DU |
|----------------------------------------|-------------|-----------|-----------|
| Light Industrial (110)                 | -35.148     | 754.612   | 719.464   |
| Manufacturing (140)                    |             |           | 0.000     |
| Warehouse (150)                        |             | 1,006.149 | 1,006.149 |
| Residential (210)                      | -65         |           | -65       |
| Institutional (560)                    | -8.926      |           | -8.926    |
| Commercial/Office (710)                |             |           | 0.000     |
| Service Commercial [Office Park] (750) |             | 503.074   | 503.074   |
| Live/Work [Business Park] (770)        |             |           | 0.000     |
| Flex Tech [Business Park] (770)        |             |           | 0.000     |
| Commercial/Retail (820)                |             |           | 0.000     |

| Land Use                             |            | Quantity | AM    |      |       | PM   |       |       | ADT    |
|--------------------------------------|------------|----------|-------|------|-------|------|-------|-------|--------|
|                                      |            |          | IN    | OUT  | TOTAL | IN   | OUT   | TOTAL |        |
| Light Industrial (110)               | Rate       | tsf      | 0.81  | 0.11 | 0.92  | 0.12 | 0.85  | 0.97  | 6.97   |
|                                      | Generation | 719.464  | 583   | 79   | 662   | 86   | 612   | 698   | 5,015  |
| Warehousing (150)                    | Rate       | tsf      | 0.24  | 0.06 | 0.30  | 0.08 | 0.24  | 0.32  | 3.56   |
|                                      | Generation | 1006.149 | 241   | 60   | 301   | 80   | 241   | 321   | 3,582  |
| Single-Family Detached Housing (210) | Rate       | du       | 0.19  | 0.56 | 0.75  | 0.64 | 0.37  | 1.01  | 9.57   |
|                                      | Generation | -65      | -12   | -36  | -48   | -42  | -24   | -66   | -622   |
| Church (560)                         | Rate       | tsf      | 0.35  | 0.21 | 0.56  | 0.26 | 0.29  | 0.55  | 9.11   |
|                                      | Generation | -8.926   | -3    | -2   | -5    | -2   | -3    | -5    | -81    |
| Office Park (750)                    | Rate       | tsf      | 1.52  | 0.19 | 1.71  | 0.21 | 1.27  | 1.48  | 11.42  |
|                                      | Generation | 503.074  | 765   | 96   | 861   | 106  | 639   | 745   | 5,745  |
| Total Net Trip Generation            |            |          | 1,574 | 197  | 1,771 | 228  | 1,465 | 1,693 | 13,639 |

Source: ITE Trip Generation (8th Edition, 2008)

Source: Pass-By Reduction - ITE Trip Generation Handbook, 2nd Edition, 2004

Notes: du = dwelling units; tsf = thousand square feet.

## SLOVER WEST INDUSTRIAL

| Land Use (Proposed ITE Code)           | Existing SF | Future SF | Net SF/DU |
|----------------------------------------|-------------|-----------|-----------|
| Light Industrial (110)                 | -122.900    | 1,507.786 | 1,384.886 |
| Manufacturing (140)                    |             |           | 0.000     |
| Warehouse (150)                        |             | 3,518.167 | 3,518.167 |
| Residential (210)                      | -66         |           | -66       |
| Institutional (560)                    | -7.803      |           | -7.803    |
| Commercial/Office (710)                | -11.880     |           | -11.880   |
| Service Commercial [Office Park] (750) |             |           | 0.000     |
| Live/Work [Business Park] (770)        |             |           | 0.000     |
| Flex Tech [Business Park] (770)        |             |           | 0.000     |
| Commercial/Retail (820)                |             |           | 0.000     |

| Land Use                             |            | Quantity | AM    |      |       | PM   |       |       | ADT    |
|--------------------------------------|------------|----------|-------|------|-------|------|-------|-------|--------|
|                                      |            |          | IN    | OUT  | TOTAL | IN   | OUT   | TOTAL |        |
| Light Industrial (110)               | Rate       | tsf      | 0.81  | 0.11 | 0.92  | 0.12 | 0.85  | 0.97  | 6.97   |
|                                      | Generation | 1384.886 | 1,122 | 152  | 1274  | 166  | 1,177 | 1343  | 9,653  |
| Warehousing (150)                    | Rate       | tsf      | 0.24  | 0.06 | 0.30  | 0.08 | 0.24  | 0.32  | 3.56   |
|                                      | Generation | 3518.167 | 844   | 211  | 1055  | 281  | 844   | 1125  | 12,525 |
| Single-Family Detached Housing (210) | Rate       | du       | 0.19  | 0.56 | 0.75  | 0.64 | 0.37  | 1.01  | 9.57   |
|                                      | Generation | -66      | -13   | -37  | -50   | -42  | -24   | -66   | -632   |
| Church (560)                         | Rate       | tsf      | 0.35  | 0.21 | 0.56  | 0.26 | 0.29  | 0.55  | 9.11   |
|                                      | Generation | -7.803   | -3    | -2   | -5    | -2   | -2    | -4    | -71    |
| General Office Building (710)        | Rate       | tsf      | 1.36  | 0.19 | 1.55  | 0.25 | 1.24  | 1.49  | 11.01  |
|                                      | Generation | -11.880  | -16   | -2   | -18   | -3   | -15   | -18   | -131   |
| Total Net Trip Generation            |            |          | 1,934 | 322  | 2,256 | 400  | 1,980 | 2,380 | 21,344 |

Source: ITE Trip Generation (8th Edition, 2008)

Source: Pass-By Reduction - ITE Trip Generation Handbook, 2nd Edition, 2004

Notes: du = dwelling units; tsf = thousand square feet.

## SPEEDWAY INDUSTRIAL

| Land Use (Proposed ITE Code)           | Existing SF | Future SF | Net SF/DU |
|----------------------------------------|-------------|-----------|-----------|
| Light Industrial (110)                 | -86.134     | 1,016.255 | 930.121   |
| Manufacturing (140)                    |             |           | 0.000     |
| Warehouse (150)                        |             | 762.191   | 762.191   |
| Residential (210)                      | -20         |           | -20       |
| Institutional (560)                    | -9.355      |           | -9.355    |
| Commercial/Office (710)                | -64.729     |           | -64.729   |
| Service Commercial [Office Park] (750) |             | 13.264    | 13.264    |
| Live/Work [Business Park] (770)        |             |           | 0.000     |
| Flex Tech [Business Park] (770)        |             |           | 0.000     |
| Commercial/Retail (820)                |             |           | 0.000     |

| Land Use                             |            | Quantity | AM   |      |       | PM   |      |       | ADT   |
|--------------------------------------|------------|----------|------|------|-------|------|------|-------|-------|
|                                      |            |          | IN   | OUT  | TOTAL | IN   | OUT  | TOTAL |       |
| Light Industrial (110)               | Rate       | tsf      | 0.81 | 0.11 | 0.92  | 0.12 | 0.85 | 0.97  | 6.97  |
|                                      | Generation | 930.121  | 753  | 102  | 855   | 112  | 791  | 903   | 6,483 |
| Warehousing (150)                    | Rate       | tsf      | 0.24 | 0.06 | 0.30  | 0.08 | 0.24 | 0.32  | 3.56  |
|                                      | Generation | 762.191  | 183  | 46   | 229   | 61   | 183  | 244   | 2,713 |
| Single-Family Detached Housing (210) | Rate       | du       | 0.19 | 0.56 | 0.75  | 0.64 | 0.37 | 1.01  | 9.57  |
|                                      | Generation | -20      | -4   | -11  | -15   | -13  | -7   | -20   | -191  |
| Church (560)                         | Rate       | tsf      | 0.35 | 0.21 | 0.56  | 0.26 | 0.29 | 0.55  | 9.11  |
|                                      | Generation | -9.355   | -3   | -2   | -5    | -2   | -3   | -5    | -85   |
| General Office Building (710)        | Rate       | tsf      | 1.36 | 0.19 | 1.55  | 0.25 | 1.24 | 1.49  | 11.01 |
|                                      | Generation | -64.729  | -88  | -12  | -100  | -16  | -80  | -96   | -713  |
| Office Park (750)                    | Rate       | tsf      | 1.52 | 0.19 | 1.71  | 0.21 | 1.27 | 1.48  | 11.42 |
|                                      | Generation | 13.264   | 20   | 3    | 23    | 3    | 17   | 20    | 151   |
| Total Net Trip Generation            |            |          | 861  | 126  | 987   | 145  | 901  | 1,046 | 8,358 |

Source: ITE Trip Generation (8th Edition, 2008)

Source: Pass-By Reduction - ITE Trip Generation Handbook, 2nd Edition, 2004

Notes: du = dwelling units; tsf = thousand square feet.

## SWIP RESIDENTIAL TRUCKING (EAST)

| Land Use (Proposed ITE Code)           | Existing SF | Future SF | Net SF/DU |
|----------------------------------------|-------------|-----------|-----------|
| Light Industrial (110)                 |             |           | 0.000     |
| Manufacturing (140)                    |             |           | 0.000     |
| Warehouse (150)                        |             |           | 0.000     |
| Residential (210)                      | -55         | 103       | 48        |
| Institutional (560)                    |             |           | 0.000     |
| Commercial/Office (710)                |             |           | 0.000     |
| Service Commercial [Office Park] (750) |             |           | 0.000     |
| Live/Work [Business Park] (770)        |             |           | 0.000     |
| Flex Tech [Business Park] (770)        |             |           | 0.000     |
| Commercial/Retail (820)                |             |           | 0.000     |

| Land Use                             |            | Quantity | AM   |      |       | PM   |      |       | ADT  |
|--------------------------------------|------------|----------|------|------|-------|------|------|-------|------|
|                                      |            |          | IN   | OUT  | TOTAL | IN   | OUT  | TOTAL |      |
| Single-Family Detached Housing (210) | Rate       | du       | 0.19 | 0.56 | 0.75  | 0.64 | 0.37 | 1.01  | 9.57 |
|                                      | Generation | 48       | 9    | 27   | 36    | 31   | 18   | 49    | 458  |
| Total Net Trip Generation            |            |          | 9    | 27   | 36    | 31   | 18   | 49    | 458  |

Source: ITE Trip Generation (8th Edition, 2008)

Source: Pass-By Reduction - ITE Trip Generation Handbook, 2nd Edition, 2004

Notes: du = dwelling units; tsf = thousand square feet.

Use to determine land uses for TAZ 11 through 13

| Land Use District                      | Acres       | Percent        |
|----------------------------------------|-------------|----------------|
| SWIP Residential Trucking - East       | 51.0        | 57.01%         |
| SWIP Residential Trucking - West/North | 8.3         | 9.24%          |
| SWIP Residential Trucking - West/South | 30.2        | 33.75%         |
| <b>Total</b>                           | <b>89.4</b> | <b>100.00%</b> |

| Existing Residential | NEW Residential |
|----------------------|-----------------|
| <b>96</b>            | <b>180</b>      |
| 55                   | 103             |
| 9                    | 17              |
| 32                   | 61              |
| <b>96</b>            | <b>180</b>      |

## SWIP RESIDENTIAL TRUCKING (WEST - NORTH)

| Land Use (Proposed ITE Code)           | Existing SF | Future SF | Net SF/DU |
|----------------------------------------|-------------|-----------|-----------|
| Light Industrial (110)                 |             |           | 0.000     |
| Manufacturing (140)                    |             |           | 0.000     |
| Warehouse (150)                        |             |           | 0.000     |
| Residential (210)                      | -9          | 17        | 8         |
| Institutional (560)                    |             |           | 0.000     |
| Commercial/Office (710)                |             |           | 0.000     |
| Service Commercial [Office Park] (750) |             |           | 0.000     |
| Live/Work [Business Park] (770)        |             |           | 0.000     |
| Flex Tech [Business Park] (770)        |             |           | 0.000     |
| Commercial/Retail (820)                |             |           | 0.000     |

| Land Use                             |            | Quantity | AM   |      |       | PM   |      |       | ADT  |
|--------------------------------------|------------|----------|------|------|-------|------|------|-------|------|
|                                      |            |          | IN   | OUT  | TOTAL | IN   | OUT  | TOTAL |      |
| Single-Family Detached Housing (210) | Rate       | du       | 0.19 | 0.56 | 0.75  | 0.64 | 0.37 | 1.01  | 9.57 |
|                                      | Generation | 8        | 1    | 4    | 5     | 5    | 3    | 8     | 74   |
| Total Net Trip Generation            |            |          | 1    | 4    | 5     | 5    | 3    | 8     | 74   |

Source: ITE Trip Generation (8th Edition, 2008)

Source: Pass-By Reduction - ITE Trip Generation Handbook, 2nd Edition, 2004

Notes: du = dwelling units; tsf = thousand square feet.

Use to determine land uses for TAZ 11 through 13

| Land Use District                      | Acres       | Percent        |
|----------------------------------------|-------------|----------------|
| SWIP Residential Trucking - East       | 51.0        | 57.01%         |
| SWIP Residential Trucking - West/North | 8.3         | 9.24%          |
| SWIP Residential Trucking - West/South | 30.2        | 33.75%         |
| <b>Total</b>                           | <b>89.4</b> | <b>100.00%</b> |

| Existing Residential | NEW Residential |
|----------------------|-----------------|
| <b>96</b>            | <b>180</b>      |
| 55                   | 103             |
| <b>9</b>             | <b>17</b>       |
| 32                   | 61              |
| <b>96</b>            | <b>180</b>      |

## SWIP RESIDENTIAL TRUCKING (WEST - SOUTH)

| Land Use (Proposed ITE Code)           | Existing SF | Future SF | Net SF/DU |
|----------------------------------------|-------------|-----------|-----------|
| Light Industrial (110)                 |             |           | 0.000     |
| Manufacturing (140)                    |             |           | 0.000     |
| Warehouse (150)                        |             |           | 0.000     |
| Residential (210)                      | -32         | 61        | 28        |
| Institutional (560)                    |             |           | 0.000     |
| Commercial/Office (710)                |             |           | 0.000     |
| Service Commercial [Office Park] (750) |             |           | 0.000     |
| Live/Work [Business Park] (770)        |             |           | 0.000     |
| Flex Tech [Business Park] (770)        |             |           | 0.000     |
| Commercial/Retail (820)                |             |           | 0.000     |

| Land Use                             |            | Quantity | AM   |      |       | PM   |      |       | ADT  |
|--------------------------------------|------------|----------|------|------|-------|------|------|-------|------|
|                                      |            |          | IN   | OUT  | TOTAL | IN   | OUT  | TOTAL |      |
| Single-Family Detached Housing (210) | Rate       | du       | 0.19 | 0.56 | 0.75  | 0.64 | 0.37 | 1.01  | 9.57 |
|                                      | Generation | 28       | 5    | 16   | 21    | 18   | 10   | 28    | 271  |
| Total Net Trip Generation            |            |          | 5    | 16   | 21    | 18   | 10   | 28    | 271  |

Source: ITE Trip Generation (8th Edition, 2008)

Source: Pass-By Reduction - ITE Trip Generation Handbook, 2nd Edition, 2004

Notes: du = dwelling units; tsf = thousand square feet.

Use to determine land uses for TAZ 11 through 13

| Land Use District                      | Acres       | Percent        |
|----------------------------------------|-------------|----------------|
| SWIP Residential Trucking - East       | 51.0        | 57.01%         |
| SWIP Residential Trucking - West/North | 8.3         | 9.24%          |
| SWIP Residential Trucking - West/South | 30.2        | 33.75%         |
| <b>Total</b>                           | <b>89.4</b> | <b>100.00%</b> |

| Existing Residential | NEW Residential |
|----------------------|-----------------|
| <b>96</b>            | <b>180</b>      |
| 55                   | 103             |
| 9                    | 17              |
| <b>32</b>            | <b>61</b>       |
| <b>96</b>            | <b>180</b>      |

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